

Metropolitan Water Reclamation District of Greater Chicago

MONITORING AND RESEARCH DEPARTMENT

REPORT NO. 11-59

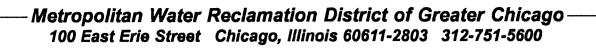
2010 ANNUAL SUMMARY REPORT

WATER QUALITY WITHIN THE WATERWAYS SYSTEM OF THE

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER

CHICAGO

December 2011



2010 ANNUAL SUMMARY REPORT WATER QUALITY WITHIN THE WATERWAYS SYSTEM OF THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Ву

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TABLE LOCATOR BY PARAMETER IN APPENDIX AII

	Sample Mean During 2010	Violation History Through 2010	Mean History Through 2010
Parameter	Page	Page	Page
Biochemical Oxygen Demand Carbonaceous Biochemical Oxygen Demand Dissolved Oxygen Temperature pH	AII-1 AII-1 AII-1	AII-18 AII-19 AII-20	AII-62 AII-63 AII-64 AII-65 AII-66
Alkalinity (Total) Chloride Turbidity Electrical Conductivity Total Kjeldahl Nitrogen	AII-1 AII-2 AII-2	AII-21	AII-67 AII-68 AII-69 AII-70 AII-71
Ammonium Nitrogen Un-ionized Ammonia Organic Nitrogen Nitrite Plus Nitrate Nitrogen Total Solids	AII-2 AII-3 AII-3 AII-3	AII-22 AII-23	AII-72 AII-73 AII-74 AII-75 AII-76
Total Volatile Solids Total Suspended Solids Volatile Suspended Solids Total Dissolved Solids Phenols	AII-4 AII-4 AII-4 AII-4	AII-24 AII-25	AII-77 AII-78 AII-79 AII-80 AII-81
Total Nonylphenols Sulfate Fats, Oils, and Greases Total Phosphorus Soluble Phosphorus	AII-5 AII-5 AII-5 AII-5	AII-26 AII-27	AII-82 AII-83 AII-84 AII-85 AII-86

TABLE LOCATOR BY PARAMETER IN APPENDIX AII (Continued)

Parameter	Sample Mean During 2010	Violation History Through 2010	Mean History Through 2010	
	Page	Page	Page	
Total Cyanide	AII-6	AII-28	AII-87	
Weak Acid Dissociable Cyanide	AII-6	AII-29	AII-88	
Fluoride	AII-6	AII-30	AII-89	
Total Organic Carbon	AII-6		AII-90	
Fecal Coliform	AII-7	AII-31	AII-91	
Escherichia Coli	AII-7		AII-92	
Total Calcium	AII-7		AII-93	
Total Magnesium	AII-7		AII-94	
Hardness	AII-8		AII-95	
Gross Alpha Radioactivity	AII-8		AII-96	
Gross Beta Radioactivity	AII-8	AII-32	AII-97	
Chlorophyll a	AII-8		AII-98	
Benzene*		AII-33		
Benzene	AII-9	AII-34	AII-99	
Ethylbenzene	AII-9	AII-35	AII-100	
Toluene	AII-9	AII-36	AII-101	
Xylene	AII-9	AII-37	AII-102	
Total Silver	AII-10	AII-38	AII-103	
Total Arsenic	AII-10	AII-39	AII-104	
Total Barium	AII-10	AII-40	AII-105	
Total Boron	AII-10	AII-41	AII-106	
Total Cadmium	AII-11	AII-42	AII-107	
Total Copper	AII-11	AII-43	AII-108	
Total Chromium	AII-11		AII-109	
Total Hexavalent Chromium	AII-11	AII-44	AII-110	

TABLE LOCATOR BY PARAMETER IN APPENDIX AII (Continued)

Parameter	Sample Mean During 2010	Violation History Through 2010	Mean History Through 2010
	Page	Page	Page
Total Iron Total Lead Total Nickel Total Manganese Total Mercury*	AII-12 AII-12 AII-12 AII-12	AII-45 AII-46 AII-47 AII-48 AII-49	AII-111 AII-112 AII-113 AII-114
Total Mercury Low Level Mercury Total Zinc Total Selenium Soluble Calcium	AII-13 AII-13 AII-13 AII-14	AII-50 AII-51 AII-52	AII-115 AII-116 AII-117 AII-118 AII-119
Soluble Magnesium Soluble Silver Soluble Arsenic Soluble Barium Soluble Boron	AII-14 AII-14 AII-15 AII-15	AII-53	AII-120 AII-121 AII-122 AII-123 AII-124
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^{*}Due to Human Health Standard in General Use Waters.

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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 the Illinois Pollution Control Board (IPCB) water quality standards for the year 2010. In addition, the District compared these data with data for 2009.

Compliance with Water Quality Standards During 2010

General Use Waters. Thirty out of 67 water quality parameters assayed were subject to IPCB water quality standards. They were dissolved oxygen (DO), temperature, pH, chloride, ammonium nitrogen, total dissolved solids, phenols, sulfate, weak acid dissociable cyanide, fluoride, fecal coliform, gross beta radioactivity, benzene, ethylbenzene, toluene, xylene, total silver, total barium, total boron, total hexavalent chromium, total manganese, total selenium, soluble arsenic, soluble cadmium, soluble copper, soluble chromium, soluble iron, soluble lead, soluble nickel, and soluble zinc. Two parameters (benzene and total mercury) were subject to IPCB Human Health Standards. Water samples were collected from locations throughout the five segments of the 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 the DuPage River System, and the Fox River System (Poplar Creek).

Twenty-two water quality parameters were in total compliance with the standards in all river systems. They were temperature, ammonium nitrogen, phenols, weak acid dissociable cyanide, fluoride, gross beta radioactivity, benzene, ethylbenzene, toluene, xylene, total silver, total barium, total boron, total manganese, total selenium, soluble arsenic, soluble cadmium, soluble chromium, soluble iron, soluble lead, soluble nickel, and soluble zinc. Benzene and total mercury were in total compliance with the Human Health Standard in all river systems.

Of the remaining eight parameters, six parameters (DO, pH, chloride, sulfate, total hexavalent chromium, and soluble copper) had compliance rates greater than 89.0 percent in all river systems. Total dissolved solids had compliance rates of 83.3, 78.4, and 85.8 percent, respectively, in the Chicago, Calumet, and Des Plaines River Systems. Fecal coliform had the lowest compliance rate in the range of 50.3 to 62.5 percent in all river systems.

A comparison of 2010 data with 2009 data indicated that there was no significant difference between 2010 and 2009 compliance rates with water quality standards except for pH, chloride, and total dissolved solids. In the Chicago River System, the compliance rate for pH significantly decreased from total compliance in 2009 to 95.8 percent in 2010. In the Calumet River System, the compliance rate for chloride significantly decreased from total compliance in 2009 to 94.5 percent in 2010. In the Des Plaines River System, the compliance rate for chloride significantly decreased from 98.7 percent in 2009 to 92.7 percent in 2010, and the compliance rate for total dissolved solids significantly decreased from 97.7 percent in 2009 to 85.8 percent in 2010. Comparison of data for Human Health Standards indicated that there was no significant difference between 2010 and 2009 compliance rates of all parameters in the three river systems.

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 Calumet River Systems. Twenty-three water quality parameters measured in the secondary contact waters during 2010 were subject to IPCB standards. They were DO; temperature; pH; un-ionized ammonia; total dissolved solids; phenols; fats, oils, and greases; total cyanide; fluoride; total silver; total arsenic; total barium; total cadmium; total copper; total hexavalent chromium; total iron; total lead; total nickel; total manganese; total mercury; total zinc; total selenium; and soluble iron.

Eighteen parameters were in complete compliance with the IPCB standards in the Chicago and Calumet River Systems in 2010. They were temperature; phenols; fats, oils, and greases; total cyanide; fluoride; total silver; total arsenic; total barium; total cadmium; total copper; total hexavalent chromium; total lead; total nickel; total manganese; total mercury; total zinc; total selenium; and soluble iron.

The remaining five parameters DO, pH, un-ionized ammonia, total dissolved solids, and total iron had compliance rates greater than 93.0 percent in both river systems.

A comparison of 2010 data with 2009 data indicated that there was no significant difference between 2010 and 2009 compliance rates for all parameters in the two river systems.

INTRODUCTION

It is the responsibility of the District to conduct monitoring of the water quality of the streams and canals within its jurisdiction. Detailed annual water quality summaries (similar to this report) of all water quality data collected have been published by the District for the years 1972 through 2009. Complete tabulations of waterway surveillance data collected by the District are available for the years 1970 through 2010.

It should be noted that the Illinois Environmental Protection Agency 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 with and support the District's evaluation.

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

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

WATER QUALITY NETWORK

Description of Waterways

The District is responsible for monitoring the quality of the waterways that are impacted by its operations. A map depicting the waterways is shown in Figure 1. These include both manmade 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 Calumet-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 for the tributary streams and water reclamation plant (WRP) effluents, combined sewer overflows, and stormwater runoff.
- Convey the flows from the Lake Michigan watershed to the Des Plaines River watershed through the waterway system, exiting at the Lockport Powerhouse.

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 Calumet-Sag Channel.

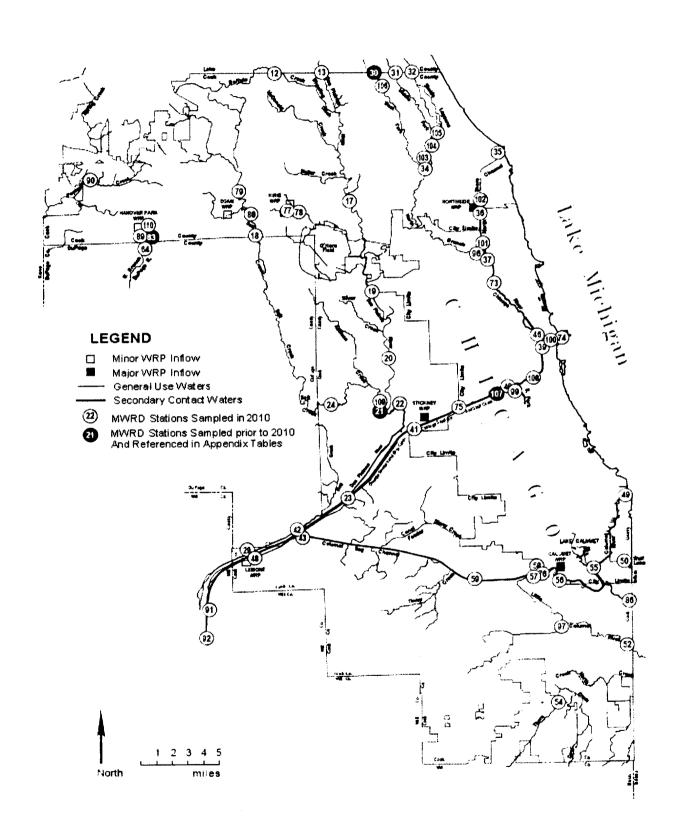
Water Use Designations. IPCB Regulations, Section 303.201, specify that "except as otherwise specifically provided, all waters of the State must meet the General Use standards for Subpart B of Part 302." Section 303.441 delineates those waters which do not qualify for General Use but "... are designated as secondary contact and indigenous aquatic life waters [Secondary Contact Waters] and must meet the water quality standards of 35 Ill. Adm. Code 302, Subpart D." 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 manmade canals or modified 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'swaterways. In addition to storage, retrieval, and update capabilities, the system includes programs for:

- The generation of reports and graphs.
- The generation of annual summary statistics.

FIGURE 1: WATERWAYS SERVICE AREA AND SAMPLING LOCATION POINTS



- Comparisons of water quality with State of Illinois stream standards.
- Comparisons of water quality with the results of previous years.

The major computations of data are presented in <u>Appendices AII</u> and AIII, and in tables appearing in the main body of this report. The water quality parameter directory is shown in <u>Appendix AI</u>. Water quality parameters assayed in 2010 and sampling stations are listed in Tables AI-1 and AI-2, respectively.

Summary water quality results for 2010 are listed in <u>Appendix AII</u>. Annual mean values of all water quality parameters assayed at all stations sampled (grab samples only) are tabulated in <u>Table AII-1</u>. This table presents the numerical values of various water quality parameters, which can be used to determine any relationships that exist among them. The results of the violations of the standards are tabulated in Tables <u>AII-2</u> through <u>AII-45</u>. Note that Tables <u>AII-2</u> through <u>AII-46</u> list the sampling locations where violations occurred during 2010 and their most recent eight-year history.

In comparing data from a historical perspective, it is desirable to view summary data from past years together with data from the current year. Tables <u>AII-46</u> through <u>AII-118</u> (<u>Appendix AII</u>) were designed to present the mean values of various parameters for 1993 through 2009, with the 2010 mean values for each parameter and all locations sampled.

Finally, Tables <u>AIII-1</u> through <u>AIII-5</u> were prepared to present comprehensive statistical analysis required to show whether the upstream and downstream means of various water quality parameters for each WRP are significantly different.

Water Sampling

Surface water grab samples were taken at 59 locations during 2010. Their locations, as well as the locations of recently discontinued sampling stations, are as shown in <u>Figure 1</u>. The samples were taken at a nominal monthly frequency, with one of the three principal river systems being sampled on a given day. The total number of samples collected monthly in each river system during 2010 is shown in <u>Table 1</u>. Note that samples taken in the West Branch of the DuPage River (upstream and downstream of the Hanover ParkWRP outfall), and in the Fox River System (Poplar Creek) are included with the Des Plaines River data. In addition, weekly grab samples were taken at the Lockport Powerhouse because of an inoperative automatic sampler.

Reconstruction of the Lockport Powerhouse during 1998 resulted in the Treblar sampler being inactivated. Grab sampling at the Lockport Powerhouse was initiated once per week in 1998 as a substitute for the inoperative sampler. This sampling was discontinued in April 2002. Sampling at the Lockport Powerhouse was replaced by collecting weekly grab samples at Location 92 (Lockport Forebay) in 2002.

Locations sampled in the respective river systems during 2010 are shown without an asterisk in <u>Table AI-2</u> of <u>Appendix AI</u>. Twenty-six sites were sampled in the Chicago River System, 13 sites in the Calumet River System, and 20 sites in the Des Plaines River System, including four locations in the DuPage and Fox River Systems. The waterways system sampling station numbers

TABLE 1: TOTAL NUMBER OF WATERWAYS (BRIDGE RUNS) SAMPLES COLLECTED MONTHLY DURING 2010

River S	ystem
---------	-------

Month	Chicago	Calumet	Des Plaines
January	21	12	10
February	26	9	17
March	29	12	17
April	28	11	20
May	29	12	19
June	27	12	17
July	26	11	16
August	30	12	17
September	27	12	18
October	27	11	17
November	28	12	16
December	22	NS	12

NS = No sample was taken at any location of this river system.

correspond to the numbers on the map shown in Figure 1. The complete waterways sampling stations directory of all 107 stations, of which the 59 sampling locations in 2010 are a subset, is listed in Table AI-2, Appendix AI.

Water Assays and Water Quality Criteria

The District's laboratories performed 67 types of analyses on water samples taken in District waterways during 2010. A list of these assays and additional parameters computed from these assays appears in <u>Table 2</u>. <u>Table 2</u> shows the water quality standard for each parameter as defined by the IPCB in the State of Illinois Rules and Regulations, Title 35 (2).

It should be noted that the General Use Water Quality Standards for ammonia nitrogen and un-ionized ammonia were revised effective November 8, 2002, and those for dissolved metals were adopted effective December 20, 2002. New revised standards are used to assess compliance rates starting from 2003. The General Use Water Quality Standard for DO was revised effective December 2008.

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 four water quality parameters (DO, fecal coliform, temperature, and total chromium) which require interpretation in light of excessive cost of sample collection and sample assay techniques at a given frequency. These costs are related to the excessive manpower requirements and cost of performing continuous DO measurements. The interpretations of IPCB standards for DO, temperature, and fecal coliform are given in Table 3. In the case of DO, there are two standards, one based on 16 hours/day and the other based on all times. Since the District samples once per month, it cannot define a 16-hour/day level. The District, therefore, interprets the IPCB standard for DO 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. Because of this, the District interprets the IPCB standard limitation as 400 cfu/100 mL in General Use Waters.

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

The IPCB water quality standards for chromium are specified separately for the trivalent and hexavalent oxidation states. Prior to 2003, the District did not differentiate between oxidation states when assaying for chromium because of the highly reactive nature of the total hexavalent chromium, but reported the results as total chromium (trivalent plus hexavalent), and applied the IPCB numerical limit for total trivalent chromium to the measured total chromium concentrations. However, since January 2003, the District has assayed for total chromium, total hexavalent chromium, and soluble chromium. The standard currently contains a limit for total hexavalent

TABLE 2: WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING WATER QUALITY STANDARDS IN 2010¹

Water Use Designations

General	Use ²	Secondary (Contact ³
Standard	Section ⁴	Standard	Section ⁴
5 mg/L ⁵	302.206	4 mg/L	302.405
J		3 mg/L^6	302.405
32°C ⁷	302.211	≤34.0°C	302.408
(Apr-Nov)		95% of the time	
16 ° C ⁷	302.211	≤37.8°C	302.408
(Dec-Mar)		100% of the	
6500	202 204		302.404
	302.204		302.404
NAS		1472	
500 mg/L	302.208	NAS	
NAS		NAS	
NAS		NAS	
mg/L ⁸	302.212	NAS	
NAS		0.1 mg/L	302.407
NAS		NAS	
1000 mg/L	302.208	1500 mg/L	302.407
$100~\mu \mathrm{g/L}$	302.208	$300~\mu \mathrm{g/L}$	302.407
NAS		NAS	
500 mg/L	302.208	NAS	
NAS		15 mg/L	302.407
NIAG		NIAC	
	Standard 5 mg/L ⁵ 32 °C ⁷ (Apr-Nov) 16 °C ⁷ (Dec-Mar) 6.5-9.0 NAS 500 mg/L NAS NAS NAS NAS NAS NAS NAS NA	5 mg/L ⁵ 302.206 32 °C ⁷ 302.211 (Apr-Nov) 16 °C ⁷ 302.211 (Dec-Mar) 6.5-9.0 302.204 NAS 500 mg/L 302.208 NAS	Standard Section⁴ Standard 5 mg/L⁵ 302.206 4 mg/L 32 °C² 302.211 ≤34.0 °C (Apr-Nov) 95% of the time 16 °C² 302.211 ≤37.8 °C (Dec-Mar) 100% of the time 6.5-9.0 302.204 6.0-9.0 NAS NAS NAS 1500 mg/L NAS NAS NAS NAS

TABLE 2 (Continued): WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING WATER QUALITY STANDARDS IN 2010¹

Water Use Designations

	General	Use ²	Secondary	Contact ³
Parameter	Standard	Section ⁴	Standard	Section ⁴
Total Cyanide	NAS		0.1 mg/L	302.407
WAD Cyanide	0.022 mg/L	302.208	NAS	
Fluoride	1.4 mg/L	302.208	15 mg/L	302.407
Total Organic Carbon	NAS		NAS	
Fecal Coliform	400 cfu/100mL	302.209	NAS	
Escherichia Coli	NAS		NAS	
Total Calcium	NAS		NAS	
Total Magnesium	NAS		NAS	
Hardness	NAS		NAS	
Gross Alpha Radioactivity	NAS		NAS	
Gross Beta Radioactivity	100 pCi/L	302.207	NAS	
Chlorophyll a	NAS		NAS	
Benzene*	$310~\mu \mathrm{g/L}$	302.658	NAS	
Benzene	$4200~\mu \mathrm{g/L}$	302.208	NAS	
Ethylbenzene	$150~\mu \mathrm{g/L}$	302.208	NAS	
Toluene	$2000~\mu \mathrm{g/L}$	302.208	NAS	
Xylene	$920~\mu$ g/L	302.208	NAS	
Total Silver	0.005 mg/L	302.208	1.1 mg/L	302.407
Total Arsenic	NAS		l mg/L	302.407
Total Barium	5 mg/L	302.208	5 mg/L	302.407
Total Boron	1 mg/L	302.208	NAS	
Total Cadmium	NAS		0.15 mg/L	302.407
Total Copper	NAS		1 mg/L	302.407
Total Chromium	NAS		NAS	

TABLE 2 (Continued): WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING WATER QUALITY STANDARDS IN 2010¹

Water Use Designations

	General	Use ²	Secondary Contact ³	
Parameter	Standard	Section ⁴	Standard	Section ⁴
Total Hexavalent Chromium	16 μg/L	302.208	300 μg/L	302.407
Total Iron	NAS		2 mg/L	302.407
Total Lead	NAS		0.1 mg/L	302.407
Total Nickel	NAS		1 mg/L	302.407
Total Manganese	1 mg/L	302.208	1 mg/L	302.407
Total Mercury*	$0.012~\mu \mathrm{g/L}$	302.658	NAS	
Total Mercury	NAS		$0.5~\mu \mathrm{g/L}$	302.407
Low Level Mercury	NAS		NAS	
Total Zinc	NAS		1 mg/L	302.407
Total Selenium	1 mg/L	302.208	1 mg/L	302.407
Soluble Calcium	NAS		NAS	
Soluble Magnesium	NAS		NAS	
Soluble Silver	NAS		NAS	
Soluble Arsenic	0.36 mg/L	302.208	NAS	
Soluble Barium	NAS		NAS	
Soluble Boron	NAS		NAS	
Soluble Cadmium	mg/L ⁹	302.208	NAS	
Soluble Copper	mg/L ¹⁰	302.208	NAS	
Soluble Chromium	mg/L ¹¹	302.208	NAS	
Soluble Iron	1 mg/L	302.208	0.5 mg/L	302.407
Soluble Lead	${\sf mg/L}^{12}$	302.208	NAS	
Soluble Nickel	mg/L ¹³	302.208	NAS	
Soluble Manganese	NAS		NAS	
Soluble Zinc	${ m mg/L^{14}}$	302.208	NAS	
	-			

TABLE 2 (Continued): WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING WATER QUALITY STANDARDS IN 2010¹

		Water Use	Designations	
Parameter	Genera Standard	al Use ² Section ⁴	Secondary Standard	Contact ³
	Standard	Section	Standard	Section
Soluble Selenium	NAS		NAS	

¹Water Quality Standards from "State of Illinois Rules and Regulations," Title 35: Environmental Protection, Subtitle C: Water Pollution.

NAS = No Applicable Standard.

²General Use Waters Designations, defined in Section 302.201 from 1 above. See Figure 1, for delineation.

³Secondary Contact and Indigenous Aquatic Life Waters Use Designation, defined in section 303.441 from 1 above. See Figure 1, for delineation.

⁴Section Number from 1 above.

⁵Water Quality Standard is 5.0 mg/L in March through July and 3.5 mg/L in other months.

⁶Calumet-Sag Channel only.

⁷The upper value cannot be exceeded during more than 1% of the hours in the preceding 12-month period. The lower value cannot be exceeded at any time.

 $^{^{8}}$ Min[0.411/(1 + $10^{7.204-pH}$) + $58.4/(1 + 10^{pH-7.204})$, 15]

 $^{^{9}}$ Min[(1.138672 - 0.041838 ln(Hard)) * $e^{-2.918+1.128$ ln(Hard) * 0.001, 0.05]

 $¹⁰e^{-1.464+0.9422\ln(\text{Hard})} * 0.000960$

 $e^{3.688+0.819\ln(\text{Hard})} * 0.000316$

 $^{^{12}[1.46203 - 0.145712 \}ln(\text{Hard})] * e^{-1.301 + 1.273 \ln(\text{Hard})} * 0.001$

 $^{^{13}}e^{0.5173+0.846\ln(\mathrm{Hard})}*0.000998$

 $^{^{14}}e^{0.9035+0.8473\ln(\mathrm{Hard})}*0.000978$

^{*}Human Health Standard.

TABLE 3: ILLINOIS POLLUTION CONTROL BOARD WATER QUALITY STANDARDS AND CORRESPONDING METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO INTERPRETATIONS FOR 2010

	Parameter	Water Use Designation	IPCB Standard	District Interpreted Standard
1.	Dissolved Oxygen	General Use Waters	March –	- July
	, ,		≥5.0 mg/L anytime	≥5.0 mg/L anytime
			≥6.0 mg/L daily mean averaged over 7 days	
			August - Fo	ebruary
			≥3.5 mg/L anytime	≥4.0 mg/L anytime
			≥4.0 mg/L daily minimum averaged over 7 days	
			≥5.5 mg/L daily mean averaged over 30 days	
		Secondary Contact Waters	≥4.0 mg/L anytime	≥4.0 mg/L anytime
		(Calumet-Sag Channel effective 5/19/88)	≥3.0 mg/L anytime	≥3.0 mg/L anytime
2.	Temperature	Secondary Contact Waters	\leq 34.0°C, 95% of the time	≤37.8°C
			≤37.8°C, 100% of the time	anytime
3.	Fecal Coliform	General Use Waters	Based on a minimum of five samples in a 30-day period geometric mean ≤200 cfu/100 mL; ≤400 cfu/100 mL in 90% of the samples	≤400 cfu/100 mL anytime

chromium and for soluble trivalent chromium. The District applies the analysis of soluble chromium to the soluble trivalent chromium standard.

Starting in January 2003, the IPCB also dropped the water quality standards for total arsenic, total cadmium, total copper, total iron, total lead, total nickel, total mercury, and total zinc, and introduced standards for the dissolved fraction of the above metals in the General Use Waters. The IPCB also introduced standards for total arsenic, total cadmium, total copper, total iron, total lead, total nickel, total mercury, and total zinc in the 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 cyanide. Thus, beginning with the 1996 report, compliance determinations have been made in terms of weak acid dissociable 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 sampling locations and the number of samples collected in General Use Waters during 2010 is shown in Table 4. Of the five river systems sampled during 2010, three (Des Plaines, DuPage, and Fox) lie entirely within the General Use classification. The General Use Waters in the Chicago and Calumet River Systems mostly consist of the streams that are tributary to the principal man-made channels and modified river sections.

In the subsequent evaluation, when the Fox River System is referred to in this report, Station 90 is considered to be General Use. Similarly, in the DuPage River System, data from three sampling locations are considered to be General Use: 8,342 feet upstream (Station 110), 1,000 feet downstream (Station 89), and 7,900 feet downstream (Station 64) of the Hanover Park WRP treated effluent discharge into the West Branch of the DuPage River. The frequency of sampling during 2010 was once per month at most locations.

River System Compliance Data

In the General Use Waters, 67 parameters were analyzed in 2010, of which 30 parameters were covered by the State of Illinois Water Quality Standards. Two parameters (benzene and total mercury) were subject to IPCB Human Health Standards. Summary results, including means, number of observations, and number of violations of General Use Standards and Human Health Standards, are shown in Appendix AII at each sampling station of each of the three river systems.

The 22 parameters which were in 100 percent compliance in all river systems were temperature, ammonium nitrogen, phenols, weak acid dissociable cyanide, fluoride, gross beta radioactivity, benzene, ethylbenzene, toluene, xylene, total silver, total barium, total boron, total manganese, total selenium, soluble arsenic, soluble cadmium, soluble chromium, soluble iron, soluble lead, soluble nickel, and soluble zinc.

Two parameters, benzene and total mercury, were in total compliance due to the Human Health Standard in all river systems.

The eight water quality parameters which were in less than complete compliance in 2010 are shown in <u>Table 5</u>. The percent compliance for these parameters in each river system is also presented.

Soluble mercury was not assayed in 2009 and 2010 in all three River Systems. The compliance rates for remaining water quality parameters with the General Use Standards and compliance rates for two parameters (benzene and total mercury) with the Human Health Standards for the Chicago, Calumet, and Des Plaines River Systems are presented in Figures 2, 3, and 4, respectively. Since soluble mercury was not assayed, it is excluded in Figure 2 through Figure 4.

TABLE 4: LOCATIONS SAMPLED AND ANNUAL SAMPLING FREQUENCIES OF GENERAL USE WATERS IN 2010

Map No.1	Station Name	Annual No. of Samples
Chicago R	iver System	
106	Dundee Road, West Fork North Branch Chicago River	10
103	Golf Road, West Fork North Branch Chicago River	10
31	Lake-Cook Road, Middle Fork North Branch	9
104	Glenview Road, North Branch Chicago River	9
32	Lake-Cook Road, Skokie River	9
105	Frontage Road, Skokie River	12
34	Dempster Street, North Branch Chicago River	8
96	Albany Avenue, North Branch Chicago River	11
35	Central Street, North Shore Channel	8
102	Oakton Street, North Shore Channel	11
74	Lake Shore Drive, Chicago River	11
100	Wells Street, Chicago River	12
		$\overline{120}$
Calumet R	iver System	
49	Ewing Avenue, Calumet River	6
50	Burnham Avenue, Wolf Lake	11
55	130th Street, Calumet River	10
52	Wentworth Avenue, Little Calumet River	11
54	Joe Orr Road, Thorn Creek	9
97	170th Street, Thorn Creek	11
57	Ashland Avenue, Little Calumet River	
		68
Des Plaine	es River System	
79	Higgins Road, Salt Creek	8
80	Arlington Heights Road, Salt Creek	12
18	Devon Avenue, Salt Creek	10
24	Wolf Road, Salt Creek	10
109	Brookfield Avenue, Salt Creek	11
77	Elmhurst Road, Higgins Creek	1
78	Wille Road, Higgins Creek	9
12	Lake-Cook Road, Buffalo Creek	7
13	Lake-Cook Road, Des Plaines River	11
10		11

TABLE 4 (Continued): LOCATIONS SAMPLED AND ANNUAL SAMPLING FREQUENCIES OF GENERAL USE WATERS IN 2010

Map No.	Station Name	Annual No. of Samples
Des Plain	es River System (Continued)	
19	Belmont Avenue, Des Plaines River	11
20	Roosevelt Road, Des Plaines River	11
22	Ogden Avenue, Des Plaines River	12
23	Willow Springs Road, Des Plaines River	12
29	Stephen Street, Des Plaines River	12
91	Material Service Road, Des Plaines River	12
		$\overline{160}$
DuPage F	River System	
89	Walnut Lane, West Branch DuPage River	12
64	Lake Street, West Branch DuPage River	6
110	Springinsguth Road, West Branch DuPage River	8
		$\overline{26}$
Fox Rive	r System	
	D. 10 D1- Creek	10
90	Route 19, Poplar Creek	$\frac{10}{10}$

¹Refer to Figure 1.

TABLE 5: WATER QUALITY PARAMETERS NOT IN TOTAL COMPLIANCE IN GENERAL USE WATERS OF ALL RIVER SYSTEMS IN 2010

Parameter	Estimated Percent Compliance ¹		
	Chicago	Calumet	Des Plaines
Dissolved Oxygen	94.7	97.2	99.6
pH	95.8	100.0	99.4
Chloride	90.1	94.5	92.7
Total Dissolved Solids	83.3	78.4	85.8
Sulfate	100.0	89.5	100.0
Fecal Coliform	54.8	50.3	62.5
Total Hexavalent Chromium	100.0	100.0	99.5
Soluble Copper	100.0	100.0	99.6

¹Based on the total number of samples in compliance divided by the total number of samples collected, multiplied by 100.

FIGURE 2: COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR GENERAL USE WATER SECTION OF THE CHICAGO RIVER IN 2009 AND 2010

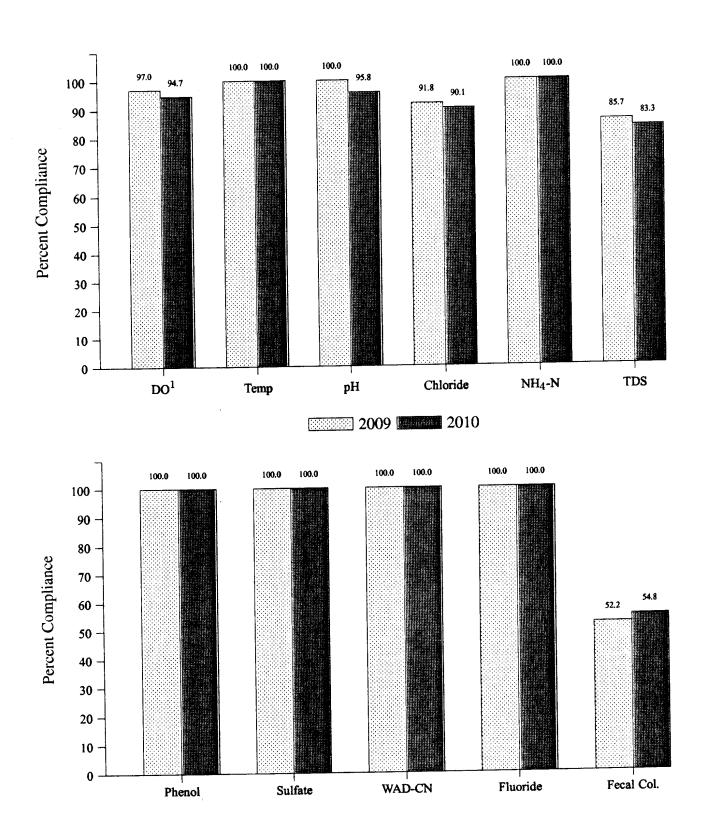


FIGURE 2 (Continued): COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR GENERAL USE WATER SECTION OF THE CHICAGO RIVER IN 2009 AND 2010

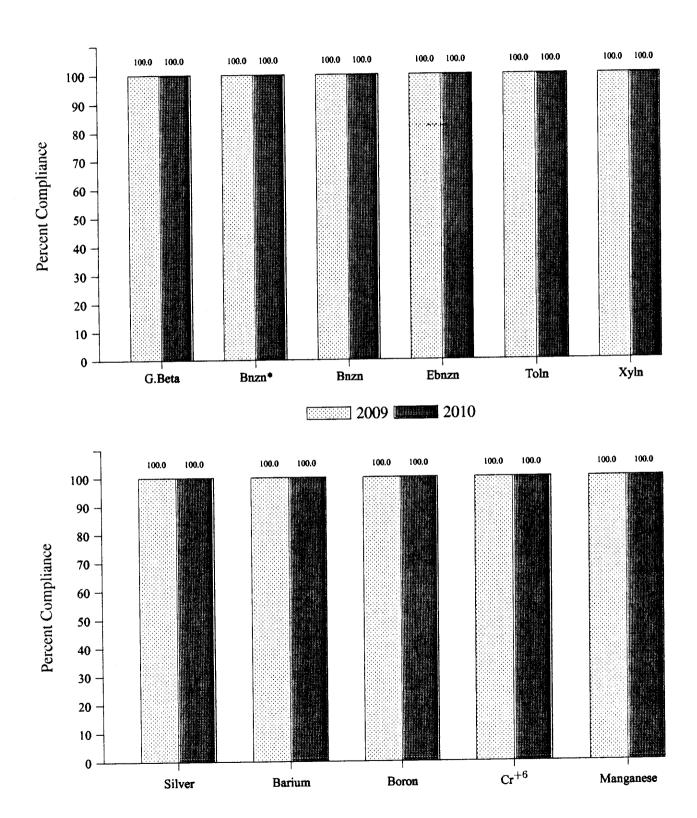
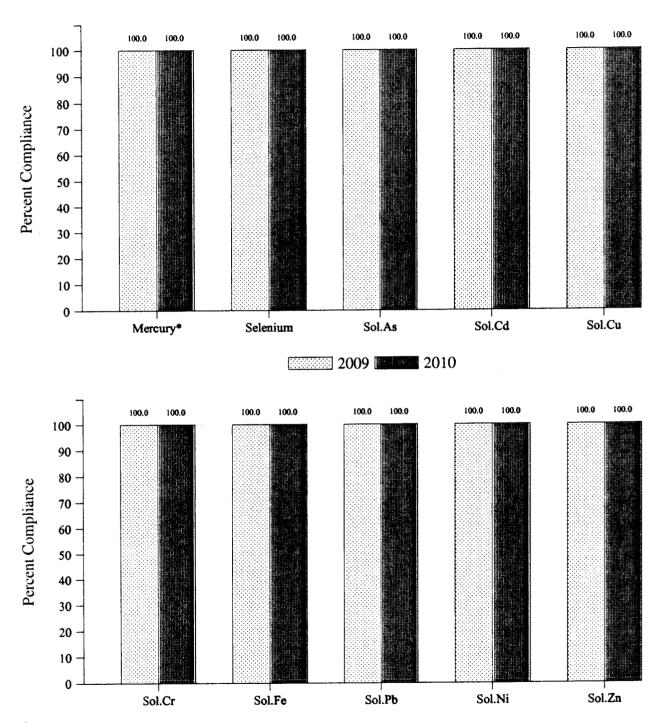


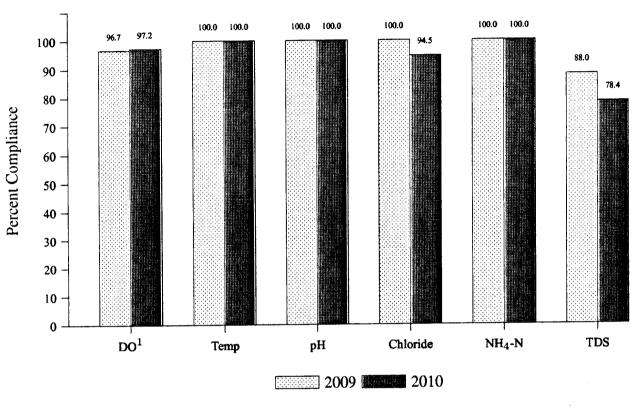
FIGURE 2 (Continued): COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR GENERAL USE WATER SECTION OF THE CHICAGO RIVER IN 2009 AND 2010



¹DO standard for general use waters is 5.0 mg/L from March through July, otherwise 3.5 mg/L.

^{*}Human Health Standard became effective in General Use Waters in December, 2002.

FIGURE 3: COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR GENERAL USE WATER SECTION OF THE CALUMET RIVER IN 2009 AND 2010



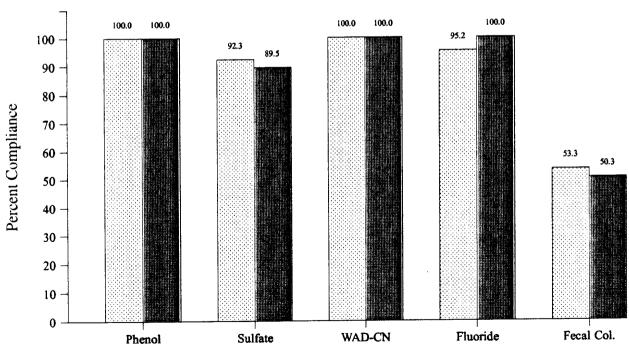


FIGURE 3 (Continued): COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR GENERAL USE WATER SECTION OF THE CALUMET RIVER IN 2009 AND 2010

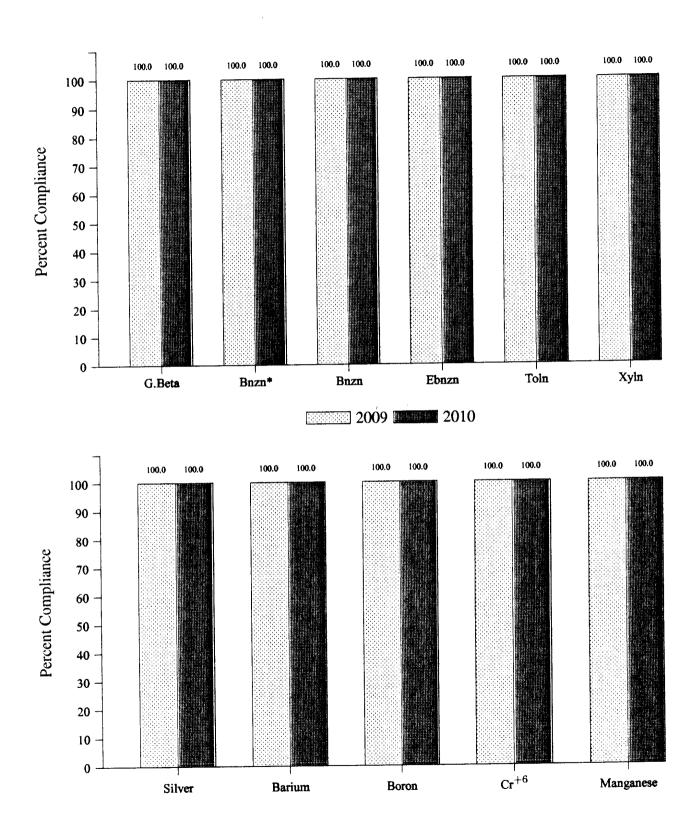
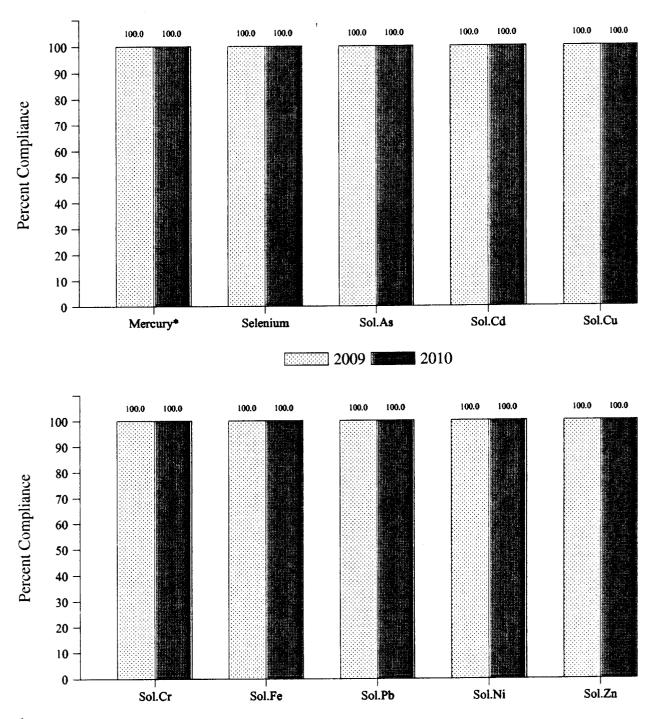


FIGURE 3 (Continued): COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR GENERAL USE WATER SECTION OF THE CALUMET RIVER IN 2009 AND 2010



¹DO standard for general use waters is 5.0 mg/L from March through July, otherwise 3.5 mg/L.

^{*}Human Health Standard became effective in General Use Waters in December, 2002.

FIGURE 4: COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR GENERAL USE WATER SECTION OF THE DES PLAINES RIVER IN 2009 AND 2010

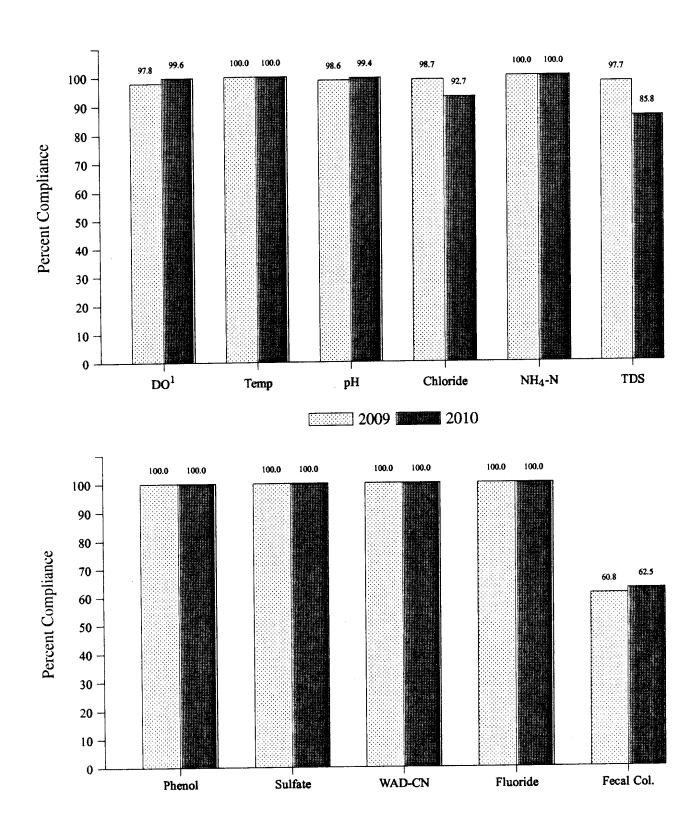


FIGURE 4 (Continued): COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR GENERAL USE WATER SECTION OF THE DES PLAINES RIVER IN 2009 AND 2010

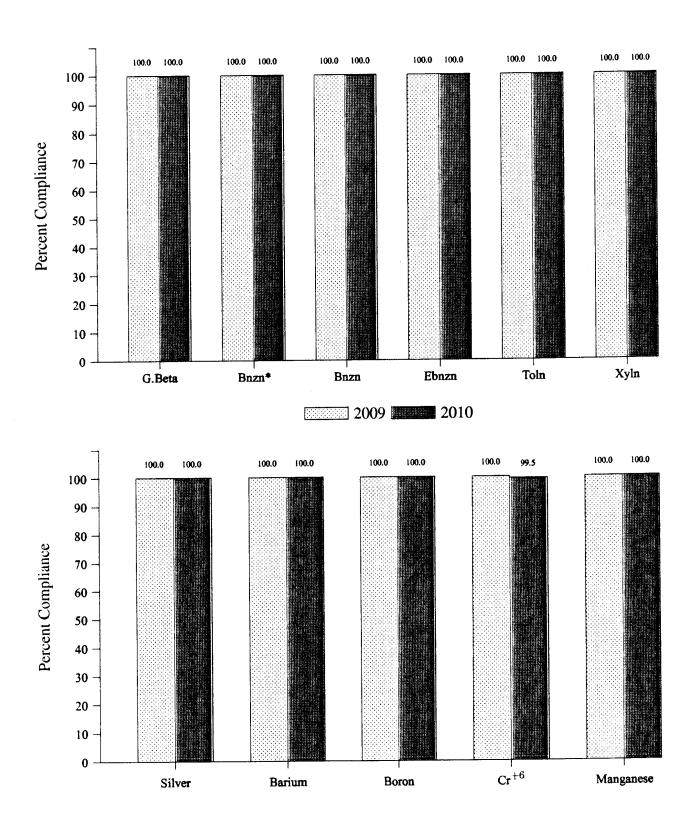
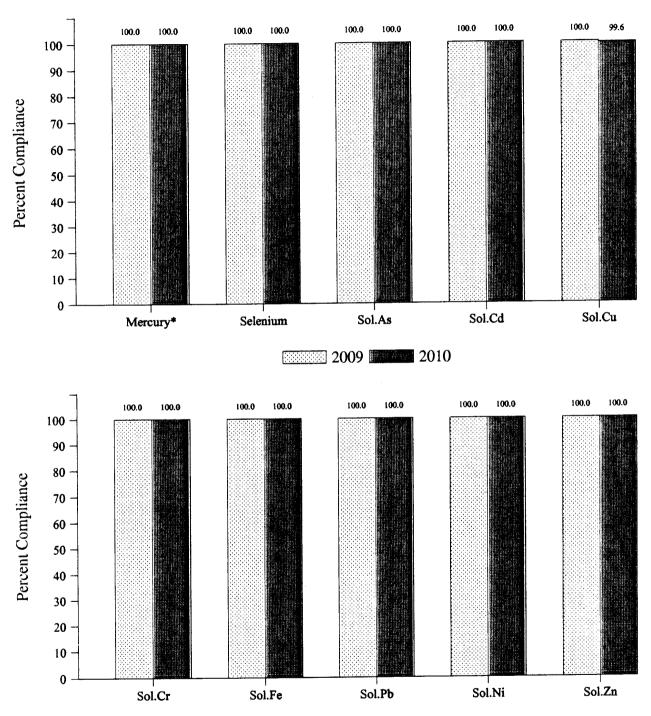


FIGURE 4 (Continued): COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR GENERAL USE WATER SECTION OF THE DES PLAINES RIVER IN 2009 AND 2010



¹DO standard for general use waters is 5.0 mg/L from March through July, otherwise 3.5 mg/L.

^{*}Human Health Standard became effective in General Use Waters in December, 2002.

Chicago River System. There are 13 sampling locations (30, 106, 103, 31, 104, 32, 105, 34, 96, 35, 102, 74, and 100) in the General Use section of the river system. However, location 30 was not sampled in 2010.

In addition to the 22 parameters listed above, sulfate, total hexavalent chromium, and soluble copper were also in total compliance. Violations of remaining five noncompliant parameters (DO, pH, chloride, total dissolved solids, and fecal coliform) are shown in <u>Table 6</u>. There was no violation due to Human Health Standard.

A comparison of 2010 data with 2009 data indicated that there was no significant difference between 2010 and 2009 compliance rates except for pH. In the Chicago River System, the compliance rate for pH significantly decreased from total compliance in 2009 to 95.8 percent in 2010.

Calumet River System. There are seven sampling locations (49, 50, 55, 52, 54, 97, and 57) in the General Use section of the river system. In addition to the 22 parameters listed above, pH, total hexavalent chromium, and soluble copper were also in total compliance. Detailed violation records for the noncompliant parameters are shown in <u>Table 7</u>.

A comparison of 2010 data with 2009 data indicated that there was no significant difference between 2010 and 2009 compliance rates except for chloride. In the Calumet River System, the compliance rate for chloride significantly decreased from total compliance in 2009 to 94.5 percent in 2010.

Des Plaines River System. All 20 sampling locations (90, 89, 64, 79, 80, 18, 24, 109, 77, 78, 12, 13, 17, 19, 20, 22, 23, 29, 91, and 110) of the river system are in General Use Waters. Three sampling locations (110, 89, and 64) on the DuPage River and one sampling location (90) on Poplar Creek are included in this sampling program. In addition to the 22 parameters listed above, sulfate was also in total compliance. Detailed violation records for the noncompliant parameters are shown in <u>Table 8</u>.

A comparison of 2010 data with 2009 data indicated that there was no significant difference between 2010 and 2009 compliance rates except for chloride and total dissolved solids. In the Des Plaines River System, the compliance rate for chloride significantly decreased from 98.7 percent in 2009 to 92.7 percent in 2010, and the compliance rate for total dissolved solids significantly decreased from 97.7 percent in 2009 to 85.8 percent in 2010.

TABLE 6: NUMBER OF PARAMETER CONCENTRATION VIOLATIONS OF GENERAL USE LIMITS IN THE GENERAL USE WATERS OF THE CHICAGO RIVER SYSTEM IN 2010

Parameter	Location No.	Total Violations	Months (No. of Violations) ¹
DO	31	1	Jul
	32	1	Jul
	105	1	Jul
	34	1	Jul
	96	1	Jul
	102	2	Apr and Jun
		7	Total violations of Dissolved Oxygen (DO)
рН	35	1	Apr
_	102	1	Apr
	74	. 1	Dec
	100	1	Dec
		4	Total violations of pH (pH)
Cl	106	3	Feb, Mar, and Dec
	103	2	Feb and Mar
	31	1	Mar
	104	1	Mar
	32	1	Mar
	34	1	Mar
	96	2	Mar and Dec
		11	Total violations of Chloride (Cl)
TDS	106	5	Feb, Mar, Apr, May, and Dec
	103	4	Feb, Mar, Apr, and May
	31	3	Mar, Apr, and May
	104	1	Mar
	32	1	Mar
	105	1	Mar
	34	2	Feb and Mar
	96	3	Feb, Mar, and Dec
		20	Total violations of Total Dissolved Solids (TDS)
FC	106	9	Feb, Mar, Apr, May, Jul, Aug, Sep, Nov, and Dec
	103	6	Feb, Mar, Jun, Jul, Aug, and Sep

TABLE 6 (Continued): NUMBER OF PARAMETER CONCENTRATION VIOLATIONS OF GENERAL USE LIMITS IN THE GENERAL USE WATERS OF THE CHICAGO RIVER SYSTEM IN 2010

	Location	Total	Months
Parameter	No.	Violations	(No. of Violations) ¹
FC (Continued)	31	6	Mar, May, Jun, Jul, Aug, and Sep
	104	2	Aug and Dec
	32	4	Mar, Jul, Aug, and Nov
	105	2	Jul and Aug
	34	6	Jan, Mar, Apr, May, Jun, and Jul
	96	7	Mar, Jun, Jul, Aug, Sep, Nov, and Dec
	35	2	Jul and Aug
	102	6	Jan, Feb, Mar, Jul, Aug, and Nov
	100	3	Mar, Aug, and Dec
		53	Total violations of Fecal Coliform (FC)

¹Number of violations in each month is one unless otherwise indicated in the parenthesis.

TABLE 7: NUMBER OF PARAMETER CONCENTRATION VIOLATIONS OF GENERAL USE LIMITS IN THE GENERAL USE WATERS OF THE CALUMET RIVER SYSTEM IN 2010

Parameter	Location No.	Total Violations	Months (No. of Violations) ¹
DO	54	1	Mar
	57	1	Jun
		<u>2</u>	Total violations of Dissolved Oxygen (DO)
Cl	54	1	Feb
	97	1	Feb
	57	1	Feb
		3	Total violations of Chloride (Cl)
TDS	52	1	Feb
	54	6	Feb, Mar, May, Jun, Sep, and Nov
	97	5	Feb, Mar, Aug, Sep, and Nov
	57	2	Feb and Nov
		14	Total violations of Total Dissolved Solids (TDS)
SO_4	54	4	Feb, Mar, Sep, and Nov
	97	3	Aug, Sep, and Nov
		7	Total violations of Sulfate (SO ₄)
FC	55	1	Oct
	52	11	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, and Nov
	54	7	Jan, Feb, Mar, Apr, Jun, Jul, and Nov
	97	7	Jan, Apr, Jun, Jul, Sep, Oct, and Nov
	57	7	Jan, Feb, Apr, Jun, Aug, Oct, and Nov
		33	Total violations of Fecal Coliform (FC)

¹Number of violations in each month is one unless otherwise indicated in the parenthesis.

TABLE 8: NUMBER OF PARAMETER CONCENTRATION VIOLATIONS OF GENERAL USE LIMITS IN THE GENERAL USE WATERS OF THE DES PLAINES RIVER SYSTEM IN 2010

Parameter	Location No.	Total Violations	Months (No. of Violations) ¹
DO	12	1	Apr
		1	Total violations of Dissolved Oxygen (DO)
рН	110	1	Nov
		1	Total violations of pH (pH)
Cl	90	1	Mar
	64	1	Mar
	80	1	Mar
	18	1	Mar
	24	1	Mar
	109	1	Mar
	77	1	Apr
	12	1	Mar
	17	1	Mar
	19	1	Mar
	20	1	Mar
	22	1	Mar
	23	1	Mar
	29	1	Mar
	91	_1	Mar
		15	Total violations of Chloride (Cl)
TDS	90	1	Mar
	89	1	Mar
	64	1	Mar
	80	3	Mar, Apr, and May
	18	3	Mar, Apr, and May
	24	2	Feb and Mar
	109	3	Feb, Mar, and Dec
	77 70	1	Apr
	78	1	Mar
	12	1	Mar
	13	1	Mar
	17	1	Mar

TABLE 8 (Continued): NUMBER OF PARAMETER CONCENTRATION VIOLATIONS OF GENERAL USE LIMITS IN THE GENERAL USE WATERS OF THE DES PLAINES RIVER SYSTEM IN 2010

Paramete		Location No.	Total Violations	Months (No. of Violations) ¹
TDS (Contin-	19	2	Mar and Dec
		20	2	Mar and Dec
		22	2	Mar and Dec
		23	1	Mar
		29	1	Mar
		91	1	Mar
			28	Total violations of Total Dissolved Solids (TDS)
FC		90	. 1	Apr
		89	7	Jan, Feb, Mar, Apr, Jul, Nov, and Dec
		64	4	Jan, Feb, Mar, and Apr
		79	2	Apr and Aug
		80	4	Mar, Apr, Nov, and Dec
		18	6	Mar, Apr, Jul, Oct, Nov, and Dec
		24	5	Jan, Mar, Apr, May, and Dec
		109	6	Feb, Apr, May, Jun, Aug, and Dec
		78	5	Jan, Feb, Mar, Apr, and Aug
		12	1	Jun
		13	3	Mar, Apr, and Jun
		17	4	Apr, Jun, Jul, and Aug
		19	4	Apr, Jun, Aug, and Dec
		20	2	Apr and Dec
		22	5	Apr, Jun, Aug, Oct, and Dec
		23	4	Apr, Jun, Sep, and Oct
		29	2	Apr and Dec
		110	7	Apr, May, Jul, Aug, Sep, Oct, and Nov
			72	Total violations of Fecal Coliform (FC)
Cr ⁺⁶		23	_1	Jun
			1	Total violations of Total Hexavalent Chromium (Cr ⁺⁶)
Sol. Cu		78	1	May
			1	Total violations of Soluble Copper (Sol. Cu)

¹Number of violations in each month is one unless otherwise indicated in the parenthesis.

COMPLIANCE WITHWATER QUALITY STANDARDS IN SECONDARY CONTACT WATERS

Sampling Locations and Frequencies

As shown in <u>Figure 1</u>, 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 2010 and the annual frequencies of sampling are shown in <u>Table 9</u>. Also, <u>Tables AII-2</u> through <u>AII-45</u> show the number of violations and the annual sampling frequencies. In 2002, grab samples were collected at the Lockport Powerhouse (Chicago River System) once per week, but sampling at this location was discontinued after April 2002. Sampling at the Lockport Powerhouse was replaced by the collection of weekly grab samples at Location 92 (Lockport Forebay) in 2002. Location 92 was sampled 52 times in 2010.

River System Compliance Data

In the Secondary Contact Waters, 67 parameters were analyzed in 2010, of which 23 parameters were subject to IPCB Water Quality Standards. They were DO; temperature; pH; unionized ammonia; total dissolved solids; phenols; fats, oils, and greases; total cyanide; fluoride; total silver; total arsenic; total barium; total cadmium; total copper; total hexavalent chromium; total iron; total lead; total nickel; total manganese; total mercury; total zinc; total selenium; and soluble iron. Summary results, including means and compliance standards, are shown in Appendix AII for the Chicago and Calumet River Systems.

Generally, compliance with IPCB standards was high in 2010 in both the Chicago and Calumet River Systems. Eighteen water quality parameters were in complete compliance in both of these river systems. They were temperature; phenols; fats, oils, and greases; total cyanide; fluoride; total silver; total arsenic; total barium; total cadmium; total copper; total hexavalent chromium; total lead; total nickel; total manganese; total mercury; total zinc; total selenium; and soluble iron.

The compliance rates for 23 water quality parameters with Secondary Contact Standards for the Chicago and Calumet River Systems are presented in <u>Figures 5</u> and <u>6</u>, respectively.

The five water quality parameters which were not in complete compliance in both of the river systems are listed in Table 10 with observed percent compliance.

Chicago River System. Violations of the pertinent Secondary Contact Standards for the remaining three parameters (DO, pH, and total dissolved solids) occurred in at least one of the locations sampled. The compliance rates of these three parameters ranged from 95.9 to 99.5 percent. Detailed violation records for the noncompliant parameters are shown in <u>Table 11</u>.

A comparison of 2010 data with 2009 data indicated that there was no significant difference between 2010 and 2009 compliance rates for all parameters in the two river systems.

TABLE 9: LOCATIONS SAMPLED AND ANNUAL SAMPLING FREQUENCIES OF SECONDARY CONTACT WATERS IN 2010

Map No.1	Station Name	Annual No. of Samples
Chicago Ri	ver System	
36	Touhy Avenue, North Shore Channel	11
101	Foster Avenue, North Shore Channel	12
37	Wilson Avenue, North Branch Chicago River	12
73	Diversey Parkway, North Branch Chicago River	12
46	Grand Avenue, North Branch Chicago River	12
39	Madison Street, South Branch Chicago River	12
108	Loomis Street, South Branch Chicago River	11
99	Archer Avenue, South Fork South Branch Chicago River	10
40	Damen Avenue, Chicago Sanitary & Ship Canal	12
75	Cicero Avenue, Chicago Sanitary & Ship Canal	12
41	Harlem Avenue, Chicago Sanitary & Ship Canal	9
42	Route 83, Chicago Sanitary & Ship Canal	12
48	Stephen Street, Chicago Sanitary & Ship Canal	12
92	Lockport Forebay, Chicago Sanitary & Ship Canal	51
		$\overline{200}$
Calumet R	iver System	
86	Burnham Avenue, Grand Calumet River	7
56	Indiana Avenue, Little Calumet River	10
76	Halsted Street, Little Calumet River	10
58	Ashland Avenue, Calumet-Sag Channel	10
59	Cicero Avenue, Calumet-Sag Channel	10
43	Route 83, Calumet-Sag Channel	11
		<u>5</u> 8

¹Refer to Figure 1.

FIGURE 5: COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR SECONDARY CONTACT WATER SECTION OF THE CHICAGO RIVER IN 2009 AND 2010

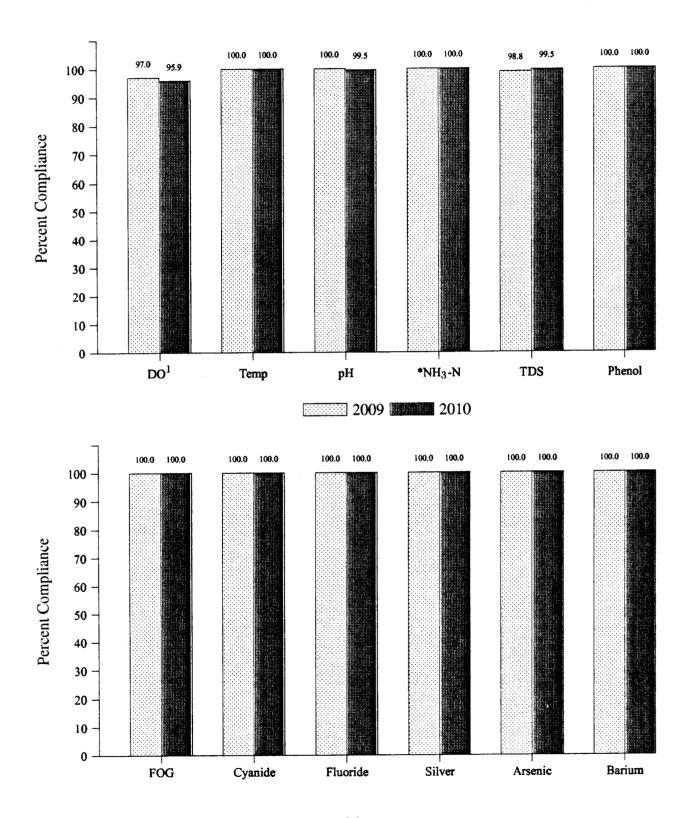


FIGURE 5 (Continued): COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR SECONDARY CONTACT WATER SECTION OF THE CHICAGO RIVER IN 2009 AND 2010

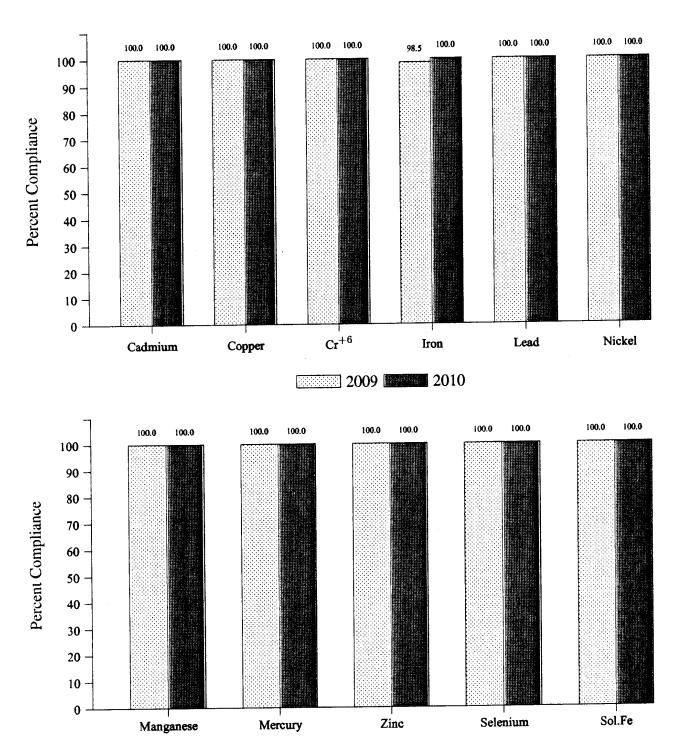


FIGURE 6: COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR SECONDARY CONTACT WATER SECTION OF THE CALUMET RIVER IN 2009 AND 2010

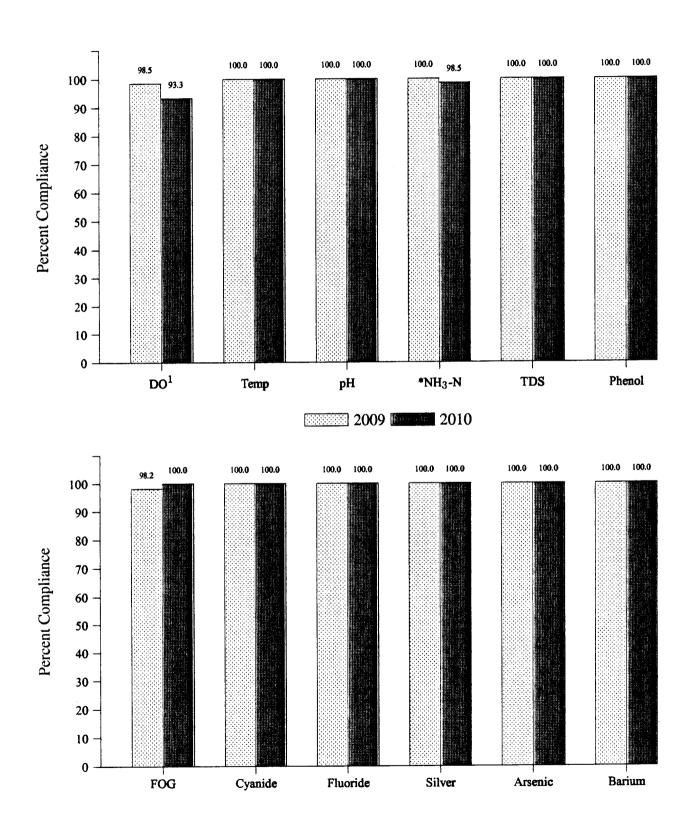
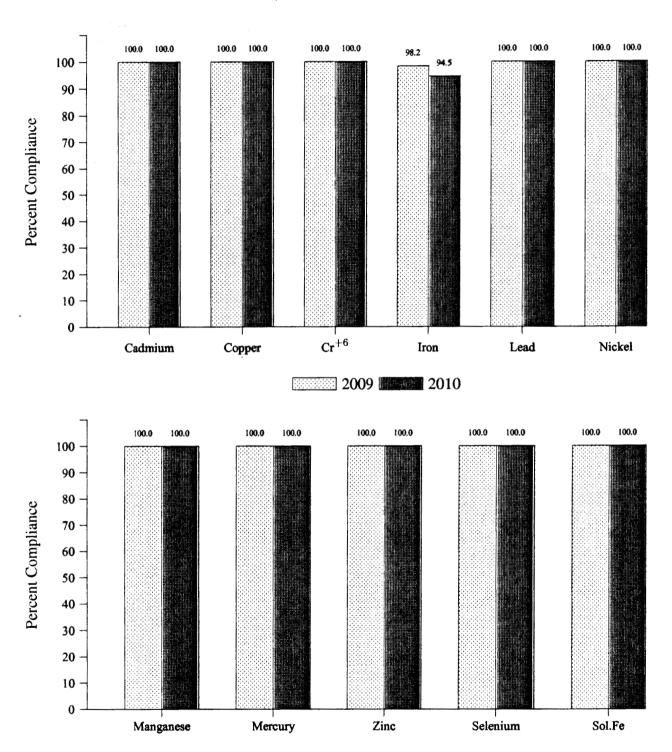


FIGURE 6 (Continued): COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR SECONDARY CONTACT WATER SECTION OF THE CALUMET RIVER IN 2009 AND 2010



 $[*]NH_3-N = Un-ionized Ammonia.$

TABLE 10: WATER QUALITY PARAMETERS NOT IN TOTAL COMPLIANCE IN SECONDARY CONTACT WATERS OF ALL RIVER SYSTEMS IN 2010

Estimated Percent Compliance¹

Parameter	Chicago	Calumet
Dissolved Oxygen pH Un-ionized Ammonia Total Dissolved Solids Total Iron	95.9 99.5 100.0 99.5 100.0	93.3 100.0 98.5 100.0 94.5

¹Based on the total number of samples in compliance divided by the total number of samples collected, multiplied by 100.

TABLE 11: NUMBER OF PARAMETER CONCENTRATION VIOLATIONS OF SECONDARY CONTACT LIMITS IN THE SECONDARY CONTACT WATERS OF THE CHICAGO RIVER SYSTEM IN 2010

Parameter	Location No.	Total Violations	Months (No. of Violations) ¹
DO	73 99 92	1 1 6 8	Jul May Jun(2), Jul(2), Aug, and Sep Total violations of Dissolved Oxygen (DO)
pН	39	$\frac{1}{1}$	Dec Total violations of pH (pH)
TDS	92	$\frac{1}{1}$	Feb Total violations of Total Dissolved Solids (TDS)

¹Number of violations in each month is one unless otherwise indicated in the parenthesis.

Calumet River System. In addition to the 18 parameters listed above, pH and total dissolved solids were also in total compliance. Violations of the pertinent Secondary Contact Standards for the remaining three parameters (DO, un-ionized ammonia, and total iron) occurred in at least one of the locations sampled. The compliance rates of these three parameters ranged from 93.3 to 98.5 percent. Detailed violation records for the noncompliant parameters are shown in <u>Table 12</u>.

A comparison of 2010 data with 2009 data indicated that there was no significant difference between 2010 and 2009 compliance rates for all parameters in the two river systems.

TABLE 12: NUMBER OF PARAMETER CONCENTRATION VIOLATIONS OF SECONDARY CONTACT LIMITS IN THE SECONDARY CONTACT WATERS OF THE CALUMET RIVER SYSTEM IN 2010

Parameter	Location No.	Total Violations	Months (No. of Violations) ¹
DO	86	4	Jun, Jul, Aug, and Oct
		$\frac{4}{4}$	Total violations of Dissolved Oxygen (DO)
NH ₃ -N	86	1	Aug
		ī	Total violations of Un-ionized Ammonia (NH ₃ -N)
Fe	86	1	Jul
	58	1	Jan
	59	1	Jan
		<u>3</u>	Total violations of Total Iron (Fe)

¹Number of violations in each month is one unless otherwise indicated in the parenthesis.

COMPLIANCE WITH RECEIVING WATER QUALITY STANDARDS UPSTREAM AND DOWNSTREAM OF THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO 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 the WRPs) for six of these WRPs were sampled during 2010. 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 their effluents into Secondary Contact Waters. During 2010, the lack of an upstream sampling location for the Lemont WRP which was downstream of the Calumet-Sag junction precluded an evaluation. Upstream and downstream sampling locations, as well as annual sampling frequencies for the respective WRPs, are shown in <u>Table 13</u>.

The outfalls for Hanover Park, John E. Egan, and James C. Kirie WRPs are located in the West Branch of the DuPage River, Salt Creek, and Higgins Creek, respectively. More specifically, the sampling stations for the plants that discharge to General Use Waters are located as follows:

- 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, 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 Elmhurst Road, 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 which have 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 the Stickney WRP are Cicero Avenue and Harlem Avenue, respectively, both on the Chicago Sanitary and Ship Canal. Cicero Avenue is 7,900 feet above and Harlem Avenue is 9,200 feet below the outfall.
- 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 and Halsted Street is 6,600 feet below the outfall.

TABLE 13: ANNUAL SAMPLING FREQUENCIES AT UPSTREAM AND DOWNSTREAM LOCATIONS OF METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO WATER RECLAMATION PLANTS IN 2010

	Upstream Sa	mple		Downstream	Sample	
WRP	Location	No. ¹	Freq.	Location	No.1	Freq.
North Side	Central Street, North Shore Channel	35	8	Touhy Avenue, North Shore Channel	36	11
Stickney	Cicero Avenue, Chicago Sanitary & Ship Canal	75	12	Harlem Avenue, Chicago Sanitary & Ship Canal	41	9
Calumet	Indiana Avenue, Little Calumet River	56	10	Halsted Street, Little Calumet River	76	10
John E. Egan	Higgins Road, Salt Creek	79	8	Arlington Heights Road, Salt Creek	80	12
James C. Kirie	Elmhurst Road, Higgins Creek	77	1	Wille Road, Higgins Creek	78	9
Hanover Park	Longmeadow Lane, West Branch DuPage River*	63	0	Walnut Lane, West Branch DuPage River	89	12

¹Location No. of stations are shown in Figure 1.

^{*}Not sampled because the water level was too low to obtain a representative sample without being contaminated by sediment

Annual Summary Results for Water Quality Upstream and Downstream of the Metropolitan Water Reclamation District of Greater Chicago Outfalls

Several statistical analyses were performed to evaluate the effect of flow from each WRP on its receiving stream. The sample values of each parameter at the upstream and downstream locations were first tested to see if they exhibited normal distribution and then tested for equality of variances. If the upstream and downstream sample data came from normally distributed populations and had equal variance, an exact t-test was used for testing the equality of upstream and downstream means. An approximate t-test was used if the data came from two different normally distributed populations.

If the sample size for each of the upstream and downstream data sets was less than 30, and did not come from normally distributed populations, a Wilcoxon rank-sum test was used to test for the equality of two population centers. Wilcoxon test applies to sample mean and median if both upstream and downstream populations come from symmetric populations; otherwise, the test applies to population medians only. Symmetry of a population was determined by a box plot if the sample size was small (n < 30).

The mean levels for each parameter measured at the upstream and downstream locations of each WRP and the appropriate significance probability associated with the exact t-test/approximate t-test or Wilcoxon rank-sum test are tabulated in <u>Tables 14</u> through <u>18</u>. <u>Tables AIII-1</u> through <u>AIII-5</u> in <u>Appendix AIII</u> show in detail the significance probability for testing normality and equality of variances of the upstream and downstream data, and the significance probability for testing the equality of upstream and downstream means employing an appropriate test.

Sixty-seven water quality parameters, including 42 parameters which have either IPCB General Use, Human Health, or Secondary Contact limits, were assayed for all WRPs in 2010. Comparison of the mean concentrations of the common parameters (maximum 67) at upstream and downstream locations showed that the downstream mean concentrations are significantly different from the upstream mean concentrations for some parameters, and about the same for the other parameters. This was indicated by the significance probabilities given in <u>Tables 14</u> through <u>18</u>. A value of 0.05 or smaller indicates that the two means are significantly different, and a value greater than 0.05 indicates there is no difference between means.

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

- 1. Identify the parameters that 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 for that parameter.

TABLE 14: COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS FOR THE NORTH SIDE WATER RECLAMATION PLANT IN 2010

Alkalinity (Total) Alk (mg/L) 118 136 0.082 Chloride Cl (mg/L) 30 155 0.010 Turbidity Turb (NTU) 5.5 4.0 0.370 Total Kjeldahl Nitrogen TKN (mg/L) <0.43 2.06 0.001 Ammonium Nitrogen NH ₄ -N (mg/L) 0.13 0.83 0.002 Un-ionized Ammonia NH ₃ -N (mg/L) 0.001 0.005 0.013 Organic Nitrogen ORG-N (mg/L) 0.21 1.24 0.005 Nitrite Plus Nitrate Nitrogen NO ₂ + NO ₃ (mg/L) 0.31 6.53 0.000 Total Solids TS (mg/L) 255 534 0.003 Total Suspended Solids TSS (mg/L) 7.1 7.0 0.958 Volatile Suspended Solids VSS (mg/L) 1.1 1.5 0.785 Total Dissolved Solids TDS (mg/L) 248 527 0.003 Phenols Phenol (µg/L) <5 <5 - Total Nonylphenols NPS (µg/L) 21.3	Parameter	Abbreviation (Units)	U¹ v	s. D¹	Sig. Prob. ^{2,3}
pH pH 7.6 7.3 0.418 Alkalinity (Total) Alk (mg/L) 118 136 0.082 Chloride Cl (mg/L) 30 155 0.010 Turbidity Turb (NTU) 5.5 4.0 0.370 Total Kjeldahl Nitrogen TKN (mg/L) <0.43	Dissolved Oxygen	DO (mg/L)	8.4	7.1	0.078
Alkalinity (Total) Alk (mg/L) 118 136 0.082 Chloride Cl (mg/L) 30 155 0.010 Turbidity Turb (NTU) 5.5 4.0 0.370 Total Kjeldahl Nitrogen TKN (mg/L) <0.43	Temperature	_	17	16	0.775
Chloride Cl (mg/L) 30 155 0.010 Turbidity Turb (NTU) 5.5 4.0 0.370 Total Kjeldahl Nitrogen TKN (mg/L) <0.43	pН	pН	7.6	7.3	0.418
Turbidity Turb (NTU) 5.5 4.0 0.370 Total Kjeldahl Nitrogen TKN (mg/L) <0.43	Alkalinity (Total)	Alk (mg/L)	118	136	0.082
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Chloride	Cl (mg/L)	30	155	0.010
Ammonium Nitrogen NH ₄ -N (mg/L) 0.13 0.83 0.002 Un-ionized Ammonia NH ₃ -N (mg/L) 0.001 0.005 0.013 Organic Nitrogen ORG-N (mg/L) 0.21 1.24 0.005 Nitrite Plus Nitrate Nitrogen NO ₂ + NO ₃ (mg/L) 0.31 6.53 0.000 Total Solids TSS (mg/L) 7.1 7.0 0.958 Volatile Suspended Solids VSS (mg/L) 1.1 1.5 0.785 Total Dissolved Solids TDS (mg/L) 248 527 0.003 Phenols Phenol (μ g/L) <5	Turbidity		5.5	4.0	0.370
Un-ionized Ammonia NH ₃ -N (mg/L) 0.001 0.005 0.013 Organic Nitrogen ORG-N (mg/L) 0.21 1.24 0.005 Nitrite Plus Nitrate Nitrogen NO ₂ + NO ₃ (mg/L) 0.31 6.53 0.000 Total Suspended Solids TS (mg/L) 255 534 0.003 Total Suspended Solids TSS (mg/L) 7.1 7.0 0.958 Volatile Suspended Solids VSS (mg/L) 1.1 1.5 0.785 Total Dissolved Solids TDS (mg/L) 248 527 0.003 Phenols Phenol (μg/L) <5	Total Kjeldahl Nitrogen		< 0.43	2.06	0.001
Organic Nitrogen ORG-N (mg/L) 0.21 1.24 0.005 Nitrite Plus Nitrate Nitrogen NO2 + NO3 (mg/L) 0.31 6.53 0.000 Total Solids TS (mg/L) 255 534 0.003 Total Suspended Solids TSS (mg/L) 7.1 7.0 0.958 Volatile Suspended Solids VSS (mg/L) 1.1 1.5 0.785 Total Dissolved Solids TDS (mg/L) 248 527 0.003 Phenols Phenol (μg/L) <5	Ammonium Nitrogen	NH_4 - $N (mg/L)$	0.13	0.83	0.002
Organic Nitrogen ORG-N (mg/L) 0.21 1.24 0.005 Nitrite Plus Nitrate Nitrogen NO2 + NO3 (mg/L) 0.31 6.53 0.000 Total Solids TS (mg/L) 255 534 0.003 Total Suspended Solids TSS (mg/L) 7.1 7.0 0.958 Volatile Suspended Solids VSS (mg/L) 1.1 1.5 0.785 Total Dissolved Solids TDS (mg/L) 248 527 0.003 Phenols Phenol (μg/L) <5	Un-ionized Ammonia	NH ₃ -N (mg/L)	0.001	0.005	0.013
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Organic Nitrogen	, ,		1.24	
Total Solids TS (mg/L) 255 534 0.003 Total Suspended Solids TSS (mg/L) 7.1 7.0 0.958 Volatile Suspended Solids VSS (mg/L) 1.1 1.5 0.785 Total Dissolved Solids TDS (mg/L) 248 527 0.003 Phenols Phenol (μg/L) <5	Nitrite Plus Nitrate Nitrogen		0.31	6.53	0.000
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Total Solids	-	255	534	0.003
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Total Suspended Solids	TSS (mg/L)	7.1	7.0	0.958
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Volatile Suspended Solids	VSS (mg/L)	1.1	1.5	0.785
Total Nonylphenols NPS (μg/L) <1.3 <1.3 - Sulfate SO ₄ (mg/L) 25 42 0.000 Fats, Oils, and Greases FOG (mg/L) <5	Total Dissolved Solids	TDS (mg/L)	248	527	0.003
Sulfate SO ₄ (mg/L) 25 42 0.000 Fats, Oils, and Greases FOG (mg/L) <5	Phenols	Phenol (μ g/L)	<5	<5	-
Sulfate SO ₄ (mg/L) 25 42 0.000 Fats, Oils, and Greases FOG (mg/L) <5	Total Nonylphenols	NPS (μg/L)	<1.3	<1.3	-
Total Phosphorus TP (mg/L) <0.136 1.15 0.000 Total Cyanide CN (mg/L) <0.005	Sulfate		25	42	0.000
Total Cyanide CN (mg/L) <0.005 <0.005 - WAD Cyanide WAD-CN (mg/L) <0.002	Fats, Oils, and Greases	FOG (mg/L)	< 5	< 5	-
WAD Cyanide WAD-CN (mg/L) <0.002 <0.002 - Fluoride F (mg/L) 0.13 0.66 0.000 Total Organic Carbon TOC (mg/L) 3.7 5.0 0.206 Fecal Coliform * FC (#/100ml) 54 5393 0.000 Escherichia Coli * EColi (#/100ml) 81 5491 0.291 Total Calcium Ca (mg/L) 38 52 0.006	Total Phosphorus	TP (mg/L)	< 0.136	1.15	0.000
WAD Cyanide WAD-CN (mg/L) <0.002	Total Cyanide	CN (mg/L)	< 0.005	< 0.005	-
Fluoride F (mg/L) 0.13 0.66 0.000 Total Organic Carbon TOC (mg/L) 3.7 5.0 0.206 Fecal Coliform * FC (#/100ml) 54 5393 0.000 Escherichia Coli * EColi (#/100ml) 81 5491 0.291 Total Calcium Ca (mg/L) 38 52 0.006	WAD Cyanide		< 0.002	< 0.002	-
Fecal Coliform * FC (#/100ml) 54 5393 0.000 Escherichia Coli * EColi (#/100ml) 81 5491 0.291 Total Calcium Ca (mg/L) 38 52 0.006	Fluoride	_	0.13	0.66	0.000
Escherichia Coli * EColi (#/100ml) 81 5491 0.291 Total Calcium Ca (mg/L) 38 52 0.006	Total Organic Carbon	, G	3.7	5.0	0.206
Escherichia Coli * EColi (#/100ml) 81 5491 0.291 Total Calcium Ca (mg/L) 38 52 0.006	Fecal Coliform *	FC (#/100ml)	54	5393	0.000
Total Calcium Ca (mg/L) 38 52 0.006	Escherichia Coli *	•			
, U	Total Calcium	,			
	Total Magnesium	Mg (mg/L)	13	18	0.007

TABLE 14 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS FOR THE NORTH SIDE WATER RECLAMATION PLANT IN 2010

Hardness	Parameter	Abbreviation (Units)	U¹ v	s. D ¹	Sig. Prob. ^{2,3}
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Hardness	Hard (mg/L)	148	205	0.006
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Gross Alpha Radioactivity	G. Alpha (pCi/L)	2.1	2.8	0.146
Benzene Bnzn ($\mu g/L$) <2 <2 - Ethylbenzene Ebnzn ($\mu g/L$) <2	Gross Beta Radioactivity	G. Beta (pCi/L)	4.9	6.4	0.100
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Chlorophyll a	Chlrphl (μ g/L)	18	2	0.330
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Benzene	Bnzn (µg/L)	<2	<2	-
Toluene Toln (μg/L) <2 <2 - Xylene Xyln (μg/L) <3	Ethylbenzene		<2	<2	-
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-		<2	<2	-
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Xylene		<3	<3	-
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Total Silver	Ag (mg/L)	< 0.003	< 0.003	-
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Total Arsenic	- · ·	< 0.048	< 0.048	-
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Total Barium	Ba (mg/L)	0.023	0.022	0.625
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Total Boron	B (mg/L)	< 0.058	0.160	-
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Total Cadmium	Cd (mg/L)	< 0.007	< 0.007	-
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Total Copper		< 0.012	< 0.012	_
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Total Chromium	. •	< 0.005	< 0.005	0.816
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Total Hexavalent Chromium	$\operatorname{Cr}^{+6}(\mu g/L)$	<10	<10	-
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Total Iron	Fe (mg/L)	0.174	< 0.136	0.544
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Total Lead		< 0.024	< 0.024	-
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Total Nickel	Ni (mg/L)	< 0.009	< 0.009	-
Low Level Mercury Hg- (ng/L) 1.838 <0.5	Total Manganese	Mn (mg/L)	0.020	0.027	0.542
Low Level Mercury Hg- (ng/L) 1.838 <0.5	Total Mercury	Hg (µg/L)	< 0.2	< 0.2	-
Total Zinc Zn (mg/L) <0.035 <0.035 0.018 Total Selenium Se (mg/L) <0.078	· •		1.838	< 0.5	-
Soluble Calcium Sol. Ca (mg/L) 38.1 51.7 0.019 Soluble Magnesium Sol. Mg (mg/L) 13.1 18.5 0.018 Soluble Silver Sol. Ag (mg/L) <0.003	Total Zinc			< 0.035	0.018
Soluble Magnesium Sol. Mg (mg/L) 13.1 18.5 0.018 Soluble Silver Sol. Ag (mg/L) <0.003	Total Selenium	Se (mg/L)	< 0.078	< 0.078	-
Soluble Magnesium Sol. Mg (mg/L) 13.1 18.5 0.018 Soluble Silver Sol. Ag (mg/L) <0.003	Soluble Calcium	Sol. Ca (mg/L)	38.1	51.7	0.019
Soluble Silver Sol. Ag (mg/L) <0.003 <0.003 -	Soluble Magnesium		13.1	18.5	
	Soluble Silver	<u> </u>	< 0.003		-
	Soluble Arsenic	Sol. As (mg/L)	< 0.034	< 0.034	-

TABLE 14 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS FOR THE NORTH SIDE WATER RECLAMATION PLANT IN 2010

Parameter	Abbreviation (Units)	U¹ vs	. D¹	Sig. Prob. ^{2,3}
Soluble Barium	Sol. Ba (mg/L)	0.022	0.020	0.458
Soluble Boron	Sol. B (mg/L)	< 0.038	0.161	0.000
Soluble Cadmium	Sol. Cd (mg/L)	< 0.002	< 0.002	-
Soluble Copper	Sol. Cu (mg/L)	< 0.008	< 0.008	-
Soluble Chromium	Sol. Cr (mg/L)	< 0.003	< 0.003	-
Soluble Iron	Sol. Fe (mg/L)	< 0.083	< 0.083	0.541
Soluble Lead	Sol. Pb (mg/L)	< 0.023	< 0.023	-
Soluble Nickel	Sol. Ni (mg/L)	< 0.005	< 0.005	
Soluble Manganese	Sol. Mn (mg/L)	0.012	0.018	0.405
Soluble Zinc	Sol. Zn (mg/L)	< 0.015	0.027	-
Soluble Selenium	Sol. Se (mg/L)	< 0.076	< 0.076	-

¹Value following < sign is the average detection limit.

²Significance Probability ≤ 0.05 indicates that upstream and downstream population means are not equal.

³Some tests may be based on Wilcoxon rank-sum statistics that apply to population medians only in the absence of population symmetry. Please see Appendix AIII-1 for details.

^{*}Test applies to population means if variances of log values are equal, otherwise applies to geometric means (see Appendix AIII-1 for details).

⁻⁼No test was done since standard deviations are below the detection limit or equal to 0.

TABLE 15: COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS FOR THE STICKNEY WATER RECLAMATION PLANT IN 2010

Parameter	Abbreviation (Units)	U^1 v	s. D¹	Sig. Prob. ^{2,3}
Dissolved Oxygen	DO (mg/L)	6.0	7.6	0.005
Temperature	Temp (°C)	19	17	0.544
pH	pН	7.0	7.2	0.053
Alkalinity (Total)	Alk (mg/L)	140	138	0.867
Chloride	Cl (mg/L)	161	188	0.492
Turbidity	Turb (NTU)	8.9	5.0	0.001
Total Kjeldahl Nitrogen	TKN (mg/L)	1.4	1.5	0.688
Ammonium Nitrogen	$NH_4-N (mg/L)$	0.56	0.52	0.770
Un-ionized Ammonia	NH ₃ -N (mg/L)	0.003	0.003	0.618
Organic Nitrogen	ORG-N (mg/L)	0.84	0.99	0.395
Nitrite Plus Nitrate Nitrogen	$NO_2 + NO_3 \text{ (mg/L)}$	5.1	8.1	0.021
Total Solids	TS (mg/L)	546	621	0.341
Total Suspended Solids	TSS (mg/L)	13	8	0.002
Volatile Suspended Solids	VSS (mg/L)	1.9	0.9	0.252
Total Dissolved Solids	TDS (mg/L)	533	614	0.308
Phenols	Phenol (μ g/L)	<5	<5	-
Total Nonylphenols	NPS (μg/L)	<1.3	<1.3	_
Sulfate	$SO_4 (mg/L)$	43	61	0.000
Fats, Oils, and Greases	FOG (mg/L)	<5	<5	-
Total Phosphorus	TP (mg/L)	0.68	0.79	0.528
Total Cyanide	CN (mg/L)	< 0.005	< 0.005	0.381
WAD Cyanide	WAD-CN (mg/L)	< 0.002	< 0.002	0.726
Fluoride	F (mg/L)	0.51	0.60	0.217
Total Organic Carbon	TOC (mg/L)	3.9	4.6	0.029
Fecal Coliform *	FC (#/100ml)	137	1391	0.000
Escherichia Coli *	EColi (#/100ml)	58	1106	0.037
Total Calcium	Ca (mg/L)	54	59	0.273
Total Magnesium	Mg (mg/L)	19	21	0.426
-				

TABLE 15 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS FOR THE STICKNEY WATER RECLAMATION PLANT IN 2010

Parameter	Abbreviation (Units)	U¹ vs	s. D ¹	Sig. Prob. ^{2,3}
Hardness	Hard (mg/L)	214	234	0.326
Gross Alpha Radioactivity	G. Alpha (pCi/L)	3.1	3.4	0.548
Gross Beta Radioactivity	G. Beta (pCi/L)	6.0	7.5	0.097
Chlorophyll a	Chlrphl (μ g/L)	4.7	4.0	0.604
Benzene	Bnzn (μg/L)	<2	<2	-
Ethylbenzene	Ebnzn (μg/L)	<2	<2	-
Toluene	Toln (μ g/L)	<2	<2	-
Xylene	$Xyln(\mu g/L)$	<3	<3	-
Total Silver	Ag (mg/L)	< 0.003	< 0.003	-
Total Arsenic	As (mg/L)	< 0.048	< 0.048	-
Total Barium	Ba (mg/L)	0.026	0.023	0.111
Total Boron	B (mg/L)	0.114	0.152	0.006
Total Cadmium	Cd (mg/L)	< 0.007	< 0.007	-
Total Copper	Cu (mg/L)	< 0.012	< 0.012	-
Total Chromium	Cr (mg/L)	< 0.005	< 0.005	0.683
Total Hexavalent Chromium	$\operatorname{Cr}^{+6}(\mu g/L)$	<10	<10	.
Total Iron	Fe (mg/L)	0.389	0.207	0.000
Total Lead	Pb (mg/L)	< 0.024	< 0.024	-
Total Nickel	Ni (mg/L)	< 0.009	< 0.009	-
Total Manganese	Mn (mg/L)	0.033	0.039	0.717
Total Mercury	Hg (μg/L)	< 0.2	< 0.2	-
Low Level Mercury	Hg-(ng/L)	< 0.5	< 0.5	-
Total Zinc	Zn (mg/L)	< 0.035	< 0.035	0.459
Total Selenium	Se (mg/L)	< 0.078	< 0.078	-
Soluble Calcium	Sol. Ca (mg/L)	52.8	58.1	0.278
Soluble Magnesium	Sol. Mg (mg/L)	19.3	21.0	0.390
Soluble Silver	Sol. Ag (mg/L)	< 0.003	< 0.003	-
Soluble Arsenic	Sol. As (mg/L)	< 0.034	< 0.034	-

TABLE 15 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS FOR THE STICKNEY WATER RECLAMATION PLANT IN 2010

Parameter	Abbreviation (Units)	U¹ vs	. D¹	Sig. Prob. ^{2,3}
Soluble Barium	Sol. Ba (mg/L)	0.021	0.020	0.584
Soluble Boron	Sol. B (mg/L)	0.121	0.160	0.008
Soluble Cadmium	Sol. Cd (mg/L)	< 0.002	< 0.002	-
Soluble Copper	Sol. Cu (mg/L)	< 0.008	< 0.008	-
Soluble Chromium	Sol. Cr (mg/L)	< 0.003	< 0.003	-
Soluble Iron	Sol. Fe (mg/L)	< 0.083	< 0.083	0.518
Soluble Lead	Sol. Pb (mg/L)	< 0.023	< 0.023	-
Soluble Nickel	Sol. Ni (mg/L)	< 0.005	< 0.005	0.224
Soluble Manganese	Sol. Mn (mg/L)	0.023	0.041	0.489
Soluble Zinc	Sol. Zn (mg/L)	< 0.015	0.022	0.054
Soluble Selenium	Sol. Se (mg/L)	< 0.076	< 0.076	-

¹Value following < sign is the average detection limit.

²Significance Probability ≤ 0.05 indicates that upstream and downstream population means are not equal.

³Some tests may be based on Wilcoxon rank-sum statistics that apply to population medians only in the absence of population symmetry. Please see Appendix AIII-2 for details.

^{*}Test applies to population means if variances of log values are equal, otherwise applies to geometric means (see Appendix AIII-2 for details).

⁻⁼No test was done since standard deviations are below the detection limit or equal to 0.

TABLE 16: COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS FOR THE CALUMET WATER RECLAMATION PLANT IN 2010

Parameter	Abbreviation (Units)	U^1 v	s. D¹	Sig. Prob. ^{2,3}
Dissolved Oxygen	DO (mg/L)	8.7	6.9	0.007
Temperature	Temp (°C)	18	17	0.784
pН	pН	7.6	7.3	0.069
Alkalinity (Total)	Alk (mg/L)	120	147	0.004
Chloride	Cl (mg/L)	104	159	0.171
Turbidity	Turb (NTU)	8.9	4.9	0.018
Total Kjeldahl Nitrogen	TKN (mg/L)	0.64	1.30	0.007
Ammonium Nitrogen	$NH_4-N (mg/L)$	0.20	0.37	0.088
Un-ionized Ammonia	NH ₃ -N (mg/L)	0.002	0.002	0.391
Organic Nitrogen	ORG-N (mg/L)	0.45	0.93	0.008
Nitrite Plus Nitrate Nitrogen	$NO_2 + NO_3 $ (mg/L)	1.1	5.4	0.001
Total Solids	TS (mg/L)	420	586	0.056
Total Suspended Solids	TSS (mg/L)	13	8	0.005
Volatile Suspended Solids	VSS (mg/L)	1.1	0.4	0.543
Total Dissolved Solids	TDS (mg/L)	407	579	0.051
Phenols	Phenol (µg/L)	<5	<5	-
Total Nonylphenols	NPS (μg/L)	<1.3	<1.3	_
Sulfate	SO ₄ (mg/L)	61	75	0.302
Fats, Oils, and Greases	FOG (mg/L)	<5	<5	-
Total Phosphorus	TP (mg/L)	0.37	2.01	0.003
Total Cyanide	CN (mg/L)	< 0.005	< 0.005	-
WAD Cyanide	WAD-CN (mg/L)	< 0.002	< 0.002	0.330
Fluoride	F (mg/L)	0.27	0.53	0.001
Total Organic Carbon	TOC (mg/L)	3.6	5.0	0.013
Fecal Coliform *	FC (#/100ml)	74	1926	0.000
Escherichia Coli *	EColi (#/100ml)	126	3724	0.012
Total Calcium	Ca (mg/L)	48	61	0.051
Total Magnesium	Mg (mg/L)	16	21	0.041

TABLE 16 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS FOR THE CALUMET WATER RECLAMATION PLANT IN 2010

Parameter	Abbreviation (Units)	U¹ v	s. D ¹	Sig. Prob. ^{2,3}
Hardness	Hard (mg/L)	185	237	0.047
Gross Alpha Radioactivity	G. Alpha (pCi/L)	2.3	3.1	0.278
Gross Beta Radioactivity	G. Beta (pCi/L)	5.8	6.3	0.591
Chlorophyll a	Chlrphl $(\mu g/L)$	14	4	0.147
Benzene	Bnzn (µg/L)	<2	<2	_
Ethylbenzene	Ebnzn (μg/L)	<2	<2	-
Toluene	Toln $(\mu g/L)$	<2	<2	-
Xylene	$Xyln (\mu g/L)$	<3	<3	-
Total Silver	Ag (mg/L)	< 0.003	< 0.003	•
Total Arsenic	As (mg/L)	< 0.048	< 0.048	-
Total Barium	Ba (mg/L)	0.029	0.021	0.002
Total Boron	B (mg/L)	0.111	0.173	0.059
Total Cadmium	Cd (mg/L)	< 0.007	< 0.007	_
Total Copper	Cu (mg/L)	< 0.012	< 0.012	-
Total Chromium	Cr (mg/L)	< 0.005	< 0.005	-
Total Hexavalent Chromium	$\operatorname{Cr}^{+6}(\mu g/L)$	<10	<10	-
Total Iron	Fe (mg/L)	0.288	0.222	0.298
Total Lead	Pb (mg/L)	< 0.024	< 0.024	-
Total Nickel	Ni (mg/L)	< 0.009	< 0.009	-
Total Manganese	Mn (mg/L)	0.085	0.049	0.421
Total Mercury	Hg (μg/L)	< 0.2	< 0.2	-
Low Level Mercury	Hg-(ng/L)	< 0.5	< 0.5	-
Total Zinc	Zn (mg/L)	< 0.035	< 0.035	0.321
Total Selenium	Se (mg/L)	< 0.078	< 0.078	-
Soluble Calcium	Sol. Ca (mg/L)	47.5	61.6	0.042
Soluble Magnesium	Sol. Mg (mg/L)	16.6	21.3	0.043
Soluble Silver	Sol. Ag (mg/L)	< 0.003	< 0.003	_
Soluble Arsenic	Sol. As (mg/L)	< 0.034	< 0.034	-

TABLE 16 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS FOR THE CALUMET WATER RECLAMATION PLANT IN 2010

Parameter	Abbreviation (Units)	U¹ vs	. D¹	Sig. Prob. ^{2,3}
Soluble Barium	Sol. Ba (mg/L)	0.026	0.018	0.003
Soluble Boron	Sol. B (mg/L)	0.115	0.172	0.076
Soluble Cadmium	Sol. Cd (mg/L)	< 0.002	< 0.002	*
Soluble Copper	Sol. Cu (mg/L)	< 0.008	< 0.008	-
Soluble Chromium	Sol. Cr (mg/L)	< 0.003	< 0.003	-
Soluble Iron	Sol. Fe (mg/L)	< 0.083	< 0.083	0.094
Soluble Lead	Sol. Pb (mg/L)	< 0.023	< 0.023	-
Soluble Nickel	Sol. Ni (mg/L)	< 0.005	< 0.005	-
Soluble Manganese	Sol. Mn (mg/L)	0.029	0.038	0.526
Soluble Zinc	Sol. Zn (mg/L)	< 0.015	0.017	0.026
Soluble Selenium	Sol. Se (mg/L)	< 0.076	< 0.076	-

¹Value following < sign is the average detection limit.

²Significance Probability ≤ 0.05 indicates that upstream and downstream population means are not equal.

³Some tests may be based on Wilcoxon rank-sum statistics that apply to population medians only in the absence of population symmetry. Please see Appendix AIII-3 for details.

^{*}Test applies to population means if variances of log values are equal, otherwise applies to geometric means (see Appendix AIII-3 for details).

⁻⁼No test was done since standard deviations are below the detection limit or equal to 0.

TABLE 1/7: COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS FOR THE JOHN E. EGAN WATER RECLAMATION PLANT IN 2010

Parameter	Abbreviation (Units)	U¹ v	s. D ¹	Sig. Prob. ^{2,3}
Dissolved Oxygen	DO (mg/L)	6.9	8.4	0.040
Temperature	Temp (°C)	19	15	0.224
pH	pН	7.5	7.5	0.941
Alkalinity (Total)	Alk (mg/L)	135	148	0.281
Chloride	Cl (mg/L)	266	289	0.712
Turbidity	Turb (NTU)	25	6	0.001
Total Kjeldahl Nitrogen	TKN (mg/L)	1.3	1.3	0.988
Ammonium Nitrogen	$NH_4-N (mg/L)$	0.10	0.20	0.339
Un-ionized Ammonia	NH ₃ -N (mg/L)	0.002	0.001	0.587
Organic Nitrogen	ORG-N (mg/L)	1.2	1.1	0.371
Nitrite Plus Nitrate Nitrogen	$NO_2 + NO_3 $ (mg/L)	0.12	7.81	0.000
Total Solids	TS (mg/L)	757	828	0.593
Total Suspended Solids	TSS (mg/L)	31	9	0.001
Volatile Suspended Solids	VSS (mg/L)	8.3	2.6	0.000
Total Dissolved Solids	TDS (mg/L)	726	820	0.429
Phenols	Phenol (µg/L)	<5	<5	-
Total Nonylphenols	NPS (μg/L)	<1.3	<1.3	_
Sulfate	$SO_4 (mg/L)$	46	68	0.000
Fats, Oils, and Greases	FOG (mg/L)	<5	<5	-
Total Phosphorus	TP (mg/L)	< 0.136	1.53	0.000
Total Cyanide	CN (mg/L)	< 0.005	< 0.005	0.210
WAD Cyanide	WAD-CN (mg/L)	< 0.002	< 0.002	0.119
Fluoride	F (mg/L)	0.18	0.53	0.001
Total Organic Carbon	TOC (mg/L)	6.6	5.6	0.014
Fecal Coliform *	FC (#/100ml)	154	273	0.441
Escherichia Coli *	EColi (#/100ml)	209	280	0.812
Total Calcium	Ca (mg/L)	51	66	0.020
Total Magnesium	Mg (mg/L)	21	25	0.152
•	- · · · · ·			

TABLE 17 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS FOR THE JOHN E. EGAN WATER RECLAMATION PLANT IN 2010

Parameter	Abbreviation (Units)	U¹ v	rs. D ¹	Sig. Prob. ^{2,3}
Hardness	Hard (mg/L)	212	265	0.039
Gross Alpha Radioactivity	G. Alpha (pCi/L)	3.2	3.2	0.915
Gross Beta Radioactivity	G. Beta (pCi/L)	4.8	6.9	0.029
Chlorophyll a	Chlrphl (μ g/L)	26	16	0.123
Benzene	Bnzn (µg/L)	<2	<2	-
Ethylbenzene	Ebnzn (μ g/L)	<2	<2	-
Toluene	Toln (μ g/L)	<2	<2	-
Xylene	Xyln (μg/L)	<3	<3	-
Total Silver	Ag (mg/L)	< 0.003	< 0.003	-
Total Arsenic	As (mg/L)	< 0.048	< 0.048	-
Total Barium	Ba (mg/L)	0.038	0.031	0.152
Total Boron	B (mg/L)	< 0.058	0.190	0.000
Total Cadmium	Cd (mg/L)	< 0.007	< 0.007	-
Total Copper	Cu (mg/L)	< 0.012	< 0.012	-
Total Chromium	Cr (mg/L)	< 0.005	< 0.005	-
Total Hexavalent Chromium	$\operatorname{Cr}^{+6}(\mu g/L)$	<10	< 10	-
Total Iron	Fe (mg/L)	1.280	0.298	0.002
Total Lead	Pb (mg/L)	< 0.024	< 0.024	-
Total Nickel	Ni (mg/L)	< 0.009	< 0.009	-
Total Manganese	Mn (mg/L)	0.112	0.061	0.001
Total Mercury	Hg (μg/L)	< 0.2	< 0.2	-
Low Level Mercury	Hg-(ng/L)	3.338	2.483	0.467
Total Zinc	Zn (mg/L)	< 0.035	< 0.035	0.337
Total Selenium	Se (mg/L)	< 0.078	< 0.078	-
Soluble Calcium	Sol. Ca (mg/L)	47.1	63.4	0.007
Soluble Magnesium	Sol. Mg (mg/L)	19.5	24.4	0.031
Soluble Silver	Sol. Ag (mg/L)	< 0.003	< 0.003	-
Soluble Arsenic	Sol. As (mg/L)	< 0.034	< 0.034	-

TABLE 17 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS FOR THE JOHN E. EGAN WATER RECLAMATION PLANT IN 2010

Parameter	Abbreviation (Units)	U¹ vs	. D¹	Sig. Prob. ^{2,3}
Soluble Barium	Sol. Ba (mg/L)	0.030	0.027	0.387
Soluble Boron	Sol. B (mg/L)	0.075	0.190	0.001
Soluble Cadmium	Sol. Cd (mg/L)	< 0.002	< 0.002	-
Soluble Copper	Sol. Cu (mg/L)	< 0.008	< 0.008	-
Soluble Chromium	Sol. Cr (mg/L)	< 0.003	< 0.003	-
Soluble Iron	Sol. Fe (mg/L)	< 0.083	< 0.083	0.456
Soluble Lead	Sol. Pb (mg/L)	< 0.023	< 0.023	-
Soluble Nickel	Sol. Ni (mg/L)	< 0.005	0.005	-
Soluble Manganese	Sol. Mn (mg/L)	0.025	0.032	0.604
Soluble Zinc	Sol. Zn (mg/L)	< 0.015	< 0.015	-
Soluble Selenium	Sol. Se (mg/L)	< 0.076	< 0.076	-

¹Value following < sign is the average detection limit.

²Significance Probability ≤ 0.05 indicates that upstream and downstream population means are not equal.

³Some tests may be based on Wilcoxon rank-sum statistics that apply to population medians only in the absence of population symmetry. Please see Appendix AIII-4 for details.

^{*}Test applies to population means if variances of log values are equal, otherwise applies to geometric means (see Appendix AIII-4 for details).

⁻⁼No test was done since standard deviations are below the detection limit or equal to 0.

TABLE 18: COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS FOR THE JAMES C. KIRIE WATER RECLAMATION PLANT IN 2010

Parameter	Abbreviation (Units)	U^1 ,	vs. D¹	Sig. Prob. ^{2,3}
Dissolved Oxygen	DO (mg/L)	8.7	9.0	-
Temperature	Temp (°C)	15	18	-
pH	pН	7.7	7.6	-
Alkalinity (Total)	Alk (mg/L)	114	176	-
Chloride	Cl (mg/L)	583	220	-
Turbidity	Turb (NTU)	19	3	-
Total Kjeldahl Nitrogen	TKN (mg/L)	0.72	1.28	-
Ammonium Nitrogen	NH_4 -N (mg/L)	< 0.1	0.221	-
Un-ionized Ammonia	NH ₃ -N (mg/L)	0.000	0.004	-
Organic Nitrogen	ORG-N (mg/L)	0.72	1.06	-
Nitrite Plus Nitrate Nitrogen	$NO_2 + NO_3 $ (mg/L)	0.35	7.90	-
Total Solids	TS (mg/L)	1183	760	•
Total Suspended Solids	TSS (mg/L)	21	< 3.8	-
Volatile Suspended Solids	VSS (mg/L)	6.0	1.3	· _
Total Dissolved Solids	TDS (mg/L)	1162	758	-
Phenols	Phenol (µg/L)	<5	<5	-
Total Nonylphenols	NPS (μg/L)	<1.3	<1.3	-
Sulfate	SO_4 (mg/L)	39	78	-
Fats, Oils, and Greases	FOG (mg/L)	<5	<5	-
Total Phosphorus	TP (mg/L)	< 0.136	1.018	-
Total Cyanide	CN (mg/L)	< 0.005	< 0.005	-
WAD Cyanide	WAD-CN (mg/L)	< 0.002	< 0.002	-
Fluoride	F (mg/L)	0.13	0.66	-
Total Organic Carbon	TOC (mg/L)	3.8	5.0	-
Fecal Coliform *	FC (#/100ml)	210	142	_
Escherichia Coli *	EColi (#/100ml)	200	179	-
Total Calcium	Ca (mg/L)	64	75	-
Total Magnesium	Mg (mg/L)	21	27	-
-	- · · ·			

TABLE 18 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS FOR THE JAMES C. KIRIE WATER RECLAMATION PLANT IN 2010

Parameter	Abbreviation (Units)	${\sf U}^1 = {\sf v}$	s. D ¹	Sig. Prob. ^{2,3}
Hardness	Hard (mg/L)	244	300	_
Gross Alpha Radioactivity	G. Alpha (pCi/L)	2.6	2.6	-
Gross Beta Radioactivity	G. Beta (pCi/L)	4.8	6.4	-
Chlorophyll a	Chlrphl (μ g/L)	28	3	-
Benzene	Bnzn (μg/L)	<2	<2	-
Ethylbenzene	Ebnzn (μg/L)	<2	<2	-
Toluene	Toln (μ g/L)	<2	<2	-
Xylene	$Xyln (\mu g/L)$	<3	<3	-
Total Silver	Ag (mg/L)	< 0.003	< 0.003	-
Total Arsenic	As (mg/L)	< 0.048	< 0.048	-
Total Barium	Ba (mg/L)	0.061	0.026	-
Total Boron	B (mg/L)	< 0.058	0.202	-
Total Cadmium	Cd (mg/L)	< 0.007	< 0.007	- .
Total Copper	Cu (mg/L)	< 0.012	< 0.012	-
Total Chromium	Cr (mg/L)	< 0.005	< 0.005	
Total Hexavalent Chromium	$\operatorname{Cr}^{+6}(\mu g/L)$	<10	<10	-
Total Iron	Fe (mg/L)	0.780	< 0.136	-
Total Lead	Pb (mg/L)	< 0.024	< 0.024	-
Total Nickel	Ni (mg/L)	< 0.009	< 0.009	-
Total Manganese	Mn (mg/L)	0.090	0.070	-
Total Mercury	Hg (μg/L)	< 0.2	< 0.2	-
Low Level Mercury	Hg-(ng/L)	5.200	0.778	-
Total Zinc	Zn (mg/L)	< 0.035	< 0.035	-
Total Selenium	Se (mg/L)	< 0.078	< 0.078	-
Soluble Calcium	Sol. Ca (mg/L)	46.1	71.9	-
Soluble Magnesium	Sol. Mg (mg/L)	15.7	26.7	-
Soluble Silver	Sol. Ag (mg/L)	< 0.003	< 0.003	-
Soluble Arsenic	Sol. As (mg/L)	< 0.034	< 0.034	-

TABLE 18 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS FOR THE JAMES C. KIRIE WATER RECLAMATION PLANT IN 2010

Parameter	Abbreviation (Units)	U¹ vs	. D ¹	Sig. Prob. ^{2,3}
Soluble Barium	Sol. Ba (mg/L)	0.040	0.022	-
Soluble Boron	Sol. B (mg/L)	0.055	0.202	-
Soluble Cadmium	Sol. Cd (mg/L)	< 0.002	< 0.002	-
Soluble Copper	Sol. Cu (mg/L)	< 0.008	< 0.008	-
Soluble Chromium	Sol. Cr (mg/L)	< 0.003	< 0.003	-
Soluble Iron	Sol. Fe (mg/L)	< 0.083	< 0.083	-
Soluble Lead	Sol. Pb (mg/L)	< 0.023	< 0.023	•
Soluble Nickel	Sol. Ni (mg/L)	< 0.005	0.006	-
Soluble Manganese	Sol. Mn (mg/L)	0.027	0.023	-
Soluble Zinc	Sol. Zn (mg/L)	< 0.015	0.023	-
Soluble Selenium	Sol. Se (mg/L)	< 0.076	< 0.076	-

¹Value following < sign is the average detection limit.

²Significance Probability ≤ 0.05 indicates that upstream and downstream population means are not equal.

³Some tests may be based on Wilcoxon rank-sum statistics that apply to population medians only in the absence of population symmetry. Please see Appendix AIII-5 for details.

^{*}Test applies to population means if variances of log values are equal, otherwise applies to geometric means (see Appendix AIII-5 for details).

⁻⁼No test was done since standard deviations are below the detection limit or equal to 0.

A study of the concentrations of the water quality parameters presented in <u>Tables 14</u> through <u>18</u> and the tables in <u>Appendix AII</u> revealed that the quality of effluents from the District's WRPs was high with respect to most parameters. This conclusion was based on the interpretation of the statistical inferences. In general, statistically significant differences existed between upstream and downstream locations for those parameters that were affected by wastewater treatment. Parameters which are significantly different in the downstream location from the upstream location and were subject to water quality limits are identified for each WRP. For some of the parameters, water quality standards exist whereas for others there are no such standards. A discussion of the results from each WRP follows.

North Side Water Reclamation Plant. Locations 35 and 36, upstream and downstream, respectively, of the North Side WRP, are classified as General Use and Secondary Contact waters. Sixty-seven water quality parameters were considered for comparison of mean concentrations between upstream and downstream locations. The following 19 water quality parameters' mean concentrations were significantly different between upstream and downstream locations:

• chloride, total Kjeldahl nitrogen, ammonium nitrogen, un-ionized ammonia, organic nitrogen, nitrite plus nitrate nitrogen, total solids, total dissolved solids, sulfate, total phosphorus, fluoride, fecal coliform, total calcium, total magnesium, hardness, total zinc, soluble calcium, soluble magnesium, and soluble boron.

The downstream average concentrations of all parameters were significantly higher than the upstream average concentration.

Out of the 19 parameters listed above, eight parameters have either IPCB Human Health, General Use, or Secondary Contact Water quality limits. These parameters are:

• chloride, ammonium nitrogen, un-ionized ammonia, total dissolved solids, sulfate, fluoride, fecal coliform, and total zinc.

Of the eight parameters referenced with IPCB Human Health, General Use, or Secondary Contact limits, five parameters were in total compliance at the upstream location. These parameters were:

• chloride, ammonium nitrogen, total dissolved solids, sulfate, and fluoride.

At the upstream location, the percent compliance rate of fecal coliform was 75.0 percent. The remaining two parameters (un-ionized ammonia and total zinc) were not regulated by IPCB Human Health or General Use limits.

Of the eight parameters referenced with IPCB Human Health, General Use, or Secondary Contact water quality limits, four parameters were in total compliance at the downstream location. These parameters were:

• un-ionized ammonia, total dissolved solids, fluoride, and total zinc.

The remaining four parameters (chloride, ammonium nitrogen, sulfate, and fecal coliform) were not regulated by IPCB Secondary Contact limits.

Stickney Water Reclamation Plant. Both the upstream and downstream sampling locations (75 and 41, respectively) of the Stickney WRP are located in the Secondary Contact Waters of the Chicago River System. Sixty-two water quality parameters were considered for comparison of mean concentrations between upstream and downstream locations. The following 11 water quality parameters' mean concentrations were significantly different between upstream and downstream locations:

• DO, turbidity, nitrite plus nitrate nitrogen, total suspended solids, sulfate, total organic carbon, fecal coliform, escherichia coli, total boron, total iron, and soluble boron.

Eight parameters (dissolved oxygen, nitrite plus nitrate nitrogen, sulfate, total organic carbon, fecal coliform, escherichia coli, total boron, and soluble boron) had significantly higher means downstream than upstream. The remaining three parameters (turbidity, total suspended solids, and total iron) had significantly higher means upstream than downstream.

Out of the 11 parameters listed above, two parameters have IPCB Secondary Contact Water quality limits. These parameters are:

• DO and total iron.

All of the parameters listed above were in total compliance at both locations.

Calumet Water Reclamation Plant. Both the upstream and downstream sampling locations (56 and 76, respectively) of the Calumet WRP are located in the Secondary Contact Waters of the Calumet River System. Sixty-seven water quality parameters were considered for comparison of mean concentrations between upstream and downstream locations. The following 19 water quality parameters' mean concentrations were significantly different between upstream and downstream locations:

• DO, alkalinity (total), turbidity, total Kjeldahl nitrogen, organic nitrogen, nitrite plus nitrate nitrogen, total suspended solids, total phosphorus, fluoride, total organic carbon, fecal coliform, escherichia coli, total magnesium, hardness, total barium, soluble calcium, soluble magnesium, soluble barium, and soluble zinc.

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

• DO, turbidity, total suspended solids, total barium, and soluble barium.

The remaining 14 parameters had significantly higher mean concentrations downstream than upstream. These parameters were:

• alkalinity (total), total Kjeldahl nitrogen, organic nitrogen, nitrite plus nitrate nitrogen, total phosphorus, fluoride, total organic carbon, fecal coliform, escherichia coli, total magnesium, hardness, soluble calcium, soluble magnesium, and soluble zinc.

Out of the 19 parameters listed above, three parameters have IPCB Secondary Contact Water quality limits. These parameters are:

• DO, fluoride, and total barium.

All of the parameters listed above were in total compliance at both locations.

John E. Egan Water Reclamation Plant. Both the upstream and downstream sampling locations (79 and 80, respectively) of the John E. Egan WRP are located in the General Use Waters of the Des Plaines River System. Sixty-seven water quality parameters were considered for comparison of mean concentrations between upstream and downstream locations.

The following 18 water quality parameters' mean concentrations were significantly different between upstream and downstream locations:

• DO, turbidity, nitrite plus nitrate nitrogen, total suspended solids, volatile suspended solids, sulfate, total phosphorus, fluoride, total organic carbon, total calcium, hardness, gross beta radioactivity, total boron, total iron, total manganese, soluble calcium, soluble magnesium, and soluble boron.

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

• turbidity, total suspended solids, volatile suspended solids, total organic carbon, total iron, and total manganese.

The remaining 12 parameters had significantly higher mean concentrations downstream than upstream. These parameters were:

• DO, nitrite plus nitrate nitrogen, sulfate, total phosphorus, fluoride, total calcium, hardness, gross beta radioactivity, total boron, soluble calcium, soluble magnesium, and soluble boron.

Out of the 18 parameters listed above, six parameters have IPCB General Use or Human Health water quality limits. These parameters are:

• DO, sulfate, fluoride, gross beta radioactivity, total boron, and total manganese.

All of the parameters listed above were in total compliance at both locations.

James C. Kirie Water Reclamation Plant. Both the upstream and downstream sampling locations (77 and 78, respectively) of the James C. Kirie WRP are located in the General Use Waters of the Des Plaines River System. Sixty-seven water quality parameters were considered for comparison of mean concentrations between upstream and downstream locations.

Upstream location 77 was sampled only once in April. Therefore, comparisons of means between upstream and downstream locations were not done since variances of the parameters in the Upstream location did not exist.

At both locations 77 and 78, 30 water quality parameters have general use limits. They were DO, temperature, pH, chloride, ammonium nitrogen, total dissolved solids, phenols, sulfate, total hexavalent chromium, total boron, total selenium, total barium, total silver, fecal coliform, total

manganese, fluoride, gross beta radioactivity, weak acid dissociable cyanide, benzene, ethylbenzene, toluene, xylene, soluble zinc, soluble cadmium, soluble copper, soluble chromium, soluble iron, soluble nickel, soluble lead, and soluble arsenic.

At location 77, 28 parameters were in complete compliance with applicable water quality standards. They were DO, temperature, pH, ammonium nitrogen, phenols, sulfate, total hexavalent chromium, total boron, total selenium, total barium, total silver, fecal coliform, total manganese, fluoride, gross beta radioactivity, weak acid dissociable cyanide, benzene, ethylbenzene, toluene, xylene, soluble zinc, soluble cadmium, soluble copper, soluble chromium, soluble iron, soluble nickel, soluble lead, and soluble arsenic. The remaining two parameters, chloride and total dissolved solids, were not in complete compliance with applicable water quality standards.

At location 78, 27 parameters had complete compliance. They were DO, temperature, pH, chloride, ammonium nitrogen, phenols, sulfate, total hexavalent chromium, total boron, total selenium, total barium, total silver, total manganese, fluoride, gross beta radioactivity, weak acid dissociable cyanide, benzene, ethylbenzene, toluene, xylene, soluble zinc, soluble cadmium, soluble chromium, soluble iron, soluble nickel, soluble lead, and soluble arsenic. The remaining three parameters, total dissolved solids, fecal coliform, and soluble copper, had 88.9, 44.4, and 88.9 percent compliance rates, respectively.

Hanover Park Water Reclamation Plant. Both the upstream and downstream sampling locations (63 and 89, respectively) of the Hanover Park WRP are located in the General Use Waters of the Des Plaines River System. No sample at the upstream location of the Hanover Park WRP (Location 63) was taken in 2010, because the water level was too low to obtain a representative sample without being contaminated by sediments. Therefore, no comparison of mean concentrations between upstream and downstream locations was made.

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APPENDIX AI WATERWAYS DATA MANAGEMENT SYSTEM DESCRIPTION

TABLE AI-1: DIRECTORY OF WATER QUALITY PARAMETERS ASSAYED IN 2010

				Water Qual	er Quality Standard ¹		
Symbol	Parameter	Unit	MDL^2	General Use	Secondary Contac		
DO	Dissolved Oxygen	mg/L	1	$(3.5, 5.0)^3$	$(3.0, 4.0)^4$		
Temp	Temperature	°C	-	16 (32 Apr - Nov)	37.8		
pH	pH		-	6.5 - 9.0	6.0 - 9.0		
Alk	Alkalinity (Total)	mg/L	19	None	None		
Cl	Chloride	mg/L	12	500	None		
Turb	Turbidity	NTU	1	None	None		
TKN	Total Kjeldahl Nitrogen	mg/L	0.43	None	None		
NH ₄ -N	Ammonium Nitrogen	mg/L	0.1	15 ⁵	None		
NH ₃ -N	Un-ionized Ammonia	mg/L	-	None	0.1		
ORG-N	Organic Nitrogen	mg/L	-	None	None		
$NO_2 + NO_3$	Nitrite Plus Nitrate Nitrogen	mg/L	0.05	None	None		
TS	Total Solids	mg/L	-	None	None		
TSS	Total Suspended Solids	mg/L	3.8	None	None		
VSS	Volatile Suspended Solids	mg/L	-	None	None		
TDS	Total Dissolved Solids	mg/L	54	1,000	1,500		
Phenol	Phenols	μ g/L	5	100	300		
NPS	Total Nonylphenols	μg/L	-	None	None		
SO ₄	Sulfate	mg/L	2	500	None		
FOG	Fats, Oils, and Greases	mg/L	5	None	15		
TP	Total Phosphorus	mg/L	0.136	None	None		
CN	Total Cyanide	mg/L	0.005	None	0.1		
WAD-CN	Weak Acid Dissociable Cyanide	mg/L	0.002	0.022	None		
F	Fluoride	mg/L	0.124	1.4	15		
TOC	Total Organic Carbon	mg/L	1	None	None		
FC	Fecal Coliform	cfu/100	mL -	400	None		
EColi	Escherichia Coli	cfu/100	mL -	None	None		
Ca	Total Calcium	mg/L	0.3	None	None		
Mg	Total Magnesium	mg/L	0.3	None	None		

TABLE AI-1 (Continued): DIRECTORY OF WATER QUALITY PARAMETERS ASSAYED IN 2010

	Water Quality Standard ¹				
Symbol	Parameter	Unit	MDL^2	General Use S	econdary Contact
Hard	Hardness	mg/L	-	None	None
Alpha	Gross Alpha Radioactivity	pCi/L	-	None	None
Beta	Gross Beta Radioactivity	pCi/L	-	100	None
Chlrphl	Chlorophyll a	μ g/L	-	None	None
Bnzn	Benzene*	μ g/L	2	310	None
Bnzn	Benzene	μ g/L	2	4,200	None
Ebnzn	Ethylbenzene	μ g/L	2	150	None
Toln	Toluene	μ g/L	2	2,000	None
Xyln	Xylene	μg/L	3	920	None
Ag	Total Silver	mg/L	0.003	0.005	1.1
As	Total Arsenic	mg/L	0.048	None	1
Ba	Total Barium	mg/L	0.003	5	5
В	Total Boron	mg/L	0.058	1	None
Cd	Total Cadmium	mg/L	0.007	None	0.15
Cu	Total Copper	mg/L	0.012	None	1
Cr	Total Chromium	mg/L	0.005	None	None
Cr ⁺⁶	Total Hexavalent Chromium	μg/L	10	16	300
Fe	Total Iron	mg/L	0.136	None	2
Pb	Total Lead	mg/L	0.024	None	0.1
Ni	Total Nickel	mg/L	0.009	None	1
Mn	Total Manganese	mg/L	0.003	1	1
Hg	Total Mercury*	μ g/L	0.2	0.012	None
Hg	Total Mercury	μ g/L	0.2	None	0.5
Hg-	Low Level Mercury	η g/L	0.5	None	None
Zn	Total Zinc	mg/L	0.035	None	1
Se	Total Selenium	mg/L	0.078	1	1
Sol. Ca	Soluble Calcium	mg/L	0.2	None	None
Sol. Mg	Soluble Magnesium	mg/L	0.1	None	None

TABLE AI-1 (Continued): DIRECTORY OF WATER QUALITY PARAMETERS ASSAYED IN 2010

Water Quality Standard ¹					
Symbol	Parameter	Unit	MDL^2	General Use Se	econdary Contact
Sol. Ag	Soluble Silver	mg/L	0.003	None	None
Sol. As	Soluble Arsenic	mg/L	0.034	0.36	None
Sol. Ba	Soluble Barium	mg/L	0.002	None	None
Sol. B	Soluble Boron	mg/L	0.038	None	None
Sol. Cd	Soluble Cadmium	mg/L	0.002	0.044^{6}	None
Sol. Cu	Soluble Copper	mg/L	0.008	0.066^{7}	None
Sol. Cr	Soluble Chromium	mg/L	0.003	1.783^{8}	None
Sol. Fe	Soluble Iron	mg/L	0.083	I	0.5
Sol. Pb	Soluble Lead	mg/L	0.023	0.347^{9}	None
Sol. Ni	Soluble Nickel	mg/L	0.005	0.278^{10}	None
Sol. Mn	Soluble Manganese	mg/L	0.002	None	None
Sol. Zn	Soluble Zinc	mg/L	0.015	0.404^{11}	None
Sol. Se	Soluble Selenium	mg/L	0.076	None	None

¹As per Illinois Pollution Control Board, except as modified (see text).

²MDL=Minimum detection limit. Average MDL value is used where referenced in this report.

³Standard is 5.0 mg/L in March through July and 3.5 mg/L in other months.

 $^{^4}$ Standard is 3.0 mg/L for locations 43, 58, and 59 and 4.0 mg/L for other Secondary Contact locations .

 $^{^5\}text{Based on Min}\left(\frac{0.411}{1+10^{7.204+\text{pH}}}+\frac{58.4}{1+10^{\text{pH}-7.204}},15\right)$.

⁶Based on Min $(e^{-2.98+1.128\times(\text{Hard})}*(1.138672-0.041838\times \ln(\text{Hard}))/1000, 0.005).$

⁷Based on $0.00090 e^{-1.464+0.9422 \times \ln(\text{Hard})}$.

⁸Based on $0.000316 e^{3.688+0.819 \times \ln(\text{Hard})}$.

⁹Based on $e^{-1.301+1.1.273\times\ln(\text{Hard})}*(1.46203-0.145712\times\ln(\text{Hard}))/1000$.

¹⁰Based on $0.000998 e^{0.5173 + 0.846 \times \ln(\text{Hard})}$.

¹¹Based on 0.000978 $e^{0.9035+0.8473 \times \ln(\text{Hard})}$.

⁻ No minimum detection limit reported.

^{*}As Human Health Standard.

TABLE AI-2: DIRECTORY OF SAMPLING STATIONS IN WATER QUALITY NETWORK

Sa	mpling Station (No. Name)	Sample Type	Water Use ¹	River System
1	Wilmette Harbor*	Auto	GEN	Chicago
2	Outer Drive Bridge*	Auto	GEN	Chicago
3	South District Water Filtration Plant*	Auto	GEN	Chicago
4	O'Brien Locks*	Auto	SEC	Chicago
5	Ohio Street*	Auto	SEC	Chicago
6	Willow Springs Road*	Auto	SEC	Chicago
7	Highway 83 and Archer*	Auto	SEC	Chicago
9	North Side WRP, Outfall*	Auto	EFF	Chicago
10	Southwest WRP, Outfall*	Auto	EFF	Chicago
11	Calumet WRP, Outfall*	Auto	EFF	Calumet
12	Lake-Cook Road, Buffalo Creek	Grab	GEN	Des Plaines
13	Lake-Cook Road, Des Plaines River	Grab	GEN	Des Plaines
14	Hintz Road, Wheeling Drain Ditch*	Grab	GEN	Des Plaines
15	Palatine Road, Des Plaines River*	Grab	GEN	Des Plaines
16	Central Road, Des Plaines River*	Grab	GEN	Des Plaines
17	Oakton Street, Des Plaines River	Grab	GEN	Des Plaines
18	Devon Avenue, Salt Creek	Grab	GEN	Des Plaines
19	Belmont Avenue, Des Plaines River	Grab	GEN	Des Plaines
20	Roosevelt Road, Des Plaines River	Grab	GEN	Des Plaines
21	First Avenue, Salt Creek*	Grab	GEN	Des Plaines
22	Ogden Avenue, Des Plaines River	Grab	GEN	Des Plaines
23	Willow Springs Road, Des Plaines River	Grab	GEN	Des Plaines
24	Wolf Road, Salt Creek	Grab	GEN	Des Plaines
25	Grand Avenue, Des Plaines River*	Grab	GEN	Des Plaines
26	Lawrence Avenue, Des Plaines River*	Grab	GEN	Des Plaines
27	York Road, Salt Creek*	Grab	GEN	Des Plaines
28	Highway 83 and Des Plaines River*	Grab	GEN	Des Plaines
29	Stephen Street, Des Plaines River	Grab	GEN	Des Plaines

TABLE AI-2 (Continued): DIRECTORY OF SAMPLING STATIONS IN WATER QUALITY NETWORK

Sar	mpling Station (No. Name)	Sample Type	Water Use ¹	River System
30	Lake-Cook Road, West Fork North Branch*	Grab	GEN	Chicago
31	Lake-Cook Road, Middle Fork North Branch	Grab	GEN	Chicago
32	Lake-Cook Road, Skokie River	Grab	GEN	Chicago
33	East Lake Avenue, Middle Fork North Branch Chicago River*	Grab	GEN	Chicago
34	Dempster Street, North Branch Chicago River	Grab	GEN	Chicago
35	Central Street, North Shore Channel	Grab	GEN	Chicago
36	Touhy Avenue, North Shore Channel	Grab	SEC	Chicago
37	Wilson Avenue, North Branch Chicago River	Grab	SEC	Chicago
38	Ohio Street, North Branch Chicago River*	Grab	SEC	Chicago
39	Madison Street, South Branch Chicago River	Grab	SEC	Chicago
40	Damen Avenue, Chicago Sanitary & Ship Canal	Grab	SEC	Chicago
41	Harlem Avenue, Chicago Sanitary & Ship Canal	Grab	SEC	Chicago
42	Route 83, Chicago Sanitary & Ship Canal	Grab	SEC	Chicago
43	Route 83, Calumet-Sag Channel	Grab	SEC	Calumet
44	Howard Street, North Shore Channel*	Grab	SEC	Chicago
45	Lawrence Avenue, North Branch Chicago River*	Grab	SEC	Chicago
46	Grand Avenue, North Branch Chicago River	Grab	SEC	Chicago
47	Randolph Street, South Branch Chicago River*	Grab	SEC	Chicago
48	Stephen Street, Chicago Sanitary & Ship Canal	Grab	SEC	Chicago
49	Ewing Avenue, Calumet River	Grab	GEN	Calumet
50	Burnham Avenue, Wolf Lake	Grab	GEN	Calumet
51	IHB Railroad Bridge, Grand Calumet River*	Grab	SEC	Calumet
52	Wentworth Avenue, Little Calumet River	Grab	GEN	Calumet
53	Wentworth Avenue, North Creek*	Grab	GEN	Calumet
54	Joe Orr Road, Thorn Creek	Grab	GEN	Calumet
55	130th Street, Calumet River	Grab	GEN	Calumet
56	Indiana Avenue, Little Calumet River	Grab	SEC	Calumet
57	Ashland Avenue, Little Calumet River	Grab	GEN	Calumet

TABLE AI-2 (Continued): DIRECTORY OF SAMPLING STATIONS IN WATER QUALITY NETWORK

Sampling Station (No. Name)	Sample Type	Water Use ¹	River System
58 Ashland Avenue, Calumet-Sag Channel	Grab	SEC	Calumet
59 Cicero Avenue, Calumet-Sag Channel	Grab	SEC	Calumet
60 Crawford Avenue, Calumet-Sag Channel*	Grab	SEC	Calumet
61 Ashland Avenue, South Branch Chicago River*	Grab	SEC	Chicago
62 Stephen Street, Chicago Sanitary & Ship Canal*	Grab	SEC	Chicago
63 Longmeadow Lane, West Branch DuPage River*	Grab	GEN	Des Plaines
64 Lake Street, West Branch DuPage 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 & Ship Canal*	Grab	SEC	Chicago
72 Stephen Street, Chicago Sanitary & Ship Canal*	Grab	SEC	Chicago
73 Diversey Parkway, North Branch Chicago River	Grab	SEC	Chicago
74 Lake Shore Drive, Chicago River	Grab	GEN	Chicago
75 Cicero Avenue, Chicago Sanitary & Ship Canal	Grab	SEC	Chicago
76 Halsted Street, Little Calumet River	Grab	SEC	Calumet
77 Elmhurst Road, Higgins Creek	Grab	GEN	Des Plaines
78 Wille Road, Higgins Creek	Grab	GEN	Des Plaines
79 Higgins Road, Salt Creek	Grab	GEN	Des Plaines
80 Arlington Heights Road, Salt Creek	Grab	GEN	Des Plaines
81 Lockport Forebay*	Auto	SEC	Chicago
82 Lockport Trebler, Chicago Sanitary & Ship Canal*	Auto	SEC	Chicago
83 Lockport Solenoid*	Auto	SEC	Chicago
84 Lockport 16th Street Bridge*	Grab	SEC	Chicago
85 Dempster Street, North Shore Channel*	Grab	SEC	Chicago

TABLE AI-2 (Continued): DIRECTORY OF SAMPLING STATIONS IN WATER QUALITY NETWORK

Sam	npling Station (No. Name)	Sample Type	Water Use ¹	River System
86	Burnham Avenue, Grand Calumet River	Grab	SEC	Calumet
89	Walnut Lane, West Branch DuPage River	Grab	GEN	Des Plaines
90	Route 19, Poplar Creek	Grab	GEN	Des Plaines
91	Material Service Road, Des Plaines River	Grab	GEN	Des Plaines
92	Lockport Forebay, Chicago Sanitary & Ship Canal	Auto	SEC	Chicago
93	Jefferson Street, Joliet, Des Plaines River ²	Grab	SEC	Des Plaines
94	Empress Casino, Des Plaines River ²	Grab	SEC	Des Plaines
95	I-55, Des Plaines River ²	Grab	SEC	Des Plaines
96	Albany Avenue, North Branch Chicago River	Grab	GEN	Chicago
97	170th Street, Thorn Creek	Grab	GEN	Calumet
98	Halsted Street, South Branch Chicago River*	Grab	SEC	Chicago
99	Archer Avenue, South Fork South Branch Chicago River	Grab	SEC	Chicago
100	Wells Street, Chicago River	Grab	GEN	Chicago
101	Foster Avenue, North Shore Channel	Grab	SEC	Chicago
102	Oakton Street, North Shore Channel	Grab	GEN	Chicago
103	Golf Road, West Fork North Branch Chicago River	Grab	GEN	Chicago
104	Glenview Road, North Branch Chicago River	Grab	GEN	Chicago
105	Frontage Road, Skokie River	Grab	GEN	Chicago
106	Dundee Road, West Fork North Branch Chicago River	Grab	GEN	Chicago
107	Western Avenue, Chicago Sanitary & Ship Canal*	Grab	SEC	Chicago
108	Loomis Street, South Branch Chicago River	Grab	SEC	Chicago
109	Brookfield Avenue, Salt Creek	Grab	GEN	Des Plaines
110	Springinsguth Road, West Branch DuPage River	Grab	GEN	Des Plaines

¹GEN = General Use, SEC = Secondary Contact, EFF = Effluent.

²Kept for Special Studies Separately.

^{*}Excluded in 2010 Sampling.

APPENDIX AII

WATER QUALITY RESULTS: ANNUAL MEAN, STANDARD COMPLIANCE VIOLATION HISTORY, AND MEAN HISTORY

TABLE AII-1: WATERWAYS SAMPLE MEANS IN 2010

Sampling Station (No. Name)	DO mg/L	Temp °C	pН	Alk mg/L
Chicago River System				
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND
106 Dundee Road, West Fork North Branch Chicago River	8.03	13.1	7.25 7.63	158 181
103 Golf Road, West Fork North Branch Chicago River	7.70 6.18	15.7 14.8	7.61	192
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	8.20	12.7	7.71	171
32 Lake-Cook Road, Skokie River	7.23	15.2	7.70	196
105 Frontage Road, Skokie River	7.63	13.5 12.7	7.56 7.70	170 183
34 Dempster Street, North Branch Chicago River	8.25 8.47	14.5	7.70 7.94	172
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	8.39	16.9	7.62	118
102 Oakton Street, North Shore Channel	7.02	15.4	7.57	131 136
36 Touhy Avenue, North Shore Channel	7.15 7.18	16.2 15.3	7.30 7.11	139
101 Foster Avenue, North Shore Channel 37 Wilson Avenue, North Branch Chicago River	7.51	15.7	7.35	139
73 Diversey Parkway, North Branch Chicago River	6.91	15.0	7.31	149
46 Grand Avenue, North Branch Chicago River	6.57	14.6	7.39 7.39	145 110
74 Lake Shore Drive, Chicago River	9.05 8.11	13.5 13.9	7.38	119
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River	7.36	13.9	7.23	134
108 Loomis Street, South Branch Chicago River	7.51	15.7	7.33	135
99 Archer Avenue, South Fork South Branch Chicago River	5.60 7.02	12.8 16.1	7.34 7.40	146 136
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND
 107 Western Avenue, Chicago Sanitary & Ship Canal 75 Cicero Avenue, Chicago Sanitary & Ship Canal 	6.02	19.3	7.04	140
41 Harlem Avenue, Chicago Sanitary & Ship Canal	7.56	17.2	7.23	138 143
42 Route 83, Chicago Sanitary & Ship Canal	5.93 6.48	16.1 16.5	7.02 7.24	145
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND
 82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal 	5.69	18.0	7.33	146
Calumet River System	8.90	17.3	7.57	107
49 Ewing Avenue, Calumet River	8.12	15.6	7.74	103
50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River	9.16	16.0	7.86	108
51 IHB Railroad Bridge, Grand Calumet River	ND	ND	ND 7.27	ND 250
86 Burnham Avenue, Grand Calumet River	4.89 8.71	18.0 17.6	7.57	120
56 Indiana Avenue, Little Calumet River 76 Halsted Street, Little Calumet River	6.89	16.6	7.30	147
52 Wentworth Avenue, Little Calumet River	7.08	15.2	7.63	184
54 Joe Orr Road, Thorn Creek	7.72 7.87	15.0 15.0	7.27 7.66	178 163
97 170th Street, Thorn Creek	7.46	14.4	7.60	166
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	7.44	15.5	7.38	159
59 Cicero Avenue, Calumet-Sag Channel	6.20	16.0	7.48	153 158
43 Route 83, Calumet-Sag Channel	6.49	15.8	7.47	130
Des Plaines River System				
90 Route 19 Poplar Creek	8.80	15.4	7.83	222
63 Longmeadow Lane, West Branch DuPage River	ND	ND	ND 7.51	ND 154
89 Walnut Lane, West Branch DuPage River	8.53 8.42	16.3 12.1	7.71 7.71	180
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	6.88	18.9	7.51	135
80 Arlington Heights Road, Salt Creek	8.43	15.0	7.52	148
18 Devon Avenue, Salt Creek	8.25	13.4	7.60 7.48	154 154
24 Wolf Road, Salt Creek	7.41 7.37	11.3 13.8	7.48 7.58	150
109 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	8.70	14.8	7.68	114
78 Wille Road, Higgins Creek	8.98	17.7 14.9	7.61 7.47	176 204
12 Lake-Cook Road, Buffalo Creek	7.31 8.11	14.9	7.58	192
13 Lake-Cook Road, Des Plaines River 17 Oakton Street, Des Plaines River	8.58	15.1	7.74	180
19 Belmont Avenue, Des Plaines River	8.41	15.0	7.82	171
20 Roosevelt Road, Des Plaines River	7.91	15.3 13.0	7.85 7.81	170 169
22 Ogden Avenue, Des Plaines River	7.89 8.07	14.1	7.86	165
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23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River	8.37	13.5	7.86	170
23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River 91 Material Service Road, Des Plaines River 110 Springinsguth Road, West Branch DuPage River		13.5 14.0 17.9	7.86 7.97 7.41	175 209

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2010

Sampling Station (No. Name)	Cl mg/L	Turb NTU	TKN mg/L	NH ₄ -N mg/L
Chicago River System				
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND 0.346
106 Dundee Road, West Fork North Branch Chicago River	470 400	18.0 12.4	1.24 1.15	0.181
103 Golf Road, West Fork North Branch Chicago River	304	10.6	0.95	0.064
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	257	7.6	0.88	0.048
32 Lake-Cook Road, Skokie River	251	9.2	0.81 1.01	0.080 0.068
105 Frontage Road, Skokie River	217 316	9.5 9.4	1.53	0.190
34 Dempster Street, North Branch Chicago River	319	13.1	0.94	0.082
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	30	5.5	0.32	0.125
102 Oakton Street, North Shore Channel	106	14.3	1.46 2.06	0.589 0.826
36 Touhy Avenue, North Shore Channel	155 170	4.0 4.6	2.10	1.061
101 Foster Avenue, North Shore Channel	222	6.6	1.84	0.807
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 	19 9	6.5	1.77	0.900
46 Grand Avenue, North Branch Chicago River	175	8.0	1.96 0.29	1.021 0.145
74 Lake Shore Drive, Chicago River	78 122	2.2 3.8	0.65	0.338
100 Wells Street, Chicago River	168	8.4	1.29	0.532
39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River	188	8.5	1.29	0.579
99 Archer Avenue, South Fork South Branch Chicago River	171	7.6	1.98 1.57	0.937 0.613
40 Damen Avenue, Chicago Sanitary & Ship Canai	185 ND	8.9 ND	ND	ND ND
107 Western Avenue, Chicago Sanitary & Ship Canal	161	8.9	1.40	0.562
75 Cicero Avenue, Chicago Sanitary & Ship Canal 41 Harlem Avenue, Chicago Sanitary & Ship Canal	188	5.0	1.51	0.521
42 Route 83, Chicago Sanitary & Ship Canal	196	4.2	1.83 1.54	0.799 0.536
48 Stephen Street, Chicago Sanitary & Ship Canal	202 ND	6.9 ND	ND	ND
82 Lockport Trebler, Chicago Sanitary & Ship Canal	181	6.0	1.49	0.573
92 Lockport Forebay, Chicago Sanitary & Ship Canal				
Calumet River System 49 Ewing Avenue, Calumet River	35	2.9	0.07	0.038
50 Burnham Avenue, Wolf Lake	86	3.5	0.52	0.080
55 130th Street, Calumet River	83 ND	2.7 ND	0.25 ND	0.071 ND
51 IHB Railroad Bridge, Grand Calumet River	ND 80	13.0	4.57	3.121
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River	104	8.9	0.64	0.202
76 Halsted Street, Little Calumet River	159	4.9	1.30	0.368 0.264
52 Wentworth Avenue, Little Calumet River	122 210	61.2 24.1	1.39 1.24	0.264
54 Joe Orr Road, Thorn Creek	192	51.5	1.21	0.134
97 170th Street, Thorn Creek 57 Ashland Avenue, Little Calumet River	182	42.1	1.11	0.196
58 Ashland Avenue, Calumet-Sag Channel	159	19.7	1.28	0.334 0.428
59 Cicero Avenue, Calumet-Sag Channel	160 178	14.1 9.2	1.33 1.29	0.407
43 Route 83, Calumet-Sag Channel	170	7.2	1.27	•,,,,,
Des Plaines River System	272	120	0.86	0.094
90 Route 19, Poplar Creek	273 ND	12.0 ND	ND	ND
63 Longmeadow Lane, West Branch DuPage River	ND 171	7.0	1.68	0.118
89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River	340	18.5	1.97	0.755
79 Higgins Road, Salt Creek	266	25.4	1.30 1.30	0.098 0.202
80 Arlington Heights Road, Salt Creek	289 327	6.0 6.9	1.46	0.202
18 Devon Avenue, Salt Creek	313	14.2	2.00	0.180
24 Wolf Road, Salt Creek 109 Brookfield Avenue, Salt Creek	293	19.4	1.02	0.224
21 First Avenue, Salt Creek	ND	ND 19.3	ND 0.72	ND 0.000
77 Elmhurst Road, Higgins Creek	583 220	3.1	1.28	0.221
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	310	23.9	1.11	0.084
13 Lake-Cook Road, Des Plaines River	185	12.9	1.07	0.040
17 Oakton Street, Des Plaines River	221	13.5	1.04 1.09	0.065 0.086
19 Belmont Avenue, Des Plaines River	231	12.7 16.6	1.09	0.065
	727			
20 Roosevelt Road, Des Plaines River	232 250		1.04	0.107
22 Ogden Avenue, Des Plaines River	232 250 239	15.3 13.1	1.04 0.92	0.107 0.088
22 Ogden Avenue, Des Plaines River 23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River	250 239 235	15.3 13.1 16.6	1.04 0.92 1.15	0.107 0.088 0.069
22 Ogden Avenue, Des Plaines River 23 Willow Springs Road, Des Plaines River	250 239	15.3 13.1	1.04 0.92	0.107 0.088

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2010

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Sampling Station (No. Name)	NH ₃ -N ¹ mg/L	ORG-N mg/L	NO ₂ + NO ₃ mg/L	TS mg/L
Chicago River System	MD	NID	ND	ND
30 Lake-Cook Road, West Fork North Branch	ND 0.002	ND 0.89	8.56	1160
106 Dundee Road, West Fork North Branch Chicago River	0.002	0.97	3.72	1052
103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch	0.001	0.88	0.17	845
104 Glenview Road, North Branch Chicago River	0.001	0.83	5.88	781 780
32 Lake-Cook Road, Skokie River	0.001	0.73	0.3 5 7.0 7	713
105 Frontage Road, Skokie River	0.001 0.002	0.95 1.34	4.02	897
34 Dempster Street, North Branch Chicago River	0.002	0.86	4.50	883
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	0.001	0.21	0.31	255
102 Oakton Street, North Shore Channel	0.005	0.88	3.29	423 534
36 Touhy Avenue, North Shore Channel	0.005	1.24	6.53 7.75	567
101 Foster Avenue, North Shore Channel	0.00 5 0.00 7	1.04 1.04	7.12	686
37 Wilson Avenue, North Branch Chicago River	0.006	0.87	7.18	638
73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River	0.006	0.94	6.66	595
74 Lake Shore Drive, Chicago River	0.000	0.15	1.28	310
100 Wells Street, Chicago River	0.003	0.41	2.83 5.05	411 532
39 Madison Street, South Branch Chicago River	0.004 0.00 5	0.76 0.71	5.12	591
108 Loomis Street, South Branch Chicago River	0.005	1.05	4.80	565
99 Archer Avenue, South Fork South Branch Chicago River 40 Damen Avenue, Chicago Sanitary & Ship Canal	0.006	0.96	5.11	572
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.003	0.84	5.15 8.12	546 621
41 Harlem Avenue, Chicago Sanitary & Ship Canai	0.003 0.003	0.99 1.03	6.10	635
42 Route 83, Chicago Sanitary & Ship Canal	0.003	1.01	5.83	665
48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND
 Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal 	0.006	0.91	5.91	669
Calumet River System	0.001	0.07	0.30	229
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	0.004	0.46	0.07	327
55 130th Street, Calumet River	0.001	0.18	0.42	363 ND
51 IHB Railroad Bridge, Grand Calumet River	ND 0.034	ND	ND 0.29	570
86 Burnham Avenue, Grand Calumet River	0.034 0.002	1.45 0.45	1.12	420
56 Indiana Avenue, Little Calumet River	0.002	0.93	5.38	586
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River	0.004	1.13	4.34	646
54 Joe Orr Road, Thorn Creek	0.001	1.07	7.39 4.53	1383 1073
97 170th Street, Thorn Creek	0.003	1.08 0.92	3.41	829
57 Ashland Avenue, Little Calumet River	0.003 0.002	0.97	4.38	682
58 Ashland Avenue, Calumet-Sag Channel 59 Cicero Avenue, Calumet-Sag Channel	0.004	0.90	4.55	617
59 Cicero Avenue, Calumet-Sag Channel 43 Route 83, Calumet-Sag Channel	0.004	0.88	4.90	679
Des Plaines River System	0.002	0.76	0.28	817
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND
89 Walnut Lane, West Branch DuPage River	0.001	1.56	11.83	653 939
64 Lake Street, West Branch DuPage River	0.007	1.22	6.82 0.12	757
79 Higgins Road, Salt Creek	0.002 0.001	1.20 1.10	7.81	828
80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	0.001	1.24	8.31	891
18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek	0.001	1.82	6.98	877
109 Brookfield Avenue, Salt Creek	0.002	0.81	6.17 ND	845 ND
21 First Avenue, Salt Creek	ND 0.000	ND 0.72	0.35	1183
77 Elmhurst Road, Higgins Creek	0.000	1.06	7.90	760
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	0.001	1.03	0.36	919
13 Lake-Cook Road, Des Plaines River	0.001	1.03	6.45	687
17 Oakton Street, Des Plaines River	0.001	0.98	6.08 5.71	738 744
19 Belmont Avenue, Des Plaines River	0.001 0.001	1.00 0.99	5.6 5	747
20 Roosevelt Road, Des Plaines River	0.001	0.93	5.52	771
Ogden Avenue, Des Plaines RiverWillow Springs Road, Des Plaines River	0.001	0.84	5.25	757
29 Stephen Street, Des Plaines River	0.001	1.08	5.01	750 763
91 Material Service Road, Des Plaines River	0.000	0.97	4.78 0.36	762 763
110 Springinsguth Road, West Branch DuPage River	0.006	1.33	0.50	, 05

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2010

Sampling Station (No. Name)	TSS mg/L	VSS mg/L	TDS mg/L	Phenol μg/L
Chicago River System				
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND
106 Dundee Road, West Fork North Branch Chicago River	25.1	3.60	1135	0.5
103 Golf Road, West Fork North Branch Chicago River	16.6	2.40	1036 834	0.6 0.0
31 Lake-Cook Road, Middle Fork North Branch	11.4 11.3	1.56 1.22	770	0.0
104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River	12.7	1.33	767	0.6
105 Frontage Road, Skokie River	13.8	1.33	699	0.6
34 Dempster Street, North Branch Chicago River	13.4	1.88	883	0.0
96 Albany Avenue, North Branch Chicago River	14.3	1.82	868	0.0 0.0
35 Central Street, North Shore Channel	7.1 20.8	1.13 3.18	248 403	0.0
102 Oakton Street, North Shore Channel 36 Touhy Avenue, North Shore Channel	7.0	1.45	527	0.0
101 Foster Avenue, North Shore Channel	7.7	0.83	559	0.0
37 Wilson Avenue, North Branch Chicago River	9.9	0.67	676	0.0
73 Diversey Parkway, North Branch Chicago River	9.5	0.00	628	0.0 0.0
46 Grand Avenue, North Branch Chicago River	10.8 1.2	0.92 0.00	584 30 9	0.0
74 Lake Shore Drive, Chicago River 100 Wells Street, Chicago River	4.1	0.00	407	0.0
39 Madison Street, South Branch Chicago River	9.5	0.92	522	0.0
108 Loomis Street, South Branch Chicago River	11.4	2.00	580	0.0
99 Archer Avenue, South Fork South Branch Chicago River	11.7	3.40	553	0.7
40 Damen Avenue, Chicago Sanitary & Ship Canal	12.0 ND	2.25 ND	560 ND	0.5 ND
107 Western Avenue, Chicago Sanitary & Ship Canal	12.8	1.92	533	0.0
75 Cicero Avenue, Chicago Sanitary & Ship Canal 41 Harlem Avenue, Chicago Sanitary & Ship Canal	7.7	0.89	614	0.7
42 Route 83, Chicago Sanitary & Ship Canal	6.8	0.67	629	0.5
48 Stephen Street, Chicago Sanitary & Ship Canal	9.3	0.58	656	0.5
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND 10.4	ND 1.08	ND 658	ND 0.2
92 Lockport Forebay, Chicago Sanitary & Ship Canal	10.4	1.00	030	0.2
Calumet River System				
49 Ewing Avenue, Calumet River	4.8	0.00	224	0.0
50 Burnham Avenue, Wolf Lake	4.3	1.27	323	0.0
55 130th Street, Calumet River	5.1	0.00	357 ND	0.0 ND
51 IHB Railroad Bridge, Grand Calumet River	ND 14.4	ND 8.00	556	0.7
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River	12.9	1.10	407	0.0
76 Halsted Street, Little Calumet River	7.6	0.40	579	0.0
52 Wentworth Avenue, Little Calumet River	74.3	8.82	572	0.0
54 Joe Orr Road, Thorn Creek	27.4 53.4	2.44 7.55	13 56 10 20	0.0 0.0
97 170th Street, Thom Creek	55.1	6.70	774	0.6
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	25.3	3.00	657	0.5
59 Cicero Avenue, Calumet-Sag Channel	18.5	2.30	598	5.9
43 Route 83, Calumet-Sag Channel	14.0	1.55	665	0.0
Des Plaines River System				
90 Route 19, Poplar Creek	17.6	3.50	79 9	0.6
63 Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND
89 Walnut Lane, West Branch DuPage River	20.1	5.42	633	0.0
64 Lake Street, West Branch DuPage River	26.7	6.67 8.25	912 726	0.0 0.0
79 Higgins Road, Salt Creek	31.4 8.5	2.58	820	0.0
80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	11.1	2.20	880	0.0
24 Wolf Road, Salt Creek	23.5	3.90	853	0.6
109 Brookfield Avenue, Salt Creek	18.3	2.55	827	0.0
21 First Avenue, Salt Creek	ND 21.0	ND 6 00	ND	N D 0.0
77 Elmhurst Road, Higgins Creek	21.0 2.4	6.00 1.33	1162 758	0.6
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	27.7	5.14	891	0.0
13 Lake-Cook Road, Des Plaines River	17.4	3.27	670	0.5
17 Oakton Street, Des Plaines River	16.8	3.45	721	0.0
19 Belmont Avenue, Des Plaines River	18.5	3.36	726 725	0.0
20 Roosevelt Road, Des Plaines River	22.0 20.5	4.00 3.33	725 750	0.0 0.0
22 Ogden Avenue, Des Plaines River	20.5 17.4	3.33 3.4 5	73 9	0.0
23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River	23.6	5.08	727	0.4
	23.1	5.17	739	0.0
91 Material Service Road, Des Plaines River	11.0	3.00	752	0.0

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2010

Sampling Station (No. Name)	NPS μg/L	SO ₄ mg/L	FOG mg/L	TP mg/L
Chicago River System				
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND
106 Dundee Road, West Fork North Branch Chicago River	ND	49.2	ND	1.366
103 Golf Road, West Fork North Branch Chicago River	ND	58.0	ND ND	0.523 0.128
31 Lake-Cook Road, Middle Fork North Branch	ND ND	46.7 54.4	ND	0.866
104 Glenview Road, North Branch Chicago River	ND	50.9	ND	0.126
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River	ND	54.2	ND	1.053
34 Dempster Street, North Branch Chicago River	ND	54.6	ND	0.494
96 Albany Avenue, North Branch Chicago River	ND	53.0	ND ND	0.695 0.078
35 Central Street, North Shore Channel	ND 0.00	25.3 36.7	0.00	0.530
102 Oakton Street, North Shore Channel	0.00	41.9	0.00	1.154
36 Touhy Avenue, North Shore Channel 101 Foster Avenue, North Shore Channel	ND	43.2	0.00	1.207
37 Wilson Avenue, North Branch Chicago River	ND	47.3	0.00	1.024
73 Diversey Parkway, North Branch Chicago River	ND	47.3	0.00	1.048 0.950
46 Grand Avenue, North Branch Chicago River	0.00 ND	44.2 25.8	0.00 ND	0.930
74 Lake Shore Drive, Chicago River	ND ND	31.2	ND	0.336
 Wells Street, Chicago River Madison Street, South Branch Chicago River 	ND	39.8	0.00	0.649
108 Loomis Street, South Branch Chicago River	ND	41.4	0.00	0.657
99 Archer Avenue, South Fork South Branch Chicago River	ND	44.0	0.00	0.682
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	41.2 ND	0.00 ND	0.670 ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND 0.00	43.0	0.00	0.681
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.00	61.0	0.00	0.791
41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal	ND	65.0	0.00	0.837
48 Stephen Street, Chicago Sanitary & Ship Canal	0.00	75.5	0.00	1.008
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND 82.5	ND 0.00	ND 1.121
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.00	62.3	0.00	1.121
Calumet River System				0.010
49 Ewing Avenue, Calumet River	ND	24.5	ND	0.018 0.043
50 Burnham Avenue, Wolf Lake	ND ND	41.4 52.7	ND ND	0.000
55 130th Street, Calumet River	ND	ND	ND	ND
51 IHB Railroad Bridge, Grand Calumet River 86 Burnham Avenue, Grand Calumet River	ND	96.1	0.00	0.919
56 Indiana Avenue, Little Calumet River	0.00	61.2	0.00	0.369
76 Halsted Street, Little Calumet River	0.00	75.2	0.00 ND	2.010 0.568
52 Wentworth Avenue, Little Calumet River	ND ND	96.3 509.8	ND	1,267
54 Joe Orr Road, Thorn Creek	ND	318.3	ND	0.920
97 170th Street, Thorn Creek 57 Ashland Avenue, Little Calumet River	ND	182.2	ND	0.758
58 Ashland Avenue, Calumet-Sag Channel	ND	138.1	0.00	1.578
59 Cicero Avenue, Calumet-Sag Channel	0.00	96.1	0.00 0.00	1.917 1.824
43 Route 83, Calumet-Sag Channel	ND	103.5	0.00	1.024
Des Plaines River System			MD	0.007
90 Route 19, Poplar Creek	ND	41.6 ND	ND ND	0.097 ND
63 Longmeadow Lane, West Branch DuPage River	ND 0.00	57.7	ND	2.310
89 Walnut Lane, West Branch DuPage River	0.00	59.1	ND	1.148
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	0.00	46.3	ND	0.120
80 Arlington Heights Road, Salt Creek	0.00	68.0	ND	1.533
18 Devon Avenue, Salt Creek	ND	72.1	ND	1.643 1.172
24 Wolf Road, Salt Creek	0.00 ND	75.7 72.5	ND ND	1.041
109 Brookfield Avenue, Salt Creek	ND	ND	ND	ND
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	0.00	39.4	ND	0.000
78 Wille Road, Higgins Creek	0.00	77.7	ND	1.018
12 Lake-Cook Road, Buffalo Creek	ND ND	76.8 58.7	ND ND	0.086 0.773
13 Lake-Cook Road, Des Plaines River	ND ND	58.7 59.7	ND	0.802
17 Oakton Street, Des Plaines River	ND	61.5	ND	0.801
19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River	ND	61.3	ND	0.734
22 Ogden Avenue, Des Plaines River	0.00	63.6	ND	0.787
23 Willow Springs Road, Des Plaines River	ND	65.2	ND	0.733 0.708
29 Stephen Street, Des Plaines River	ND	6 5 .0 6 6.8	ND ND	0.708
91 Material Service Road, Des Plaines River	ND ND	48.0	ND	0.190
110 Springinsguth Road, West Branch DuPage River	IND	70.0	112	0

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2010

Sampling Station (No. Name)	CN mg/L	WAD-CN mg/L	F mg/L	TOC mg/L
Chicago River System				
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND
106 Dundee Road, West Fork North Branch Chicago River	0.003	0.000	0.505	4.89
103 Golf Road, West Fork North Branch Chicago River	0.001 0.000	0.000 0.000	0.374 0.226	4.70 6.79
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	0.001	0.000	0.497	4.66
32 Lake-Cook Road, Skokie River	0.001	0.000	0.268	5.60
105 Frontage Road, Skokie River	0.001	0.000	0.528	4.58
34 Dempster Street, North Branch Chicago River	0.001	0.000 0.000	0.39 5 0.417	4.33 5.35
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	0.001 0.000	0.000	0.134	3.65
102 Oakton Street, North Shore Channel	0.000	0.000	0.375	4.09
36 Touhy Avenue, North Shore Channel	0.001	0.000	0.663	4.95
101 Foster Avenue, North Shore Channel	0.001	0.001 0.000	0.684 0.614	6.04 4.48
37 Wilson Avenue, North Branch Chicago River	0.001 0.001	0.000	0.657	4.68
73 Diversey Parkway, North Branch Chicago River46 Grand Avenue, North Branch Chicago River	0.001	0.000	0.623	4.53
74 Lake Shore Drive, Chicago River	0.000	0.000	0.208	2.55
100 Wells Street, Chicago River	0.001	0.000	0.316 0.493	2.93 4.04
39 Madison Street, South Branch Chicago River	0.001 0.001	0.000 0.000	0.493	4.02
108 Loomis Street, South Branch Chicago River 99 Archer Avenue, South Fork South Branch Chicago River	0.001	0.000	0.554	4.44
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.001	0.000	0.505	3.84
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND 202
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.000	0.000 0.000	0.50 5 0.598	3.93 4.63
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.001 0.001	0.001	0.643	4.91
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal	0.002	0.000	0.587	4.93
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.001	0.001	0.584	4.83
Calumet River System				
49 Ewing Avenue, Calumet River	0.000	0.001	0.102	4.50
50 Burnham Avenue, Wolf Lake	0.000	0.000	0.362 0.212	6.28 2.84
55 130th Street, Calumet River	0.000 ND	0.000 ND	0.212 ND	ND
51 IHB Railroad Bridge, Grand Calumet River 86 Burnham Avenue, Grand Calumet River	0.002	0.000	0.596	10.66
56 Indiana Avenue, Little Calumet River	0.000	0.000	0.272	3.64
76 Halsted Street, Little Calumet River	0.001	0.000	0.530	4.96 7.69
52 Wentworth Avenue, Little Calumet River	0.001 0.002	0.000 0.001	0.487 0.482	5.96
54 Joe Orr Road, Thorn Creek 97 170th Street, Thorn Creek	0.002	0.000	0.370	6.19
57 Ashland Avenue, Little Calumet River	0.002	0.000	0.422	5.60
58 Ashland Avenue, Calumet-Sag Channel	0.002	0.000	0.492	5.53
59 Cicero Avenue, Calumet-Sag Channel	0.001 0.002	0.000 0.000	0.483 0.509	5.55 4.92
43 Route 83, Calumet-Sag Channel	0.002	0.000	0.507	
Des Plaines River System 90 Route 19, Poplar Creek	0.001	0.000	0.144	5.67
63 Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND
89 Walnut Lane, West Branch DuPage River	0.003	0.002	0.643	6.54
64 Lake Street, West Branch DuPage River	0.003	0.001	0.377	5.80 6.64
79 Higgins Road, Salt Creek	0.001 0.003	0.000 0.001	0.179 0.527	5.58
80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	0.003	0.001	0.566	5.59
24 Wolf Road, Salt Creek	0.002	0.000	0.433	4.95
109 Brookfield Avenue, Salt Creek	0.001	0.000	0.424	4.87
21 First Avenue, Salt Creek	ND 0.000	ND 0.001	ND 0.130	ND 3.80
77 Elmhurst Road, Higgins Creek 78 Wille Road, Higgins Creek	0.003	0.001	0.661	5.02
12 Lake-Cook Road, Buffalo Creek	0.001	0.000	0.120	5.97
13 Lake-Cook Road, Des Plaines River	0.001	0.000	0.365	5.98
17 Oakton Street, Des Plaines River	0.000	0.000	0.363	5.94 5.48
19 Belmont Avenue, Des Plaines River	0.002 0.001	0.000 0.000	0.420 0.415	5.48 5.68
20 Roosevelt Road, Des Plaines River 22 Ogden Avenue, Des Plaines River	0.001	0.001	0.403	5.28
23 Willow Springs Road, Des Plaines River	0.000	0.000	0.396	5.23
29 Stephen Street, Des Plaines River	0.000	0.001	0.383	5.45
91 Material Service Road, Des Plaines River	0.000	0.000	0.373	5.19 11.70
110 Springinsguth Road, West Branch DuPage River	0.000	0.001	0.239	11.70

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2010

Sampling Station (No. Name)	FC ² cfu/100mL	EColi ² cfu/100mL	Ca mg/L	Mg mg/L
Chicago River System				
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND
106 Dundee Road, West Fork North Branch Chicago River	2364	1195	72.1	28.5
103 Golf Road, West Fork North Branch Chicago River	466	411	75.7 61.3	29.1 26.4
31 Lake-Cook Road, Middle Fork North Branch	646 188	348 174	64.3	27.0
104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River	775	697	67.5	28.1
105 Frontage Road, Skokie River	112	129	63.5	27.0
34 Dempster Street, North Branch Chicago River	1472	2277 1244	69.8 65.4	28.3 26.3
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	507 54	81	38.2	12.8
102 Oakton Street, North Shore Channel	615	3345	48.9	16.9
36 Touhy Avenue, North Shore Channel	5393	5491	52.3	18.0
101 Foster Avenue, North Shore Channel	5484	4095	55.0 50.0	19.1 22.0
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 	4091 3538	3511 2336	59.9 58.5	21.1
46 Grand Avenue, North Branch Chicago River	971	573	57.0	20.3
74 Lake Shore Drive, Chicago River	28	17	38.2	12.7
100 Wells Street, Chicago River	182	33	43.5	15.0 18.2
39 Madison Street, South Branch Chicago River	415 257	180 68	51.3 52.7	18.7
108 Loomis Street, South Branch Chicago River 99 Archer Avenue, South Fork South Branch Chicago River	230	201	54.9	19.4
40 Damen Avenue, Chicago Sanitary & Ship Canal	258	230	53.4	19.0
107 Western Avenue, Chicago Sanitary & Ship Canal	ND 127	ND	ND	ND 19.4
75 Cicero Avenue, Chicago Sanitary & Ship Canal	137 1391	58 1106	53.8 59.2	20.9
41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal	537	667	58.5	20.1
48 Stephen Street, Chicago Sanitary & Ship Canal	199	202	60.5	21.1
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND 21.2
92 Lockport Forebay, Chicago Sanitary & Ship Canal	101	81	60.7	21.2
Calumet River System				
49 Ewing Avenue, Calumet River	15	23	35.2	11.8
50 Burnham Avenue, Wolf Lake	21	26	35.5	12.4
55 130th Street, Calumet River	35 ND	43 ND	41.8 ND	14.2 ND
51 IHB Railroad Bridge, Grand Calumet River 86 Burnham Avenue, Grand Calumet River	4613	204450	85.3	28.2
56 Indiana Avenue, Little Calumet River	74	126	47.6	16.2
76 Halsted Street, Little Calumet River	1926	3724	60.8	20.6
52 Wentworth Avenue, Little Calumet River	258 5 1131	2785 1368	72.2 79.2	28.6 28.3
54 Joe Orr Road, Thorn Creek 97 170th Street, Thorn Creek	1086	435	73.9	29.7
57 Ashland Avenue, Little Calumet River	1346	552	69.4	26.5
58 Ashland Avenue, Calumet-Sag Channel	1280	436	65.3	23.4
59 Cicero Avenue, Calumet-Sag Channel	1060 127	360 26	63.9 66.9	22.4 23.7
43 Route 83, Calumet-Sag Channel	127	20	00.9	23.1
Des Plaines River System				
90 Route 19, Poplar Creek	87	144	75.9	32.3
63 Longmeadow Lane, West Branch DuPage River	ND 549	ND 588	ND 65.3	ND 24.2
89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River	814	1509	79.2	28.3
79 Higgins Road, Salt Creek	154	209	50.6	20.7
80 Arlington Heights Road, Salt Creek	273	280	65.8	24.5
18 Devon Avenue, Salt Creek	472 358	552 218	68.3 70.8	25.6 27.1
24 Wolf Road, Salt Creek 109 Brookfield Avenue, Salt Creek	560	442	67.8	26.2
21 First Avenue, Salt Creek	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	210	200	63.6	20.6
78 Wille Road, Higgins Creek	142	179	75.2 76.8	27.2 32.6
12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River	140 245	280 333	67.8	29.5
17 Oakton Street, Des Plaines River	224	185	66.3	28.2
19 Belmont Avenue, Des Plaines River	423	477	65.1	26.8
20 Roosevelt Road, Des Plaines River	296	335	65.1	26.7 26.5
 Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River 	363 280	364 154	65.3 63.3	26.5 25.7
	400			
20 Stephen Street Des Plaines River	162	179	67.1	27.3
29 Stephen Street, Des Plaines River 91 Material Service Road, Des Plaines River	162 63	179 59	67.1 67.8 72.1	27.3 27.8 25.5

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2010

Sampling Station (No. Name)	Hard mg/L	Alpha pCi/L	Beta pCi/L	Chlrphl μg/L
Chicago River System				
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND
106 Dundee Road, West Fork North Branch Chicago River	297	2.75	8.10	8.1
103 Golf Road, West Fork North Branch Chicago River	309	3.38	7.99	14.0 5.0
31 Lake-Cook Road, Middle Fork North Branch	262 272	3.42 3.56	5.51 6.34	7.0
104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River	284	3.10	6.18	7.0
105 Frontage Road, Skokie River	270	3.48	7.12	10.1
34 Dempster Street, North Branch Chicago River	291	3.68	5.94	7.7
96 Albany Avenue, North Branch Chicago River	272	3.67	7.06	8.8 17.7
35 Central Street, North Shore Channel	148 192	2.05 2.67	4.87 5.19	16.8
102 Oakton Street, North Shore Channel 36 Touhy Avenue, North Shore Channel	205	2.85	6.36	2.1
101 Foster Avenue, North Shore Channel	216	ND	ND	1.5
37 Wilson Avenue, North Branch Chicago River	240	ND	ND	2.5
73 Diversey Parkway, North Branch Chicago River	233	ND	ND	2.8 2.6
46 Grand Avenue, North Branch Chicago River	226 148	ND 2.37	ND 4.55	1.3
74 Lake Shore Drive, Chicago River 100 Wells Street, Chicago River	171	2.23	5.25	1.9
39 Madison Street, South Branch Chicago River	203	ND	ND	3.8
108 Loomis Street, South Branch Chicago River	209	ND	ND	2.3
99 Archer Avenue, South Fork South Branch Chicago River	217	ND	ND	13.3 5.8
40 Damen Avenue, Chicago Sanitary & Ship Canal	211 ND	ND ND	ND ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal 75 Cicero Avenue, Chicago Sanitary & Ship Canal	214	3.08	5.97	4.7
41 Harlem Avenue, Chicago Sanitary & Ship Canal	234	3.41	7.47	4.0
42 Route 83, Chicago Sanitary & Ship Canal	229	ND	ND	5.5
48 Stephen Street, Chicago Sanitary & Ship Canal	238	ND	ND	4.7
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND 220	ND 3.43	ND 6.85	ND 4.7
92 Lockport Forebay, Chicago Sanitary & Ship Canal	239	3.43	0.63	7.,
Calumet River System				
49 Ewing Avenue, Calumet River	136	1.84	4.38	0.9 4.5
50 Burnham Avenue, Wolf Lake	140 163	1.95 2.15	6.0 5 4.79	3.7
55 130th Street, Calumet River 51 IHB Railroad Bridge, Grand Calumet River	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	329	ND	ND	75.6
56 Indiana Avenue, Little Calumet River	185	2.28	5.82	14.1
76 Halsted Street, Little Calumet River	237	3.07	6.34	4.1 8.2
52 Wentworth Avenue, Little Calumet River	298 314	2.91 3.91	7.19 6.83	4.7
54 Joe Orr Road, Thorn Creek 97 170th Street, Thorn Creek	307	3.98	7.91	11.2
57 Ashland Avenue, Little Calumet River	283	3.64	6.80	8.0
58 Ashland Avenue, Calumet-Sag Channel	259	ND	ND	7.0
59 Cicero Avenue, Calumet-Sag Channel	252 265	ND ND	ND ND	4.0 5.2
43 Route 83, Calumet-Sag Channel	203	ND	ND	J.2
Des Plaines River System	222	1.01	£ 0.2	10.0
90 Route 19, Poplar Creek	323 ND	3.01 ND	5.93 ND	ND
63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River	263	2.97	9.15	4.8
64 Lake Street, West Branch DuPage River	314	4.93	9.39	15.9
79 Higgins Road, Salt Creek	212	3.23	4.79	26.3
80 Arlington Heights Road, Salt Creek	265	3.16	6.94	15.6
18 Devon Avenue, Salt Creek	276 289	3.37 3.50	6.89 6.63	13.6 8.6
24 Wolf Road, Salt Creek 109 Brookfield Avenue, Salt Creek	277	3.30	8.37	8.2
21 First Avenue, Salt Creek	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	244	2.64	4.78	28.3
78 Wille Road, Higgins Creek	300	2.59	6.42 5.54	2.6 14.1
12 Lake-Cook Road, Buffalo Creek	326 291	3.27 3.24	5.54 7.23	12.3
13 Lake-Cook Road, Des Plaines River 17 Oakton Street, Des Plaines River	282	2.71	5.94	14.2
19 Belmont Avenue, Des Plaines River	273	2.84	6.60	13.7
20 Roosevelt Road, Des Plaines River	272	4.18	6.24	12.6
20 Koosever Koau, Des Flames Kivei	272	3. 46	7.06	11.5
22 Ogden Avenue, Des Plaines River				
22 Ogden Avenue, Des Plaines River 23 Willow Springs Road, Des Plaines River	264	3.65	6.11	12.6
22 Ogden Avenue, Des Plaines River		3.65 3.27 3.48	6.11 7.00 8.06	12.6 16.9 26.3

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2010

Sam	pling Station (No. Name)	Bnzn μg/L	Ebnzn μg/L	Toln μg/L	Xyln μg/L
Chi	Division Courts				
	ago River System				
30	Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND
	Dundee Road, West Fork North Branch Chicago River	0.000	0.000	0.000	0.000
	Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch	0.000	0.000	0.000	0.000
104	Glenview Road, North Branch Chicago River	0.000 0.000	0.000	0.000	0.000
32	Lake-Cook Road, Skokie River	0.000	0.000 0.000	0.000 0.000	0.000 0.000
	Frontage Road, Skokie River	0.000	0.000	0.000	0.000
34	Dempster Street, North Branch Chicago River	0.000	0.000	0.000	0.000
96	Albany Avenue, North Branch Chicago River	0.000	0.000	0.000	0.000
3 5	Central Street, North Shore Channel	0.000	0.000	0.000	0.000
	Oakton Street, North Shore Channel	0.000	0.000	0.000	0.000
	Touhy Avenue, North Shore Channel	0.000	0.000	0.000	0.000
101	Foster Avenue, North Shore Channel	0.000	0.000	0.000	0.000
3/	Wilson Avenue, North Branch Chicago River	0.000	0.000	0.000	0.000
15	Diversey Parkway, North Branch Chicago River	0.000	0.000	0.000	0.000
74	Grand Ávenue, North Branch Chicago Říver Lake Shore Drive, Chicago River	0.000	0.000	0.000	0.000
ióo :	Wells Street, Chicago River	0.000 0.000	0.000	0.000	0.000
39	Madison Street, South Branch Chicago River	0.000	0.000 0.000	0.000 0.000	0.000
108	Loomis Street, South Branch Chicago River	0.000	0.000	0.000	0.000 0.000
99	Archer Avenue, South Fork South Branch Chicago River	0.000	0.000	1.200	0.000
40	Damen Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000
107	Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND
75	Cicero Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000
41	Harlem Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000
42	Route 83, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000
48	Stephen Street, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000
	Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND 0.000	ND
,,,	bookport i olebay, emeago Saintary & Ship Canar	0.000	0.000	0.000	0.000
Calu	met River System				
	Ewing Avenue, Calumet River	0.000	0.000	0.000	0.000
50	Burnham Avenue, Wolf Lake	0.000	0.000	0.000	0.000 0.000
	130th Street, Calumet River	0.000	0.000	0.000	0.000
	IHB Railroad Bridge, Grand Calumet River	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	0.000	0.000	0.000	0.000
	Indiana Avenue, Little Calumet River	0.000	0.000	0.000	0.000
	Halsted Street, Little Calumet River	0.000	0.000	0.000	0,000
	Wentworth Avenue, Little Calumet River	0.000	0.000	0.000	0.000
	Toe Orr Road, Thorn Creek	0.000	0.000	0.000	0.000
	170th Street, Thorn Creek	0.000	0.000	0.000	0.000
	Ashland Avenue, Little Calumet River Ashland Avenue, Calumet-Sag Channel	0.000	0.000	0.000	0.000
	Cicero Avenue, Calumet-Sag Channel	0.000 0.000	0.000 0.000	0.000	0.000
	Route 83, Calumet-Sag Channel	0.000	0.000	0.000 0.000	0.000 0.000
	one of our or one or	0.000	0.000	0.000	0.000
Des 1	Plaines River System				
	Route 19, Poplar Creek	0.000	0.000	0.000	0.000
63 I	Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND
89 \	Walnut Lane, West Branch DuPage River	0.000	0.000	0.000	0.000
64 I	Lake Street, West Branch DuPage River	0.000	0.000	0.000	0.000
	liggins Road, Salt Creek	0.000	0.000	0.000	0.000
	Arlington Heights Road, Salt Creek	0.000	0.000	0.000	0.000
	Devon Avenue, Salt Creek	0.000	0.000	0.000	0.000
	Volf Road, Salt Creek	0.000	0.000	0.000	0.000
	Brookfield Avenue, Salt Creek	0.000	0.000	0.000	0.000
	First Avenue, Salt Creek Elmhurst Road, Higgins Creek	ND	ND	ND	ND
	Wille Road, Higgins Creek	0.000	0.000	0.000	0.000
	Lake-Cook Road, Buffalo Creek	0.000 0.000	0.000	0.000	0.000
	ake-Cook Road, Des Plaines River	0.000	0.0 00 0.0 00	0.000 0.000	0.000 0.000
	Dakton Street, Des Plaines River	0.000	0.000	0.000	0.000
	Belmont Avenue, Des Plaines River	0.000	0.000	0.000	0.000
	Roosevelt Road, Des Plaines River	0.000	0.000	0.000	0.000
	Ogden Avenue, Des Plaines River	0.000	0.000	0.000	0.000
23 V	Villow Springs Road, Des Plaines River	0.000	0.000	0.000	0.000
29 S	tephen Street, Des Plaines River	0.000	0.000	0.000	0.000
47 3					
91 N	Material Service Road, Des Plaines River pringinsguth Road, West Branch DuPage River	0.000	0.000	0.000	0.000

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2010

Sampling Station (No. Name)	Ag mg/L	As mg/L	Ba mg/L	B mg/L
Chicago River System				
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND
106 Dundee Road, West Fork North Branch Chicago River	0.000	0.000	0.064	0.138
103 Golf Road, West Fork North Branch Chicago River	0.000	0.000	0.054	0.124
31 Lake-Cook Road, Middle Fork North Branch	0.000	0.000	0.039	0.067
104 Glenview Road, North Branch Chicago River	0.000 0.000	0.000	0.033 0.042	0.126 0.092
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River	0.000	0.000 0.000	0.042	0.032
34 Dempster Street, North Branch Chicago River	0.000	0.000	0.040	0.107
96 Albany Avenue, North Branch Chicago River	0.000	0.000	0.038	0.118
35 Central Street, North Shore Channel	0.000	0.000	0.023	0.000
102 Oakton Street, North Shore Channel	0.000 0.000	0.000 0.000	0.026 0.022	0.060 0.160
36 Touhy Avenue, North Shore Channel 101 Foster Avenue, North Shore Channel	0.000	0.000	0.023	0.151
37 Wilson Avenue, North Branch Chicago River	0.000	0.000	0.028	0.138
73 Diversey Parkway, North Branch Chicago River	0.000	0.000	0.026	0.143
46 Grand Avenue, North Branch Chicago River	0.000	0.000	0.026	0.132
74 Lake Shore Drive, Chicago River	0.000 0.000	0.000 0.000	0.023 0.023	0.024 0.044
100 Wells Street, Chicago River39 Madison Street, South Branch Chicago River	0.000	0.000	0.026	0.103
108 Loomis Street, South Branch Chicago River	0.000	0.000	0.026	0.107
99 Archer Avenue, South Fork South Branch Chicago River	0.000	0.000	0.026	0.118
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.027	0.108
107 Western Avenue, Chicago Sanitary & Ship Canal	ND 0.000	ND 0.000	ND 0.026	ND 0.114
75 Cicero Avenue, Chicago Sanitary & Ship Canal 41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.023	0.152
42 Route 83, Chicago Sanitary & Ship Canal	0.000	0.000	0.021	0.221
48 Stephen Street, Chicago Sanitary & Ship Canal	0.000	0.000	0.023	0.204
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND 0.022	ND 0.202
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.000	0.000	0.023	0.203
Calumet River System				
49 Ewing Avenue, Calumet River	0.000	0.000	0.022	0.000
50 Burnham Avenue, Wolf Lake	0.000	0.000	0.035	0.242
55 130th Street, Calumet River	0.000 ND	0.000 ND	0.028 ND	0.089 ND
51 IHB Railroad Bridge, Grand Calumet River 86 Burnham Avenue, Grand Calumet River	0.000	0.000	0.037	0.774
56 Indiana Avenue, Little Calumet River	0.000	0.000	0.029	0.111
76 Halsted Street, Little Calumet River	0.000	0.000	0.021	0.173
52 Wentworth Avenue, Little Calumet River	0.000 0.000	0.000 0.000	0.044 0.035	0.179 0.221
54 Joe Orr Road, Thorn Creek 97 170th Street, Thorn Creek	0.000	0.000	0.041	0.194
57 Ashland Avenue, Little Calumet River	0.000	0.000	0.039	0.180
58 Ashland Avenue, Calumet-Sag Channel	0.000	0.000	0.029	0.176
59 Cicero Avenue, Calumet-Sag Channel	0.000	0.000	0.026 0.026	0.172 0.181
43 Route 83, Calumet-Sag Channel	0.000	0.000	0.020	0.101
Des Plaines River System	0.000	0.000	0.069	0.025
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND
89 Walnut Lane, West Branch DuPage River	0.000	0.000	0.031	0.216
64 Lake Street, West Branch DuPage River	0.000	0.000	0.046	0.102
79 Higgins Road, Salt Creek	0.000	0.000	0.038	0.051
80 Arlington Heights Road, Salt Creek	0.000	0.000	0.031	0.190
18 Devon Avenue, Salt Creek	0.000 0.000	0.000 0.000	0.034 0.037	0.189 0.162
24 Wolf Road, Salt Creek 109 Brookfield Avenue, Salt Creek	0.000	0.000	0.037	0.181
21 First Avenue, Salt Creek	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0.000	0.000	0.061	0.000
78 Wille Road, Higgins Creek	0.000	0.000	0.026	0.202
12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River	0.000 0.000	0.000 0.000	0.050 0.042	0.073 0.141
17 Oakton Street, Des Plaines River	0.000	0.000	0.042	0.141
19 Belmont Avenue, Des Plaines River	0.000	0.000	0.040	0.149
20 Roosevelt Road, Des Plaines River	0.000	0.000	0.040	0.155
22 Ogden Avenue, Des Plaines River	0.000	0.000	0.038	0.151
23 Willow Springs Road, Des Plaines River	0.000	0.000	0.037	0.155 0.145
29 Stephen Street, Des Plaines River	0.000	0.000	0.038 0.037	0.143
91 Material Service Road, Des Plaines River	0.000			

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2010

Chicago River System 30	Cr Cr ⁺⁶	Cr	~		
Chicago River System 30	-/I Ua/I	/T			
Take-Cook Road, West Fork North Branch Chicago River	ng/L μg/L	mg/L	mg/L	mg/L	Sampling Station (No. Name)
Take-Cook Road, West Fork North Branch Chicago River					Chicago River System
100	ND ND	ND	ND	ND	
103 Golf Road, West Fork North Branch Chicago River 0.000 0.00		0.001	0.004		
Carrier Carr		0.001			103 Golf Road, West Fork North Branch Chicago River
2 Lake-Cook Road, Skokie River		0.000 0.000			
Dempster Street, North Branch Chicago River		0.001			104 Glenview Road, North Branch Unicago River
34 Dempster Street, North Branch Chicago River 6 Albany Avenue, North Branch Chicago River 10.000 0.000 0.000 0.000 35 Central Street, North Shore Channel 102 Oakton Street, North Shore Channel 103 Touhy Avenue, North Shore Channel 104 Despendent 0.000	0.000	0.001	0.000	0.000	105 Frontage Road, Skokie River
Analy North Shore Channel		0.000			34 Dempster Street, North Branch Chicago River
102 Oakton Street, North Shore Channel		0.001 0.000			
Touhy Avenue, North Shore Channel		0.000			
101 Foster Avenue, North Shore Channel 0.000 0	0.000	0.000			36 Toulby Avenue North Shore Channel
173 Diversey Parkway, North Branch Chicago River 0.000		0.000			101 Foster Avenue, North Shore Channel
1		0.000 0.000			
1		0.000			
Wells Street, Chicago River		0.000			
Madison Street, South Branch Chicago River		0.000			
No.		0.001			39 Madison Street, South Branch Chicago River
10 10 10 10 10 10 10 10		0.001 0.000			108 Loomis Street, South Branch Chicago River
107 Western Avenue, Chicago Sanitary & Ship Canal 0.000		0.001			99 Archer Avenue, South Fork South Branch Unicago River
75 Cicero Avenue, Chicago Sanitary & Ship Canal 0.000	ND ND				
41 Harlem Avenue, Chicago Sanitary & Ship Canal 0.000 0.000 0.000 42 Route 83, Chicago Sanitary & Ship Canal 0.000 0.000 0.000 48 Stephen Street, Chicago Sanitary & Ship Canal 0.000 0.000 0.000 82 Lockport Trebler, Chicago Sanitary & Ship Canal ND ND 92 Lockport Forebay, Chicago Sanitary & Ship Canal 0.000 0.000 0.000 Calumet River System 0.000 0.000 0.000 0.000 49 Ewing Avenue, Calumet River 0.000 0.000 0.000 0.000 0.000 50 Burnham Avenue, Wolf Lake 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.001 0.000 0.001 0.000		0.001			
1		0.000			41 Harlem Avenue, Chicago Sanitary & Ship Canal
Stephen Greek Chicago Sanitary & Ship Canal ND ND		0.001 0.001			42 Route 83, Chicago Sanitary & Ship Canal
Calumet River System	ND ND				48 Stephen Street, Chicago Sanitary & Ship Canal
49 Ewing Avenue, Calumet River 0.000 0	0.001 0.000	0.001			
Soluminam Avenue, Wolf Lake 0.000					Calumet River System
50 Burnham Avenue, Wolf Lake 0.000 0.000 0.000 55 130th Street, Calumet River 0.000 0.000 0.000 51 IHB Railroad Bridge, Grand Calumet River 0.000 0.001 0.001 86 Burnham Avenue, Grand Calumet River 0.000 0.000 0.000 56 Indiana Avenue, Little Calumet River 0.000 0.000 0.000 76 Halsted Street, Little Calumet River 0.000 0.001 0.001 52 Wentworth Avenue, Little Calumet River 0.000 0.001 0.001 54 Joe Orr Road, Thorn Creek 0.000 0.001 0.001 57 Ashland Avenue, Little Calumet River 0.000 0.001 0.001 57 Ashland Avenue, Calumet-Sag Channel 0.000 0.000 0.001 58 Ashland Avenue, Calumet-Sag Channel 0.000 0.000 0.000 59 Cicero Avenue, Calumet-Sag Channel 0.000 0.000 0.000 43 Route 83, Calumet-Sag Channel 0.000 0.000		0.001			49 Ewing Avenue, Calumet River
Statistics Sta		0.000 0.000			
Section	ND ND				
56 Indiana Avenue, Little Calumet River 0.000 0.000 0.000 76 Halsted Street, Little Calumet River 0.000 0.000 0.001 52 Wentworth Avenue, Little Calumet River 0.000 0.001 0.001 54 Joe Orr Road, Thorn Creek 0.000 0.000 0.001 97 170th Street, Thorn Creek 0.000 0.001 0.001 57 Ashland Avenue, Little Calumet River 0.000 0.001 0.001 58 Ashland Avenue, Calumet-Sag Channel 0.000 0.000 0.000 59 Cicero Avenue, Calumet-Sag Channel 0.000 0.000 0.000 43 Route 83, Calumet-Sag Channel 0.000 0.000 0.000 Des Plaines River System	0.000 0.000	0.000		0.000	
Name State		0.000			
100 Orr Road, Thorn Creek 0.000 0.000 0.000 0.000 0.001 0.000 0.001		0.000 0.003			
97 170th Street, Thorn Creek 0.000 0.001 0		0.001			
57 Ashland Avenue, Little Calumet River 0.000 0.001 0.001 58 Ashland Avenue, Calumet-Sag Channel 0.000 0.000 0.000 59 Cicero Avenue, Calumet-Sag Channel 0.000 0.000 0.000 43 Route 83, Calumet-Sag Channel 0.000 0.000 0.000 Des Plaines River System	0.002 0.000	0.002	0.001	0.000	
Solution Calciumet Sag Channel		0.002			
43 Route 83, Calumet-Sag Channel 0.000 0.000 Des Plaines River System		0.001 0.001			
		0.000			
					Des Plaines River System
	0.002 0.000	0.002	0.000	0.000	90 Route 19, Poplar Creek
63 Longmeadow Lane, West Branch DuPage River	ND ND				63 Longmeadow Lane, West Branch DuPage River
0) Walliat Laile, West Dialen Dai age 14701		0.002 0.001			
		0.001			64 Lake Street, West Branch Durage River
80 Arlington Heights Road. Salt Creek 0.000 0.000	0.000 0.000	0.000		0.000	80 Arlington Heights Road, Salt Creek
18 Devon Avenue, Salt Creek 0.000 0.000		0.000		0.000	18 Devon Avenue, Salt Creek
27 Will Roug Dark Clock		0.001 0.001			
109 Brookfield Avenue, Salt Creek 0.000 0.003 21 First Avenue, Salt Creek ND ND	ND ND				
77 Elmhurst Road, Higgins Creek 0.000 0.000	0.000	0.000	0.000	0.000	77 Elmhurst Road, Higgins Creek
78 Wille Road, Higgins Creek 0.000 0.000		0.000	0.000	0.000	78 Wille Road, Higgins Creek
12 Lake-Cook Road, Buffalo Creek 0.002 0.000		0.002 0.000			12 Lake-Cook Road, Buffalo Creek
		0.000			13 Lake-Cook Road, Des Plaines River
	0.001 0.000	0.001			17 Oakion Street, Des Flaines River 19 Relmont Avenue, Des Plaines River
20 Roosevelt Road. Des Plaines River 0.000 0.001	0.002 0.000	0.002	0.001	0.000	
ZE Ogden i tvende, Des i mines i dive		0.002			
25 Willow Springs House, 2001		0.013 0.001			23 Willow Springs Road, Des Plaines River
		0.001			
		0.000		0.000	

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2010

Sampling Station (No. Name)	Fe mg/L	Pb mg/L	Ni mg/L	Mn mg/L
Chicago River System				
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND
106 Dundee Road, West Fork North Branch Chicago River	0.991	0.000	0.002	0.094
103 Golf Road, West Fork North Branch Chicago River	0.571	0.000	0.001	0.066
31 Lake-Cook Road, Middle Fork North Branch	0.698	0.000	0.000	0.171
104 Glenview Road, North Branch Chicago River	0.614	0.000	0.000 0.002	0.072 0.120
32 Lake-Cook Road, Skokie River	0.602 0.459	0.000 0.000	0.002	0.069
105 Frontage Road, Skokie River 34 Dempster Street, North Branch Chicago River	0.469	0.000	0.000	0.069
96 Albany Avenue, North Branch Chicago River	0.605	0.000	0.000	0.058
35 Central Street, North Shore Channel	0.174	0.000	0.000	0.020
102 Oakton Street, North Shore Channel	0.553	0.000	0.000	0.041
36 Touhy Avenue, North Shore Channel	0.134	0.000	0.000 0.000	0.027 0.023
101 Foster Avenue, North Shore Channel	0.171 0.309	0.000 0.000	0.000	0.023
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 	0.274	0.000	0.000	0.034
46 Grand Avenue, North Branch Chicago River	0.320	0.000	0.000	0.032
74 Lake Shore Drive, Chicago River	0.090	0.000	0.000	0.017
100 Wells Street, Chicago River	0.126	0.000	0.001	0.019
39 Madison Street, South Branch Chicago River	0.336	0.000	0.000	0.036 0.036
108 Loomis Street, South Branch Chicago River	0.360 0.394	0.001 0.002	0.000 0.000	0.034
 Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal 	0.393	0.002	0.000	0.034
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.389	0.001	0.000	0.033
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.207	0.000	0.001	0.039
42 Route 83, Chicago Sanitary & Ship Canal	0.209	0.001	0.001 0.000	0.024 0.065
48 Stephen Street, Chicago Sanitary & Ship Canal	0.345 ND	0.000 ND	ND	ND
82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.338	0.000	0.000	0.042
72 Lockport Polebay, Cineago Saintary & Ship Canal	0.000	0.000		
Calumet River System				
49 Ewing Avenue, Calumet River	0.067	0.000	0.000	0.023
50 Burnham Avenue, Wolf Lake	0.082	0.000	0.002	0.058
55 130th Street, Calumet River	0.103	0.000	0.000	0.026
51 IHB Railroad Bridge, Grand Calumet River	ND 1.404	ND 0.000	ND 0.000	ND 0.221
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River	0.288	0.002	0.000	0.085
76 Halsted Street, Little Calumet River	0.222	0.000	0.000	0.049
52 Wentworth Avenue, Little Calumet River	3.213	0.000	0.002	0.147
54 Joe Orr Road, Thorn Creek	1.170	0.000	0.000	0.073
97 170th Street, Thorn Creek	2.409	0.000	0.004	0.115
57 Ashland Avenue, Little Calumet River	2.236 0.906	0.002 0.002	0.000 0.000	0.108 0.081
58 Ashland Avenue, Calumet-Sag Channel 59 Cicero Avenue, Calumet-Sag Channel	0.665	0.002	0.000	0.064
43 Route 83, Calumet-Sag Channel	0.430	0.001	0.001	0.065
is nouse of culture out constitution				
Des Plaines River System				
90 Route 19, Poplar Creek	0.796	0.000	0.000	0.105
63 Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND
89 Walnut Lane, West Branch DuPage River	0.446	0.000	0.001 0.000	0.066 0.101
64 Lake Street, West Branch DuPage River	0.913 1.280	0.000 0.000	0.000	0.112
79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek	0.298	0.000	0.003	0.061
18 Devon Avenue, Salt Creek	0.374	0.000	0.004	0.079
24 Wolf Road, Salt Creek	0.785	0.000	0.003	0.061
109 Brookfield Avenue, Salt Creek	0.716	0.000	0.002	0.066
21 First Avenue, Salt Creek	ND 0.780	ND	ND 0.000	ND 0.090
77 Elmhurst Road, Higgins Creek	0.780 0.078	0.000 0.000	0.000 0.004	0.090
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	1.391	0.002	0.000	0.143
13 Lake-Cook Road, Des Plaines River	0.682	0.000	0.000	0.084
17 Oakton Street, Des Plaines River	0.525	0.000	0.000	0.064
19 Belmont Avenue, Des Plaines River	0.681	0.000	0.000	0.084
20 Roosevelt Road, Des Plaines River	0.698	0.000	0.000	0.066
22 Ogden Avenue, Des Plaines River	0.773 0.634	0.000 0.000	0.000 0.000	0.059 0.058
23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River	0.634 0.715	0.000	0.000	0.058
	0.713	0.000	0.000	0.060
91 Material Service Road, Des Plaines River				

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2010

Sampling Station (No. Name)	Hg μg/L	Hg− ηg/L	Zn mg/L	Se mg/L
Chicago River System				
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND
106 Dundee Road, West Fork North Branch Chicago River	0.000	7.0	0.013	0.000
103 Golf Road, West Fork North Branch Chicago River	0.000	9.7	0.006	0.000
31 Lake-Cook Road, Middle Fork North Branch	0.000 0.000	1.9 3.0	0.002 0.021	0.000 0.000
104 Glenview Road, North Branch Chicago River	0.000	5.2	0.007	0.000
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River	0.000	2.4	0.015	0.000
34 Dempster Street, North Branch Chicago River	0.000	3.3	0.012	0.000
96 Albany Avenue, North Branch Chicago River	0.000	4.3 1.8	0.007 0.002	0.000 0.000
35 Central Street, North Shore Channel	0.000 0.000	7.2	0.002	0.000
 102 Oakton Street, North Shore Channel 36 Touhy Avenue, North Shore Channel 	0.000	ND	0.020	0.000
101 Foster Avenue, North Shore Channel	0.000	ND	0.019	0.000
37 Wilson Avenue, North Branch Chicago River	0.000	ND	0.018	0.000
73 Diversey Parkway, North Branch Chicago River	0.000 0.000	ND ND	0.020 0.019	0.000
46 Grand Avenue, North Branch Chicago River	0.000	1.0	0.001	0.000
74 Lake Shore Drive, Chicago River 100 Wells Street, Chicago River	0.000	2.2	0.013	0.000
39 Madison Street, South Branch Chicago River	0.000	ND	0.013	0.000
108 Loomis Street, South Branch Chicago River	0.000	ND ND	0.011 0.010	0.000
99 Archer Avenue, South Fork South Branch Chicago River	0.000 0.000	ND	0.015	0.000
40 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.000	ND	0.014	0.000
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.000	ND	0.020	0.000
42 Route 83, Chicago Sanitary & Ship Canal	0.000 0.000	ND ND	0.015 0.015	0.000
48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.000	ND	0.016	0.000
22 Zoonpoint officery, emongs among the among				
Calumet River System	0.000	0.6	0.000	0.000
49 Ewing Avenue, Calumet River	0.000 0.000	0.6 0.9	0.003	0.000
50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River	0.000	2.2	0.004	0.000
51 IHB Railroad Bridge, Grand Calumet River	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.000	ND	0.021	0.001 0.000
56 Indiana Avenue, Little Calumet River	0.000 0.000	ND ND	0.007 0.016	0.000
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River	0.000	6.4	0.014	0.000
54 Joe Orr Road, Thorn Creek	0.000	3.1	0.027	0.000
97 170th Street, Thorn Creek	0.000	15.1	0.025	0.000
57 Ashland Avenue, Little Calumet River	0.000 0.000	9.2 ND	0.018 0.015	0.000
58 Ashland Avenue, Calumet-Sag Channel 59 Cicero Avenue, Calumet-Sag Channel	0.000	ND	0.012	0.000
43 Route 83, Calumet-Sag Channel	0.000	ND	0.010	0.000
Des Plaines River System 90 Route 19, Poplar Creek	0.000	1.5	0.002	0.000
63 Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND
89 Walnut Lane, West Branch DuPage River	0.000	5.1	0.030	0.000
64 Lake Street, West Branch DuPage River	0.000	3.0 3.3	0.032 0.004	0.000
79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek	0.000 0.000	2.5	0.004	0.000
18 Devon Avenue, Salt Creek	0.000	2.1	0.011	0.000
24 Wolf Road, Salt Creek	0.000	4.8	0.016	0.000
109 Brookfield Avenue, Salt Creek	0.000	3.9 ND	0.016 ND	0.000 ND
21 First Avenue, Salt Creek	ND 0.000	5.2	0.020	0.000
77 Elmhurst Road, Higgins Creek 78 Wille Road, Higgins Creek	0.000	0.8	0.026	0.000
12 Lake-Cook Road, Buffalo Creek	0.000	2.3	0.014	0.000
13 Lake-Cook Road, Des Plaines River	0.000	1.9	0.007 0.003	0.000 0.000
17 Oakton Street, Des Plaines River	0.000 0.000	2.4 2.8	0.003	0.000
19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River	0.000	3.7	0.012	0.000
22 Ogden Avenue, Des Plaines River	0.000	3.7	0.017	0.000
23 Willow Springs Road, Des Plaines River	0.000	3.6	0.010	0.000
	Λ ΛΛΛ	4.2	0.015	0.000
29 Stephen Street, Des Plaines River 91 Material Service Road, Des Plaines River	0.000 0.000	3.9	0.014	0.000

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2010

Sampling Station (No. Name)	Sol. Ca mg/L	Sol. Mg mg/L	Sol. Ag mg/L	Sol. As mg/L
Chiang Diver System				
Chicago River System	ND	ND	ND	ND
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River	75.3	30.8	0.000	0.000
103 Golf Road, West Fork North Branch Chicago River	72.4	29.2	0.000	0.000
31 Lake-Cook Road, Middle Fork North Branch	63.8	28.2	0.000 0.000	0.000 0.000
104 Glenview Road, North Branch Chicago River	65.0 72.2	28.5 31.5	0.000	0.000
32 Lake-Cook Road, Skokie River	63.7	27.9	0.000	0.000
105 Frontage Road, Skokie River 34 Dempster Street, North Branch Chicago River	71.7	29.9	0.000	0.000
96 Albany Avenue, North Branch Chicago River	65.8	27.4	0.000	0.000
35 Central Street, North Shore Channel	38.1	13.1	0.000 0.000	0.000 0.000
102 Oakton Street, North Shore Channel	48.4 51.7	17.2 18.5	0.000	0.000
36 Touhy Avenue, North Shore Channel	55.2	19.8	0.000	0.000
 101 Foster Avenue, North Shore Channel 37 Wilson Avenue, North Branch Chicago River 	60.0	22.7	0.000	0.000
73 Diversey Parkway, North Branch Chicago River	57.9	21.3	0.000	0.000
46 Grand Avenue, North Branch Chicago River	55.5	20.4	0.000 0.000	0.000 0.000
74 Lake Shore Drive, Chicago River	37.3 43.0	12.9 15.2	0.000	0.000
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River	49.7	18.0	0.000	0.000
108 Loomis Street, South Branch Chicago River	51.2	18.6	0.000	0.000
99 Archer Avenue, South Fork South Branch Chicago River	54.6	19.7	0.000	0.000 0.000
40 Damen Avenue, Chicago Sanitary & Ship Canal	51.9	18.8 ND	0.000 ND	NI
107 Western Avenue, Chicago Sanitary & Ship Canal	ND 52.8	19.3	0.000	0.000
75 Cicero Avenue, Chicago Sanitary & Ship Canal 41 Harlem Avenue, Chicago Sanitary & Ship Canal	58.1	21.0	0.000	0.000
42 Route 83, Chicago Sanitary & Ship Canal	57.4	20.3	0.000	0.00
48 Stephen Street, Chicago Sanitary & Ship Canal	58.5	20.9	0.000	0.00 NI
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND 50.0	ND 21.2	ND 0.000	0.000
92 Lockport Forebay, Chicago Sanitary & Ship Canal	59.0	21.2	0.000	0.000
Calumet River System	24.4	11.7	0.000	0.000
49 Ewing Avenue, Calumet River	34.4 36.0	12.6	0.000	0.000
50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River	41.5	14.5	0.000	0.000
51 IHB Railroad Bridge, Grand Calumet River	ND	ND	ND	NI O OO
86 Burnham Avenue, Grand Calumet River	78.8	27.1	0.000 0.000	0.00
56 Indiana Avenue, Little Calumet River	47.5 61.6	16.6 21.3	0.000	0.00
76 Halsted Street, Little Calumet River	65.1	26.3	0.000	0.00
52 Wentworth Avenue, Little Calumet River 54 Joe Orr Road, Thorn Creek	77.0	28.3	0.000	0.00
97 170th Street, Thorn Creek	68.6	28.2	0.000	0.00
57 Ashland Avenue, Little Calumet River	68.2	26.5	0.000 0.000	0.00 0.00
58 Ashland Avenue, Calumet-Sag Channel	59.7 62.5	21.6 22.7	0.000	0.00
59 Cicero Avenue, Calumet-Sag Channel 43 Route 83, Calumet-Sag Channel	64.9	23.8	0.000	0.00
Des Plaines River System				
90 Route 19, Poplar Creek	69.9	31.9	0.000	0.00
63 Longmeadow Lane, West Branch DuPage River	ND	ND	ND	NI 0.00
89 Walnut Lane, West Branch DuPage River	62.0	23.7	0.000 0.000	0.00 0.00
64 Lake Street, West Branch DuPage River	75.0 47.1	28.0 19.5	0.000	0.00
79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek	63.4	24.4	0.000	0.00
18 Devon Avenue, Salt Creek	67.5	25.8	0.000	0.00
24 Wolf Road, Salt Creek	70.4	27.2	0.000	0.00
109 Brookfield Avenue, Salt Creek	66.1	26.0	0.000 ND	0.00 N
21 First Avenue, Salt Creek	ND 46.1	ND 15.7	0.000	0.00
77 Elmhurst Road, Higgins Creek 78 Wille Road, Higgins Creek	71.9	26.7	0.000	0.00
12 Lake-Cook Road, Buffalo Creek	72.7	31.6	0.000	0.00
13 Lake-Cook Road, Des Plaines River	64.8	29.0	0.000	0.00
17 Oakton Street, Des Plaines River	62.9	27.3	0.000 0.000	0.00 0.00
19 Belmont Avenue, Des Plaines River	62.1 61.6	26.1 25.8	0.000	0.00
20 Roosevelt Road, Des Plaines River	63.3	26.3	0.000	0.00
Ogden Avenue, Des Plaines RiverWillow Springs Road, Des Plaines River	61.9	25.7	0.000	0.00
29 Stephen Street, Des Plaines River	64.2	26.7	0.000	0.00
91 Material Service Road, Des Plaines River	66.7 68.9	28.0 25.2	0.000 0.000	0.00 0.00
110 Springinsguth Road, West Branch DuPage River	200	7.5		

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2010

Sampling Station (No. Name)	Sol. Ba mg/L	Sol. B mg/L	Sol. Cd mg/L	Sol. Cu mg/L
Chiana Dinas Guatan				
Chicago River System	ND	ND	ND	ND
30 Lake-Cook Road, West Fork North Branch	0.060	0.156	0.001	0.005
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	0.046	0.125	0.000	0.000
31 Lake-Cook Road, Middle Fork North Branch	0.037	0.088	0.001	0.000
104 Glenview Road, North Branch Chicago River	0.029	0.131	0.000	0.000 0.000
32 Lake-Cook Road, Skokie River	0.041	0.109 0.136	0.000 0.000	0.000
105 Frontage Road, Skokie River	0.027 0.037	0.130	0.000	0.000
34 Dempster Street, North Branch Chicago River 96 Albany Avenue, North Branch Chicago River	0.035	0.123	0.000	0.000
35 Central Street, North Shore Channel	0.022	0.013	0.000	0.000
102 Oakton Street, North Shore Channel	0.022	0.077	0.000	0.000
36 Touhy Avenue, North Shore Channel	0.020	0.161	0.000 0.000	0.000 0.000
101 Foster Avenue, North Shore Channel	0.022 0.026	0.156 0.142	0.000	0.000
37 Wilson Avenue, North Branch Chicago River	0.024	0.145	0.000	0.001
73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River	0.022	0.134	0.000	0.000
74 Lake Shore Drive, Chicago River	0.022	0.040	0.000	0.001
100 Wells Street, Chicago River	0.022	0.064	0.000	0.002
39 Madison Street, South Branch Chicago River	0.022	0.109	0.000 0.000	0.000 0.002
108 Loomis Street, South Branch Chicago River	0.023 0.023	0.114 0.129	0.000	0.000
99 Archer Avenue, South Fork South Branch Chicago River	0.023	0.115	0.000	0.000
40 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.021	0.121	0.000	0.000
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.020	0.160	0.000	0.000 0.000
42 Route 83. Chicago Sanitary & Ship Canal	0.018	0.232 0.212	0.000 0.000	0.000
48 Stephen Street, Chicago Sanitary & Ship Canal	0.019 ND	ND	ND	ND
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0.020	0.203	0.000	0.000
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.020			
Calumet River System	0.021	0.032	0.000	0.000
49 Ewing Avenue, Calumet River	0.021	0.032	0.000	0.000
50 Burnham Avenue, Wolf Lake	0.027	0.096	0.000	0.000
 130th Street, Calumet River 1 IHB Railroad Bridge, Grand Calumet River 	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.025	0.686	0.000	0.000
56 Indiana Avenue, Little Calumet River	0.026	0.115 0.172	0.000 0.000	0.000 0.000
76 Halsted Street, Little Calumet River	0.018 0.030	0.172	0.000	0.000
52 Wentworth Avenue, Little Calumet River	0.031	0.220	0.000	0.001
54 Joe Orr Road, Thorn Creek 97 170th Street, Thorn Creek	0.029	0.185	0.000	0.000
57 Ashland Avenue, Little Calumet River	0.031	0.188	0.000	0.000
58 Ashland Avenue, Calumet-Sag Channel	0.022	0.159	0.000	0.002 0.000
59 Cicero Avenue, Calumet-Sag Channel	0.022	0.174 0.183	0.000 0.000	0.000
43 Route 83, Calumet-Sag Channel	0.023	0.165	0.000	0.000
Des Plaines River System			0.000	0.000
90 Route 19, Poplar Creek	0.062	0.037	0.000 ND	0.000 ND
63 Longmeadow Lane, West Branch DuPage River	ND 0.027	ND 0.215	0.000	0.002
89 Walnut Lane, West Branch DuPage River	0.027	0.119	0.000	0.000
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	0.030	0.075	0.000	0.000
80 Arlington Heights Road, Salt Creek	0.027	0.190	0.000	0.001
18 Devon Avenue, Salt Creek	0.028	0.197	0.000	0.001 0.002
24 Wolf Road, Salt Creek	0.031	0.164	0.000 0.000	0.002
109 Brookfield Avenue, Salt Creek	0.031 ND	0.184 ND	ND	ND
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	0.040	0.055	0.000	0.000
77 Elmhurst Road, Higgins Creek 78 Wille Road, Higgins Creek	0.022	0.202	0.000	0.004
12 Lake-Cook Road, Buffalo Creek	0.042	0.091	0.002	0.000
13 Lake-Cook Road, Des Plaines River	0.035	0.141	0.000	0.000 0.001
17 Oakton Street, Des Plaines River	0.038	0.144	0.000 0.000	0.001
19 Belmont Avenue, Des Plaines River	0.034 0.034	0.152 0.157	0.000	0.000
20 Roosevelt Road, Des Plaines River	0.034	0.152	0.000	0.000
Ogden Avenue, Des Plaines RiverWillow Springs Road, Des Plaines River	0.033	0.158	0.000	0.000
23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River	0.031	0.146	0.000	0.000
91 Material Service Road, Des Plaines River	0.032	0.151	0.000	0.000
110 Springinsguth Road, West Branch DuPage River	0.042	0.077	0.000	0.000

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2010

Sampling Station (No. Name)	Sol. Cr mg/L	Sol. Fe mg/L	Sol. Pb mg/L	Sol. Ni mg/L
Cli Di a Cantana				
Chicago River System	ND	ND	ND	NE
30 Lake-Cook Road, West Fork North Branch	0.000	0.025	0.000	0.000
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	0.000	0.023	0.000	0.001
31 Lake-Cook Road, Middle Fork North Branch	0.000	0.073	0.000	0.000
104 Glenview Road, North Branch Chicago River	0.000	0.021	0.000	0.00
32 Lake-Cook Road, Skokie River	0.000 0.000	0.032 0.079	0.000 0.000	0.000
105 Frontage Road, Skokie River	0.000	0.041	0.000	0.00
34 Dempster Street, North Branch Chicago River 96 Albany Avenue, North Branch Chicago River	0.000	0.023	0.000	0.00
35 Central Street, North Shore Channel	0.000	0.014	0.000	0.00
102 Oakton Street, North Shore Channel	0.000	0.025	0.000 0.000	0.00 0.00
36 Touhy Avenue, North Shore Channel	0.000 0.000	0.021 0.024	0.000	0.00
101 Foster Avenue, North Shore Channel	0.000	0.025	0.000	0.00
37 Wilson Avenue, North Branch Chicago River73 Diversey Parkway, North Branch Chicago River	0.000	0.028	0.000	0.00
46 Grand Avenue, North Branch Chicago River	0.000	0.026	0.000	0.00
74 Lake Shore Drive, Chicago River	0.000	0.000	0.000 0.000	0.00 0.00
100 Wells Street, Chicago River	0.000 0.000	0.011 0.0 26	0.000	0.00
39 Madison Street, South Branch Chicago River	0.000	0.027	0.000	0.00
108 Loomis Street, South Branch Chicago River 99 Archer Avenue, South Fork South Branch Chicago River	0.000	0.045	0.000	0.00
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.000	0.032	0.000	0.00
107 Western Avenue, Chicago Sanitary & Ship Canai	ND	ND 0.026	ND 0.000	NI 0.00
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.000 0.000	0.026 0.033	0.000	0.00
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.000	0.049	0.000	0.00
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal	0.000	0.025	0.002	0.00
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	NI
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.000	0.026	0.000	0.00
Columnat Dissay System				
Calumet River System	0.001	0.000	0.004	0.00
49 Ewing Avenue, Calumet River50 Burnham Avenue, Wolf Lake	0.000	0.014	0.002	0.00
55 130th Street, Calumet River	0.000	0.002	0.002 ND	0.00 N
51 IHB Railroad Bridge, Grand Calumet River	ND 0.000	ND 0.110	0.000	0.00
86 Burnham Avenue, Grand Calumet River	0.000	0.003	0.000	0.00
56 Indiana Avenue, Little Calumet River 76 Halsted Street, Little Calumet River	0.000	0.022	0.000	0.00
52 Wentworth Avenue, Little Calumet River	0.000	0.071	0.000	0.00 0.00
54 Joe Orr Road, Thorn Creek	0.000	0.089 0.076	0.000 0.000	0.00
97 170th Street, Thorn Creek	0.000 0.000	0.052	0.000	0.00
57 Ashland Avenue, Little Calumet River	0.000	0.047	0.000	0.00
58 Ashland Avenue, Calumet-Sag Channel 59 Cicero Avenue, Calumet-Sag Channel	0.000	0.045	0.000	0.00
43 Route 83, Calumet-Sag Channel	0.000	0.035	0.000	0.00
Des Disings Divor System				
Des Plaines River System 90 Route 19, Poplar Creek	0.000	0.058	0.000	0.00
63 Longmeadow Lane, West Branch DuPage River	ND	ND	ND	N
89 Walnut Lane, West Branch DuPage River	0.000	0.033	0.000 0.000	0.00 0.00
64 Lake Street, West Branch DuPage River	0.000 0.000	0.045 0.039	0.000	0.00
79 Higgins Road, Salt Creek	0.000	0.056	0.002	0.00
80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	0.000	0.045	0.002	0.00
24 Wolf Road, Salt Creek	0.000	0.030	0.000	0.00
109 Brookfield Avenue, Salt Creek	0.000	0.032	0.002 ND	0.00 N
21 First Avenue, Salt Creek	ND 0.000	ND 0.035	0.000	0.00
77 Elmhurst Road, Higgins Creek	0.000	0.032	0.005	0.00
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	0.000	0.037	0.003	0.00
13 Lake-Cook Road, Des Plaines River	0.000	0.036	0.002	0.00
17 Oakton Street, Des Plaines River	0.000	0.046	0.000 0.000	0.00 0.00
19 Belmont Avenue, Des Plaines River	0.000 0.001	0.031 0.025	0.000	0.00
20 Roosevelt Road, Des Plaines River	0.000	0.036	0.002	0.00
			0.002	0.00
22 Ogden Avenue, Des Plaines River 23 Willow Springs Road, Des Plaines River	0.012	0.035		
23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River	0.000	0.031	0.000	0.00
23 Willow Springs Road, Des Plaines River				

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2010

Sampling Station (No. Name)	Sol. Mn mg/L	Sol. Zn mg/L	Sol. Se mg/L
Chicago River System		M	ND
30 Lake-Cook Road, West Fork North Branch	ND 0.076	ND 0.009	0.000
106 Dundee Road, West Fork North Branch Chicago River	0.078	0.005	0.000
103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch	0.154	0.000	0.000
104 Glenview Road, North Branch Chicago River	0.055	0.007 0.000	0.000 0.000
32 Lake-Cook Road, Skokie River	0.089 0.025	0.000	0.000
105 Frontage Road, Skokie River	0.056	0.007	0.000
34 Dempster Street, North Branch Chicago River 96 Albany Avenue, North Branch Chicago River	0.040	0.003	0.000 0.000
35 Central Street, North Shore Channel	0.012	0.000 0.012	0.000
102 Oakton Street, North Shore Channel	0.025 0.018	0.027	0.000
36 Touhy Avenue, North Shore Channel 101 Foster Avenue, North Shore Channel	0.013	0.024	0.000
37 Wilson Avenue, North Branch Chicago River	0.025	0.018	0.000 0.000
73 Diversey Parkway, North Branch Chicago River	0.029 0.025	0.018 0.019	0.000
46 Grand Avenue, North Branch Chicago River	0.012	0.003	0.000
74 Lake Shore Drive, Chicago River 100 Wells Street, Chicago River	0.017	0.009	0.000 0.000
30 Madison Street South Branch Chicago River	0.031 0.028	0.012 0.018	0.000
108 Loomis Street South Branch Chicago River	0.028	0.011	0.000
99 Archer Avenue, South Fork South Branch Chicago River 40 Damen Avenue, Chicago Sanitary & Ship Canal	0.026	0.012	0.000
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND 0.000
75 Cicero Avenue, Chicago Sanitary & Ship Canai	0.023 0.041	0.011 0.022	0.000
41 Harlem Avenue, Chicago Sanitary & Ship Canai	0.020	0.021	0.000
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal	0.026	0.014	0.000
92 I ocknort Trebler Chicago Sanifary & Ship Canal	ND 0.021	ND 0.015	ND 0.000
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.031	0.013	0.000
Calumet River System		0.000	0.000
49 Ewing Avenue, Calumet River	0.006	0.000 0.000	0.000 0.000
50 Burnham Avenue, Wolf Lake	0.022 0.017	0.003	0.000
55 130th Street, Calumet River	ND	ND	ND
51 IHB Railroad Bridge, Grand Calumet River 86 Burnham Avenue, Grand Calumet River	0.198	0.000	0.005 0.000
56 Indiana Avenue, Little Calumet River	0.029 0.038	0.004 0.017	0.000
76 Halsted Street, Little Calumet River	0.038	0.005	0.000
52 Wentworth Avenue, Little Calumet River 54 Joe Orr Road, Thorn Creek	0.051	0.024	0.000
97 170th Street, Thorn Creek	0.062	0.005 0.005	0.000 0.000
57 Ashland Avenue, Little Calumet River	0.058 0.050	0.009	0.000
58 Ashland Avenue, Calumet-Sag Channel	0.047	0.008	0.000
59 Cicero Avenue, Calumet-Sag Channel43 Route 83, Calumet-Sag Channel	0.047	0.006	0.000
Des Plaines River System 90 Route 19, Poplar Creek	0.067	0.000	0.000
63 Longmeadow Lane, West Branch DuPage River	ND 0.047	ND 0.030	NI 0.000
90 Walnut I and West Branch DuPage River	0.047 0.063	0.014	0.000
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	0.003	0.000	0.00
79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek	0.032	0.014	0.00
18 Devon Avenue, Salt Creek	0.042	0.017 0.015	0.00
24 Wolf Road, Salt Creek	0.034 0.041	0.013	0.00
109 Brookfield Avenue, Salt Creek	ND	ND	NI
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	0.027	0.000	0.00
78 Wille Road, Higgins Creek	0.022	0.023 0.002	0.00
12 Take-Cook Road, Buffalo Creek	0.056 0.036	0.002	0.00
13 Lake-Cook Road, Des Plaines River	0.028	0.006	0.00
17 Oakton Street, Des Plaines River 19 Belmont Avenue, Des Plaines River	0.038	0.009	0.00
20 Roosevelt Road, Des Plaines River	0.030	0.011 0.013	0.00
22 Ogden Avenue, Des Plaines River	0.026 0.027	0.013	0.00
23 Willow Springs Road, Des Plaines River	0.027	0.010	0.00
29 Stephen Street, Des Plaines River 91 Material Service Road, Des Plaines River	0.023	0.007 0.002	0.00
91 Material Service Road, Des Plaines River 110 Springinsguth Road, West Branch DuPage River	0.117		

ND = No Data.

¹Un-ionized Ammonia.

²Geometric Mean.

TABLE AII-2: DISSOLVED OXYGEN VIOLATION HISTORY 2003 THROUGH 2010

		Ratio of Violations/Sampling Frequency per Year							
Sam	pling Station (No. Name)	10	09	08	07	06	05	04	03
Chic	cago River System								
	Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND
106	Dundee Road, West Fork North Branch Chicago River	0/10	1/11	2/11	0/4	0/5	0/4	1/6	0/3
103 31	Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch	0/10 1/9	2/11 0/10	2/10 2/10	3/11 4/10	0/12 2/11	2/10 6/10	1/10 5/10	3/8 5/9
104	Glenview Road, North Branch Chicago River	0/9	1/12	3/12	4/11	0/12	1/12	1/12	0/3
32	Lake-Cook Road, Skokie River	1/9	0/10	1/10	3/10	1/12	2/11	2/10	2/9 0/12
105 34	Frontage Road, Skokie River Dempster Street, North Branch Chicago River	1/12 1/8	0/12 1/12	1/12 5/11	1/11 4/11	0/12	0/12 3/11	0/12 0/12	1/11
96	Albany Avenue, North Branch Chicago River	1/11	0/12	1/12	1/11	1/12 0/12	1/11	0/11	1/10
35	Central Street, North Shore Channel	0/8	1/9	2/9	0/9	1/9	2/8	1/9	1/9
102 36	Oakton Street, North Shore Channel Touhy Avenue, North Shore Channel	2/11 0/11	1/11 0/10	2/11 0/12	2/12 0/12	0/12 0/12	0/12 0/12	2/12 0/12	1/10 0/12
101	Foster Avenue, North Shore Channel	0/12	0/12	0/12	0/11	0/12 0/12	0/13	0/12 0/12	0/12
37 73	Wilson Avenue, North Branch Chicago River	0/12	0/12	0/12	1/12		0/12	0/12	0/12
46	Diversey Parkway, North Branch Chicago River Grand Avenue, North Branch Chicago River	1/12 0/12	0/12 0/12	1/12 1/12	0/12 0/11	0/12 0/11	1/12 1/12	0/12 0/12	0/12 0/12
74	Lake Shore Drive, Chicago River	0/11	0/9	0/10	1/11	0/11	0/10	0/9	1/10
100	Wells Street, Chicago River	0/12	0/11	1/12	0/11	0/12 0/12	0/12	0/12 0/12	0/12 0/11
39 108	Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River	0/12 0/11	0/11 0/12	0/12 1/11	0/11 0/12	0/12	0/12 0/10	0/12	0/12
99	Archer Avenue, South Fork South Branch Chicago River	1/10	4/11	4/12	1/11	1/7	1/11	2/12	2/12
40	Damen Avenue, Chicago Sanitary & Ship Canal	0/12	0/11	2/12 ND	1/12 ND	0/12 ND	0/12 ND	1/12 ND	0/12 ND
107 75	Western Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal	ND 0/12	ND 1/12	3/12	1/12	1/13	1/12	1/12	3/12
41	Harlem Avenue, Chicago Sanitary & Ship Canal	0/9	0/12	0/12	0/12	0/13	0/12	0/12	0/12
42	Route 83, Chicago Sanitary & Ship Canal	0/12	0/10	0/12 0/12	0/11 1/11	1/13 1/13	0/11 0/11	0/12 0/12	1/12 0/12
48 82	Stephen Street, Chicago Sanitary & Ship Canal Lockport Trebler, Chicago Sanitary & Ship Canal	0/12 ND	0/10 ND	ND	ND	ND	ND	ND	ND
92	Lockport Forebay, Chicago Sanitary & Ship Canal	6/51	1/50	2/51	4/51	3/53	5/52	3/50	5/51
Calu	imet River System								
49	Ewing Avenue, Calumet River	0/6	0/7	1/9	0/10	0/11	0/11	0/10	0/12
50	Burnham Avenue, Wolf Lake	0/11	0/10	1/12	2/11	0/11	1/12	0/12	0/12 0/10
55 51	130th Street, Calumet River	0/10 ND	0/9 ND	1/9 ND	0/10 ND	1/11 ND	0/11 ND	0/11 ND	ND
86	IHB Railroad Bridge, Grand Calumet River Burnham Avenue, Grand Calumet River	4/7	1/5	3/10	4/10	4/11	4/10	5/9	7/10
56	Indiana Avenue, Little Calumet River	0/10	0/8	2/9	0/8	0/11	0/9	0/9 0/12	0/11 0/11
76 52	Halsted Street, Little Calumet River Wentworth Avenue, Little Calumet River	0/10 0/11	0/11 1/10	1/12 4/10	0/11 4/11	0/11 0/11	0/12 5/11	3/9	3/10
54	Joe Orr Road, Thorn Creek	1/9	0/9	0/9	0/10	0/9	2/8	0/6	0/3
97	170th Street, Thorn Creek	0/11	0/9	2/10	0/11	1/11	1/1 1 5/1 1	0/11 4/10	1/10 6/10
57 58	Ashland Avenue, Little Calumet River Ashland Avenue, Calumet-Sag Channel	1/10 0/10	1/9 0/11	5/10 0/12	4/11 0/11	0/11 0/11	0/12	0/12	0/12
59	Cicero Avenue, Calumet-Sag Channel	0/10	0/10	0/11	0/11	0/11	0/12	0/12	0/11
43	Route 83, Calumet-Sag Channel	0/11	0/10	0/10	0/11	0/11	0/11	0/10	0/11
Des	Plaines River System								
90	Route 19, Poplar Creek	0/10	0/11	0/11	0/11	0/12	0/10	0/10	0/10
63 89	Longmeadow Lane, West Branch DuPage River	ND 0/12	ND 0/12	ND 0/12	ND 0/12	ND 0/12	ND 0/12	ND 0/10	0/1 0/11
64	Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River	0/12	0/12	1/12	0/12	0/12	0/12	1/11	0/12
79	Higgins Road, Salt Creek	0/8	0/8	3/9	1/10	1/9	3/9	0/10	2/9
80 18	Arlington Heights Road, Salt Creek Devon Avenue, Salt Creek	0/12 0/10	1/12 0/11	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/11 0/11	0/12 0/12
24	Wolf Road, Salt Creek	0/10	2/12	0/12	0/11	0/12	0/12	1/10	0/12
109	Brookfield Avenue, Salt Creek	0/11	0/11	1/11 ND	0/11	2/12	1/12	0/10	0/10 ND
21 77	First Avenue, Salt Creek Elmhurst Road, Higgins Creek	ND 0/1	ND 0/4	ND 0/5	ND 0/5	ND 1/7	ND 0/4	ND 0/3	ND 0/5
78	Wille Road, Higgins Creek Lake-Cook Road, Buffalo Creek	0/9	0/12	0/12	0/12	0/12	0/12	0/10	0/12
12	Lake-Cook Road, Buffalo Creek	1/7	0/9	1/11	0/9	1/9 1/12	0/7 0/12	0/6 0/10	1/8 1/12
13 17	Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River	0/11 0/11	0/12 0/11	0/12 0/11	1/12 2/11	1/12	2/12	0/10	1/10
19	Belmont Avenue, Des Plaines River	0/11	0/12	1/12	2/11	1/12	3/12	3/10	2/12
20	Roosevelt Road, Des Plaines River	0/11	0/11	1/12	2/11	1/12	2/12	3/10	1/7
22 23	Ogden Avenue, Des Plaines River Willow Springs Boad, Des Plaines River	0/12 0/11	0/11 0/11	0/11 0/11	0/11 0/11	0/12 0/12	0/12 1/12	0/10 0/10	0/5 0/10
23 29	Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River	0/11	0/11	0/12	0/11	0/12	0/11	0/10	0/11
91	Material Service Road, Des Plaines River	0/12	1/12	1/12	0/11	0/12	0/12	1/10	0/12
110	Springinsguth Road, West Branch DuPage River	0/8	3/9	6/11	6/10	5/11	4/11	5/9	ND

TABLE AII-3: TEMPERATURE VIOLATION HISTORY 2003 THROUGH 2010

	Rat	io of V	iolation	ıs/Samp	oling Fr	equenc	y per Y	ear
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System								
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND 0/3
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	0/10 0/10	0/1 1 0/1 1	0/10 0/10	0/4 0/11	0/5 1/12	0/4 0/10	0/8 0/10	0/8
31 Lake-Cook Road, Middle Fork North Branch	0/9	0/10	0/10	0/10	0/11	0/10	0/10 0/12	0/8 0/3
104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River	0/9 0/9	0/12 0/10	0/12 0/10	0/11 0/9	0/12 0/12	1/12 1/11	0/10	0/8
105 Frontage Road, Skokie River	0/12	0/12	0/12	0/11 0/11	0/12 0/12	0/12 0/11	0/12 0/12	0/11 0/11
34 Dempster Street, North Branch Chicago River 96 Albany Avenue, North Branch Chicago River	0/8 0/11	0/12 0/12	0/11 0/12	0/11	0/12	0/11	0/11	0/10
35 Central Street, North Shore Channel	0/8	0/9	0/9	0/9	1/9 0/12	0/8 0/12	0/9 0/11	0/9 0/10
102 Oakton Street, North Shore Channel 36 Touhy Avenue, North Shore Channel	0/11 0/11	0/11 0/10	0/11 0/12	0/12 0/12	0/12	0/12	0/12	0/12
101 Foster Avenue, North Shore Channel	0/12	0/12	0/12	0/12	0/12	0/13	0/12 0/12	0/11 0/12
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12	0/12
46 Grand Avenue, North Branch Chicago River	0/12	0/12	0/12	0/11	0/12	0/12 0/10	0/12 0/9	0/12 0/10
74 Lake Shore Drive, Chicago River 100 Wells Street, Chicago River	0/11 0/12	0/9 0/11	0/10 0/12	0/11 0/11	0/11 0/12	0/12	0/12	0/12
39 Madison Street, South Branch Chicago River	0/12	0/11	0/12	0/11	0/12 0/12	0/12 0/10	0/12 0/12	0/11 0/12
108 Loomis Street, South Branch Chicago River 99 Archer Avenue, South Fork South Branch Chicago River	0/11 0/10	0/12 0/11	0/11 0/12	0/12 0/11	0/12	0/11	0/12	0/12
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/12	0/11	0/12	0/12 [*] ND	0/12 ND	0/12 ND	0/12 ND	0/12 ND
107 Western Avenue, Chicago Sanitary & Ship Canal 75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND 0/12	ND 0/12	ND 0/12	0/12	0/13	0/12	0/12	0/11
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/9	0/12	0/12	0/12	0/13	0/12	0/12 0/12	0/11 0/12
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal	0/12 0/12	0/10 0/10	0/12 0/12	0/11 0/11	0/13 0/13	0/11 0/11	0/12	0/12
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND 0/50	ND 0/50
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/51	0/51	0/51	0/51	0/53	0/51	0/30	0/30
Calumet River System	0/6	0/7	0/9	0/9	0/11	0/11	0/10	0/12
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	0/6 0/11	0/10	0/12	0/10	0/11	0/12	0/12	1/12
55 130th Street, Calumet River	0/10 ND	0/9 ND	0/9 ND	0/9 ND	0/11 ND	0/11 ND	0/11 ND	0/10 ND
51 IHB Railroad Bridge, Grand Calumet River 86 Burnham Avenue, Grand Calumet River	ND 0/7	0/5	0/10	0/9	0/11	0/10	0/9	0/10
56 Indiana Avenue, Little Calumet River	0/10 0/10	0/8 0/11	0/9 0/12	0/9 0/11	0/11 0/11	0/9 0/12	0/9 0/12	0/11 0/11
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River	0/11	0/10	0/10	0/11	0/11	0/11	0/9	1/10
54 Joe Orr Road, Thorn Creek	0/9 0/11	0/9 0/9	0/9 0/11	0/10 0/11	0/9 0/11	0/8 0/11	0/7 0/11	0/3 1/10
97 170th Street, Thorn Creek 57 Ashland Avenue, Little Calumet River	0/10	0/9	0/10	0/11	0/11	0/11	0/10	1/10
58 Ashland Avenue, Calumet-Sag Channel	0/10	0/11 0/10	0/12 0/11	0/11 0/11	0/11 0/11	0/12 0/12	0/12 0/12	0/12 0/11
59 Cicero Avenue, Calumet-Sag Channel43 Route 83, Calumet-Sag Channel	0/10 0/11	0/10	0/10	0/11	0/11	0/11	1/10	ŏ/i i
Des Plaines River System								
90 Route 19. Poplar Creek	0/10	0/11	0/11	0/11	0/12	0/11	0/11	0/10
63 Longmeadow Lane, West Branch DuPage River	ND 0/12	ND 0/12	ND 0/12	ND 0/12	ND 0/12	ND 0/12	ND 0/10	0/1 0/11
64 Lake Street, West Branch DuPage River	0/12	0/12	0/12	0/12	0/12	0/11	0/11	0/12
79 Higgins Road, Salt Creek	0/8 0/12	0/8 0/12	0/9 0/12	0/10 0/12	0/9 0/12	0/9 0/12	0/11 0/12	0/9 1/12
80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	0/10	0/11	0/12	0/12	0/12	0/12	0/12	1/12
24 Wolf Road, Salt Creek	0/10 0/11	0/12 0/11	1/12 0/11	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/11 0/9
109 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/1	0/4	0/5	0/5 0/12	0/7 0/12	0/4 0/11	0/6 0/11	0/5 0/12
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	0/9 0/7	0/12 0/9	1/11 0/10	0/9	0/9	0/6	0/7	0/8
13 Lake-Cook Road, Des Plaines River	0/11	0/12	0/11	0/12	0/12 0/12	0/11 0/11	0/11 0/11	0/12 0/10
17 Oakton Street, Des Plaines River 19 Belmont Avenue, Des Plaines River	0/11 0/11	0/11 0/12	0/11 0/11	0/11 0/11	0/12	0/11	1/11	0/12
20 Roosevelt Road, Des Plaines River	0/10	0/11	0/11	0/11	0/12	0/11	0/11	0/7 0/5
22 Ogden Avenue, Des Plaines River 23 Willow Springs Road, Des Plaines River	0/12 0/11	0/11 0/11	0/11 0/11	0/11 0/11	0/12 0/12	0/12 0/12	0/10 0/10	0/3 0/10
29 Stephen Street, Des Plaines River	0/12	0/11	0/12	0/11	0/12	0/12	0/10	0/11
91 Material Service Road, Des Plaines River 110 Springinsguth Road, West Branch DuPage River	0/12 0/8	0/12 0/9	0/12 0/11	0/11 0/10	0/12 0/11	0/12 0/11	0/10 0/10	0/12 ND
Springinguir Road, west Branch Bur age River								

TABLE AII-4: pH VIOLATION HISTORY 2003 THROUGH 2010

		Rati	o of Vi	olation	s/Samp	ling Fr	equenc	y per Y	ear
Sam	pling Station (No. Name)	10	09	08	07	06	05	04	03
Chic	ago River System								MD
30	Lake-Cook Road, West Fork North Branch	ND 0/10	ND 0/11	ND 0/10	ND 0/4	ND 0/5	ND 0/4	ND 0/8	ND 0/3
106 103	Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River	0/10	0/11	0/10	0/11	0/12	0/10	0/10	0/8
31	Lake-Cook Road, Middle Fork North Branch	0/9	0/10 0/12	0/10 0/12	0/10 0/11	0/11 0/12	0/10 2/12	0/10 0/12	0/8 0/3
104 32	Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River	0/9 0/9	0/10	0/10	0/9	0/12	2/11	0/10	0/7
105	Frontage Road, Skokie River	0/12	0/12	0/12	0/11	0/12 0/12	2/12 0/11	0/12 0/12	0/11 0/11
34	Demoster Street, North Branch Chicago River	0/8 0/11	0/12 0/12	0/11 0/12	0/11 0/11	0/12	2/11	0/11	0/10
96 35	Albany Avenue, North Branch Chicago River Central Street, North Shore Channel	1/8	0/9	0/9	0/9	0/8	0/8 1/12	0/9	1/9 1/10
102	Oakton Street, North Shore Channel	1/11 0/11	0/11 0/10	0/11 0/12	0/12 0/12	0/11 0/11	0/12	0/11 0/12	0/12
36 101	Touhy Avenue, North Shore Channel Foster Avenue, North Shore Channel	0/11	0/12	0/12	0/12	0/11	0/13	0/12	0/11
37	Wilson Avenue, North Branch Chicago River	0/12	0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12
73	Diversey Parkway, North Branch Chicago River Grand Avenue, North Branch Chicago River	0/12 0/12	0/12 0/12	0/12	0/11	0/12	0/12	0/12	0/12
46 74	Lake Shore Drive, Chicago River	1/11	0/9	0/10	0/11	0/11	0/10 1/12	0/9 0/12	1/10 0/12
100	Wells Street, Chicago River	1/12 1/12	0/11 0/11	0/12 0/12	0/11 0/11	0/12 0/12	0/12	0/12	0/11
39 108	Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River	0/11	0/12	0/11	0/12	0/12	0/10	0/12	0/12 0/12
99	Archer Avenue, South Fork South Branch Chicago River	0/10 0/12	0/11 0/11	0/12 0/12	0/11 0/12	0/7 0/12	0/11 0/12	0/12 0/12	0/12
40	Damen Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal	ND	ND						
107 75	Cicero Avenue, Chicago Sanitary & Ship Canal	0/12	0/12	0/12	0/12	0/13 0/13	0/12 0/12	0/12 0/11	0/12 0/12
41	Harlem Avenue, Chicago Sanitary & Ship Canal	0/9 0/12	0/12 0/10	0/12 0/12	0/12 0/11	0/13	0/11	0/12	0/12
42 48	Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal	0/12	0/10	0/12	0/10	0/13	0/11	0/12	0/12
82	1 ocknort Trebler Unicago Sanitary & Ship Callai	ND	ND 0/51	ND 0/51	ND 0/50	ND 1/52	ND 1/51	ND 0/50	ND 0/52
92	Lockport Forebay, Chicago Sanitary & Ship Canal	0/51	0/51	0/31	0/30	1752	1/31	0,00	0.02
	met River System	0/6	0/7	0/9	0/10	0/11	0/11	1/10	0/12
49 50	Ewing Avenue, Calumet River Burnham Avenue, Wolf Lake	0/11	0/10	1/12	1/11	2/11	0/12	0/12	0/12 0/10
55	130th Street Calumet River	0/10 ND	0/9 ND	0/9 ND	0/10 ND	0/11 ND	0/11 ND	0/11 ND	ND
51 86	IHB Railroad Bridge, Grand Calumet River Burnham Avenue, Grand Calumet River	0/7	0/5	0/10	0/10	0/11	0/10	0/9	0/10
56	Indiana Avenue, Little Calumet River	0/10	0/8	0/9 0/12	0/9 0/11	0/11 0/11	1/9 1/12	0/9 0/12	0/11 0/11
76	Halsted Street, Little Calumet River	0/10 0/11	0/11 0/10	0/12	0/11	1/11	1/10	0/9	0/10
52 54	Wentworth Avenue, Little Calumet River Joe Orr Road, Thorn Creek	0/9	0/9	0/9	1/10	0/9	0/8	0/6 0/11	0/3 0/10
97	170th Street, Thorn Creek	0/11 0/10	0/9 0/9	0/11 0/10	0/11 0/11	0/11 0/11	1/11 2/11	0/10	0/10
57 58	Ashland Avenue, Little Calumet River Ashland Avenue, Calumet-Sag Channel	0/10	0/11	0/12	0/11	0/11	1/12	0/12	0/12
59	Cicero Avenue, Calumet-Sag Channel	0/10	0/10	0/11 0/10	0/11 0/11	0/11 0/11	1/12 0/11	0/12 0/10	0/11 0/11
43	Route 83, Calumet-Sag Channel	0/11	0/10	0/10	0/11	0/11	0,11	0,10	
	Plaines River System	0/10	0/11	0/11	0/11	1/12	0/11	0/11	0/10
90 63	Route 19, Poplar Creek Longmeadow Lane, West Branch DuPage River	ND	0/1 0/11						
89	Walnut Lane. West Branch DuPage River	0/12 0/6	0/12 0/12	0/12 0/12	0/12 0/12	1/12 1/12	0/12 0/11	0/10 0/11	0/12
64	Lake Street, West Branch DuPage River Higgins Road, Salt Creek	0/8	0/8	0/9	0/10	0/9	0/9	0/11	0/9
79 80	Arlington Heights Road, Salt Creek	0/12	1/12	0/12 0/12	0/12 0/12	0/12	0/12 0/12	0/12 0/12	0/12 0/12
18	Devon Avenue, Salt Creek	0/10 0/10	0/11 0/12	0/12	0/12	1/12 2/12	0/12	0/11	0/11
24 109	Wolf Road, Salt Creek Brookfield Avenue, Salt Creek	0/11	0/11	0/11	0/11	2/12	0/12	0/11 ND	0/9 ND
21	First Avenue, Salt Creek	ND 0/1	ND 0/4	ND 0/5	ND 0/5	ND 0/7	ND 0/4	0/6	0/5
77 78	Elmhurst Road, Higgins Creek Wille Road, Higgins Creek	0/9	0/12	0/11	0/12	0/12	1/11	0/11	0/12
12	Lake-Cook Road, Buffalo Creek	0/7	0/9 0/12	0/10 0/11	0/9 1/12	1/9 0/12	0/6 2/11	0/7 0/11	0/8 0/12
13	Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River	0/11 0/11	0/12	0/11	0/11	0/12	1/11	0/11	0/10
17 19	Belmont Avenue, Des Plaines River	0/11	0/12	0/11	0/11	0/12	1/11	0/11	0/12 0/7
20	Roosevelt Road, Des Plaines River	0/10 0/12	0/11 0/11	0/11 0/11	0/11 0/11	0/12 2/12	1/11 0/12	0/11 0/1 0	0/5
22 23	Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River	0/11	0/11	0/11	0/11	1/12	0/12	0/10	0/10
29	Stephen Street, Des Plaines River	0/12	1/11	0/12	0/11 0/11	1/12 0/12	0/12 0/12	0/10 0/10	0/11 0/12
91	Material Service Road, Des Plaines River Springinsguth Road, West Branch DuPage River	0/12 1/8	1/11 0/9	0/12 0/11	0/10	0/11	0/11	0/10	ND
110	optingingual road, west branch but age raver	1.0							

TABLE AII-5: CHLORIDE VIOLATION HISTORY 2003 THROUGH 2010

		Rati	o of Vi	iolation	s/Samp	ling Fr	Ratio of Violations/Sampling Frequency per Year						
Sam	pling Station (No. Name)	10	09	08	07	06	05	04	03				
Chic	ago River System								NTD.				
30	Lake-Cook Road, West Fork North Branch	ND 3/10	ND 4/11	ND 3/11	ND 0/4	ND 1/5	ND 2/4	ND 3/8	ND 0/3				
106 103	Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River	2/10	3/11	2/10	2/10	2/12	5/10	0/9 0/9	1/8 0/9				
31	Lake-Cook Road, Middle Fork North Branch	1/9 1/9	0/10 0/12	1/10 1/12	0/10 1/11	1/11 1/12	0/10 1/12	1/11	0/3				
104 32	Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River	1/9	0/10	1/10	0/10	0/12	2/11 0/12	0/9 0/11	0/9 0/12				
105	Frontage Road, Skokie River Dempster Street, North Branch Chicago River	0/12 1/8	0/12 0/12	2/12 2/11	0/11 1/11	0/12 1/12	2/11	1/11	0/11				
34 96	Albany Avenue, North Branch Chicago River	2/11	1/12	3/12	1/11 0/9	2/12 0/9	1/11 0/8	0/10 0/8	0/10 0/9				
35	Central Street, North Shore Channel Oakton Street, North Shore Channel	0/8 0/11	0/9 0/11	0/9 0/11	0/12	0/12	0/12	0/11	0/10				
102 36	Touhy Avenue, North Shore Channel	NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA				
101 37	Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River	NA NA	NA NA	NA NA	NA	NA	NA	NA	NA				
73	Diversey Parkway, North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA				
46 74	Grand Avenue, North Branch Chicago River Lake Shore Drive, Chicago River	0/11	0/9	0/10	0/11	0/11	0/10	0/9	0/10				
100	Wells Street. Chicago River	0/12 NA	0/11 NA	0/12 NA	1/11 NA	0/12 NA	0/12 NA	0/12 NA	0/12 NA				
39 108	Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA				
99	Archer Avenue, South Fork South Branch Unicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA				
40 107	Damen Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA NA	NA NA				
75	Cicero Avenue, Chicago Sanitary & Ship Canai	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA				
41 42	Harlem Avenue, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA NA	NA NA	NA NA	NA NA				
48	Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA	NA				
82 92	Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA				
	umet River System	0.46	0.77	0.40	0/10	0/11	0/11	0/10	0/12				
49	Ewing Avenue, Calumet River	0/6 0/11	0/7 0/10	0/9 0/12	0/10 0/11	0/10	0/12	0/12	0/12				
50 55	Burnham Avenue, Wolf Lake 130th Street, Calumet River	0/10	0/9	0/9	0/10	0/11 NA	0/11 NA	0/11 NA	0/10 NA				
51	IHB Railroad Bridge, Grand Calumet River	NA NA	NA NA	NA NA	NA NA	NA	NA	NA	NA				
86 56	Burnham Avenue, Grand Calumet River Indiana Avenue, Little Calumet River	NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA				
76 52	Halsted Street, Little Calumet River Wentworth Avenue, Little Calumet River	NA 0/11	NA 0/10	0/10	0/11	0/11	0/11	0/9	0/10				
54	Joe Orr Road, Thorn Creek	1/9 1/11	0/9 0/9	0/9 0/11	0/10 0/11	0/9 0/11	0/8 0/11	0/7 0/11	0/3 0/10				
97 57	170th Street, Thorn Creek Ashland Avenue, Little Calumet River	1/10	0/9	0/10	0/11	0/11	1/11	0/10	0/10				
58	Ashland Avenue, Calumet-Sag Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA				
59 43	Cicero Avenue, Calumet-Sag Channel Route 83, Calumet-Sag Channel	NA NA	ŇĀ	NA	NA	NA	NA	NA	NA				
	Plaines River System							0/11	0/10				
90	Route 19. Poplar Creek	1/10 ND	0/11 ND	1/11 ND	1/11 ND	2/12 ND	1/11 ND	0/11 ND	0/10 0/1				
63 89	Longmeadow Lane, West Branch DuPage River Walnut Lane, West Branch DuPage River	0/12	0/12	1/12	0/12	1/12	0/12	1/11	1/11				
64	Lake Street, West Branch DuPage River	1/6 0/8	0/12 0/8	1/12 2/9	1/12 2/10	0/12 1/9	0/12 2/9	1/12 2/11	0/12 1/9				
79 80	Higgins Road, Salt Creek Arlington Heights Road, Salt Creek	1/12	0/12	3/12 3/12	1/12	2/12	2/12	1/12	1/12				
18	Devon Avenue, Salt Creek	1/10 1/10	0/11 0/12	3/12 3/12	1/12 1/11	2/12 0/12	2/12 1/12	1/12 1/11	1/12 2/12				
24 109	Wolf Road, Salt Creek Brookfield Avenue, Salt Creek	1/11	0/11	2/11	1/11	1/12	1/12	1/11	1/10 ND				
21	First Avenue, Salt Creek	ND 1/1	ND 1/4	ND 2/5	ND 0/5	ND 2/7	ND 2/4	ND 3/6	1/5				
77 78	Elmhurst Road, Higgins Creek Wille Road, Higgins Creek	0/9	1/12	1/12	1/12	0/12	1/12	0/11 0/7	1/12 1/8				
12	Lake-Cook Road, Buffalo Creek Lake-Cook Road, Des Plaines River	1/7 0/11	0/9 0/12	3/11 0/12	1/9 0/12	0/9 0/12	1/7 0/12	0/11	0/12				
13 17	Oakton Street, Des Plaines River	1/11	0/11	0/11	0/11	1/12 2/12	1/12 0/12	0/11 0/11	0/10 1/12				
19	Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River	1/11 1/11	0/12 0/11	1/12 3/12	0/11 0/11	2/12	1/12	0/11	0/7				
20 22	Ogden Avenue, Des Plaines River	1/12	0/11	2/11	0/11	1/12	1/12 1/12	0/11 0/11	0/5 0/10				
23	Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River	1/11 1/12	0/11 0/11	2/11 3/12	2/11 1/11	1/12 1/12	1/12	1/11	0/11				
29 91	Material Service Road Des Plaines River	1/12	0/12	2/12 1/11	1/11 1/10	1/12 2/11	1/12 3/11	1/11 1/10	0/12 ND				
110	Springinsguth Road, West Branch DuPage River	0/8	1/9	1/11	1/10	4/11	3/11	.,10					

NA = Not Applicable. ND = No Data.

TABLE AII-6: AMMONIUM NITROGEN VIOLATION HISTORY 2003 THROUGH 2010

	Ratio of Violations/Sampling Frequency per Year							
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System								
30 Lake-Cook Road, West Fork North Branch	ND	ND 0/11	ND 0/11	ND 0/4	ND 0/5	ND 0/4	ND 0/8	ND 0/3
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	0/10 0/10	0/11	0/10	0/11	0/12	0/10	0/10	0/8
31 Lake-Cook Road, Middle Fork North Branch	0/9 0/9	0/10 0/12	0/10 0/12	0/10 0/11	0/11 0/12	0/10 0/12	0/10 0/12	0/9 0/3
104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River	0/9	0/10	0/10	0/10	0/12 0/12	0/11	0/10	0/9
105 Frontage Road, Skokie River	0/12 0/8	0/12 0/12	0/12 0/11	0/11 0/11	0/12 0/12	0/12 0/11	0/12 0/12	0/12 0/11
34 Dempster Street, North Branch Chicago River 96 Albany Avenue, North Branch Chicago River	0/11	0/12	0/12	0/11	0/12	0/11	0/11	0/10
35 Central Street, North Shore Channel	0/8 0/11	0/9 0/11	0/9 0/11	0/9 0/12	0/9 0/12	0/8 0/12	0/9 0/12	0/9 0/10
102 Oakton Street, North Shore Channel 36 Touhy Avenue, North Shore Channel	NA	NA	NA	NA	NA	NA	NA	NA
101 Foster Avenue, North Shore Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 	NA NA	NA NA	NA	NA	NA	NA	NA	NA
46 Grand Avenue. North Branch Chicago River	NA 0/11	NA 0/9	NA 0/10	NA 0/11	NA 0/11	NA 0/10	NA 0/9	NA 0/10
74 Lake Shore Drive, Chicago River 100 Wells Street, Chicago River	0/11 0/12	0/11	0/12	0/11	0/12	0/12	0/12	0/12
39 Madison Street, South Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
108 Loomis Street, South Branch Chicago River 99 Archer Avenue, South Fork South Branch Chicago River	NA NA	NA NA	NA	NA	NA	NA	NA	NA
40 Damen Avenue, Chicago Sanitary & Ship Canal	NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
107 Western Avenue, Chicago Sanitary & Ship Canal 75 Cicero Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA	NA
41 Harlem Avenue, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA NA	NA NA	NA NA
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA	NA
82 Lockport Trebler, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA NA	NA NA	NA NA
92 Lockport Forebay, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	INA.
Calumet River System	016	0.00	0.10	0/10	0/11	0/11	0/10	0/12
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	0/6 0/11	0/7 0/10	0/9 0/12	0/10 0/11	0/11 0/11	0/11 0/12	0/10	0/12
55 130th Street, Calumet River	0/10	0/9	0/9	0/10	0/11	0/11	0/11	0/10 NA
51 IHB Railroad Bridge, Grand Calumet River 86 Burnham Avenue, Grand Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA
56 Indiana Avenue, Little Calumet River	NA	NA	NA	NA	NA	NA	NA	NA NA
76 Halsted Street, Little Calumet River. 52 Wentworth Avenue, Little Calumet River	NA 0/11	NA 0/10	NA 0/10	NA 0/11	NA 0/11	NA 0/11	NA 0/9	0/10
54 Joe Orr Road, Thorn Creek	0/9	0/9	0/9	0/10	0/9	0/8	0/7	0/3
97 170th Street, Thorn Creek 57 Ashland Avenue, Little Calumet River	0/11 0/10	0/9 0/9	0/11 0/10	0/11 0/11	0/11 0/11	0/11 0/11	0/11 0/10	0/10 0/10
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
59 Cicero Avenue, Calumet-Sag Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
43 Route 83, Calumet-Sag Channel	IVA	1421	144.		• • • •			
Des Plaines River System 90 Route 19, Poplar Creek	0/10	0/11	0/11	0/11	0/12	0/11	0/11	0/10
63 Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	0/1
89 Walnut Lane, West Branch DuPage River	0/12 0/6	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/11 0/12	0/11 0/12
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	0/8	0/8	0/9	0/10	0/9	0/9	0/11	0/9
80 Arlington Heights Road, Salt Creek	0/12 0/10	0/12 0/11	0/12	0/12 0/12	0/12	0/12 0/12	0/12 0/12	0/12 0/12
18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek	0/10	0/12	0/12 0/12	0/11	0/12 0/12	0/12	0/11	0/12
109 Brookfield Avenue, Salt Creek	0/11 ND	0/11 ND	0/11 ND	0/11 ND	0/12 ND	0/12 ND	0/11 ND	0/10 ND
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	ND 0/1	0/4	0/5	0/5	0/7	0/4	0/6	0/5
78 Wille Road, Higgins Creek	0/9	0/12	0/12	0/12 0/9	0/12 0/9	0/12 0/7	0/11 0/7	0/12 0/8
12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River	0/7 0/11	0/9 0/12	0/11 0/12	0/12	0/12	0/12	0/11	0/12
17 Oakton Street, Des Plaines River	0/11	0/11	0/11	0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/10 0/12
19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River	0/11 0/11	0/12 0/11	0/12 0/12	0/11 0/11	0/12	0/12	0/11	0/7
22 Ogden Avenue, Des Plaines River	0/12	0/11	0/11	0/11	0/12	0/12	0/11	0/5
23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River	0/11 0/12	0/11 0/11	0/11 0/12	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/1 0 0/11
91 Material Service Road, Des Plaines River	0/12	0/12	0/12	0/11	0/12	0/12	0/11	0/12
110 Springinsguth Road, West Branch DuPage River	0/8	0/9	0/11	0/10	0/11	0/11	0/10	ND

NA = Not Applicable. ND = No Data.

TABLE AII-7: UN-IONIZED AMMONIA VIOLATION HISTORY 2003 THROUGH 2010

		Rat	io of V	iolation	s/Samp	oling Fr	equenc	y per Y	ear
Sampling Station	(No. Name)	10	09	08	07	06	05	04	03
Chicago River Sys	tem								
	, West Fork North Branch	NA	NA	NA	NA	NA	NA	NA	NA
106 Dundee Road, W	est Fork North Branch Chicago River	NA	NA	NA	NA	NA	ŅA	NA	NA
	Fork North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
	, Middle Fork North Branch North Branch Chicago River	NA NA	NA NA	NA NA	NA	NA	NA	NA	NA
32 Lake-Cook Road	, Skokie River	ŇA	NA	NA	NA	NA	NA	NA	NA
105 Frontage Road, S	kokie River	ŅA	ŅA	NA	NA	NA NA	NA NA	NA NA	NA NA
34 Dempster Street, 96 Albany Avenue,	North Branch Chicago River North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA	NA
	orth Shore Channel	NA	NA	NA	NA	NA	NA	NA	NA
102 Oakton Street, N	orth Shore Channel	NA	NA	NA	NA	NA	NA 0/12	NA	NA 0/12
	orth Shore Channel	0/11 0/12	0/10 0/12	0/12 0/12	0/12 0/12	0/11 0/11	0/12 0/13	0/12 0/12	0/12
	orth Shore Channel Vorth Branch Chicago River	0/12	0/12	0/12	0/12	0/12	0/12	1/12	0/12
	y, North Branch Chicago River	0/12	0/12	0/12	0/12	1/12	0/12	0/12	0/12
	orth Branch Chicago River	0/12 NA	0/12 NA	0/12 NA	0/11 NA	0/12 NA	0/12 N A	0/12 NA	0/12 NA
74 Lake Shore Drive 100 Wells Street, Chi	e, Chicago Kiver	NA NA	NA	NA	NA	NA	NA	NA	NA
	South Branch Chicago River	0/12	0/11	0/12	0/11	0/12	0/12	0/12	0/11
108 Loomis Street, S	outh Branch Chicago River	0/11	0/12	0/11	0/12	0/12	0/10 0/11	0/12 0/12	0/12 0/12
	South Fork South Branch Chicago River	0/10 0/12	0/11 0/11	0/12 0/12	0/11 0/12	0/7 0/12	0/12	0/12	0/12
40 Damen Avenue, 107 Western Avenue,	Chicago Sanitary & Ship Canal Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
75 Cicero Avenue, C	Chicago Sanitary & Ship Canal	0/12	0/12	0/12	0/12	0/13	1/12	0/12	0/11
	Chicago Sanitary & Ship Canal	0/ 9 0/12	0/12 0/10	0/12 0/12	0/12 0/11	0/13 0/13	0/12 0/11	0/11 0/12	0/11 0/12
42 Route 83, Chicag 48 Stephen Street, C	o Sanitary & Ship Canal hicago Sanitary & Ship Canal	0/12	0/10	0/12	0/10	0/13	0/11	0/12	0/12
82 Lockport Trebler	, Chicago Sanitary & Ship Canal	ND 0/51	ND 0/51	ND 0/51	ND 0/50	ND 0/52	ND 0/51	ND 0/49	ND 0/50
	y, Chicago Sanitary & Ship Canal	0/31	0,51	0,5.	0.00	5,5 -			
Calumet River Sys		NA	NA	NA	NA	NA	NA	NA	NA
49 Ewing Avenue, C 50 Burnham Avenue		ŇA	NA	NA	NA	NA	NA	NA	NA
55 130th Street, Cal	umet River	NA	NA	NA	NA	NA	NA	NA	NA ND
	dge, Grand Calumet River	ND 1/7	ND 0/5	ND 0/10	ND 1/9	ND 0/11	ND 0/10	ND 0/9	1/10
	e, Grand Calumet River Little Calumet River	0/10	0/8	0/9	0/9	0/11	0/9	0/8	0/11
76 Halsted Street, L	ittle Calumet River	0/10	0/11	0/12	0/11	0/11	0/12	0/12	0/11 NA
52 Wentworth Aven	ue, Little Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
54 Joe Orr Road, Th 97 170th Street, Tho		NA NA	NA	NA	NA	NA	NA	NA	NA
	Little Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
	Calumet-Sag Channel	0/10	0/11 0/10	0/12 0/11	0/11 0/11	0/11 0/11	0/12 0/12	0/12 0/12	0/12 0/11
59 Cicero Avenue, C 43 Route 83, Calum	Calumet-Sag Channel et-Sag Channel	0/10 0/11	0/10	0/10	ŏ∕i i	0/11	0/11	0/10	0/11
Des Plaines River	System								
90 Route 19, Poplar	Creek	NA	NA	NA	NA	NA	NA	NA	NA NA
63 Longmeadow La	ne, West Branch DuPage River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
	st Branch DuPage River	NA NA	NA NA	NA NA	NA	NA NA	NA	NA	NA
79 Higgins Road, Sa	t Branch DuPage River ilt Creek	NA	NA	NA	NA	NA	NA	NA	NA
80 Arlington Height	s Road, Salt Creek	ŅA	ŅA	NA	NA'	NA	NA	NA NA	NA NA
18 Devon Avenue, S		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA
24 Wolf Road, Salt (109 Brookfield Aven)		NA	NA	NA	NA	NA	NA	NA	NA
21 First Avenue, Sal	t Čreek	NA	NA	NA	NA	NA	NA	NΑ	NA
77 Elmhurst Road, I		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
78 Wille Road, Higg 12 Lake-Cook Road		NA NA	NA NA	NA NA	NA	NA	NA	NA	NA
13 Lake-Cook Road	, Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA
17 Oakton Street, D	es Plaines River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
	, Des Plaines River Des Plaines River	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA	NA
22 Ogden Avenue, I	Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA
23 Willow Springs I	Road, Des Plaines River	NA	NA	NA	NA	NA NA	NA NA	NA NA	NA NA
25 Willow Springs i									
29 Stephen Street, D	es Plaines River Road, Des Plaines River	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA NA	NA

NA = Not Applicable. ND = No Data.

TABLE AII-8: TOTAL DISSOLVED SOLIDS VIOLATION HISTORY 2003 THROUGH 2010

	Rati	o of Vi	olation	s/Samp	ing Fre	quency	per Ye	ear
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System 30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River 106 Pompster Street, North Branch Chicago River 107 Albany Avenue, North Branch Chicago River 108 Central Street, North Shore Channel 109 Oakton Street, North Shore Channel 100 Cakton Street, North Shore Channel 101 Foster Avenue, North Shore Channel 102 Touhy Avenue, North Shore Channel 103 Touhy Avenue, North Shore Channel 104 Wilson Avenue, North Branch Chicago River 105 Diversey Parkway, North Branch Chicago River 106 Grand Avenue, North Branch Chicago River 107 Lake Shore Drive, Chicago River 108 Wells Street, Chicago River 109 Madison Street, South Branch Chicago River 109 Archer Avenue, South Fork South Branch Chicago River 100 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal 108 Cicero Avenue, Chicago Sanitary & Ship Canal 109 Latel Marken Avenue, Chicago Sanitary & Ship Canal 100 Latel Marken Avenue, Chicago Sanitary & Ship Canal 101 Latel Marken Avenue, Chicago Sanitary & Ship Canal 102 Latel Marken Avenue, Chicago Sanitary & Ship Canal 103 Latel Marken Avenue, Chicago Sanitary & Ship Canal 104 Latel Marken Avenue, Chicago Sanitary & Ship Canal 105 Latel Road River	ND 5/10 4/10 3/9 1/9 1/12 2/8 3/11 0/11 0/12 0/12 0/12 0/12 0/12 0/12 0	ND 5/11 0/10 1/12 2/12 0/9 0/11 0/10 1/12 2/12 1/12 1/12 1/12 1/12	ND 4/11 2/10 2/10 3/12 1/10 3/12 3/11 4/12 0/9 0/11 0/12 0/12 0/12 0/12 0/10 0/12 0/11 0/12 0/11 0/12 0/12	ND 1/4 5/11 3/10 1/11 1/11 1/11 2/11 0/9 1/12 2/12 2/12 0/12 2/12 0/12 1/11 0/11 1/11 1	ND 2/5 4/12 1/11 1/12 0/12 0/12 2/12 0/12 0/12 0	ND 2/4 6/10 3/10 1/12 5/11 0/12 3/11 0/8 0/12 0/12 0/12 0/12 0/12 0/12 0/10 0/12 0/10 0/11 0/12 0/10 0/11 0/12 0/10 0/11	ND 4/8 3/10 0/10 0/12 1/12 0/11 0/9 0/12 0/12 0/12 0/12 0/12 0/12 0/12 0/12	ND 0/3 1/8 1/9 0/3 1/9 0/12 2/11 0/10 0/9 0/12 0/12 0/12 0/12 0/12 0/12 0/12 0/12
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal 48 Lockport Trebler, Chicago Sanitary & Ship Canal 49 Lockport Forebay, Chicago Sanitary & Ship Canal 40 Lockport Forebay, Chicago Sanitary & Ship Canal	0/12 0/12 ND 1/51	0/10 0/10 ND 0/51	0/12 ND 3/51	0/11 ND 0/51	0/13 ND 0/53	0/11 ND 1/52	0/12 ND 0/52	0/12 ND 0/52
Calumet River System	0.44	0.77	0.60	0/10	0/11	0/11	0/10	0/12
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake 51 130th Street, Calumet River 51 IHB Railroad Bridge, Grand Calumet River 63 Burnham Avenue, Grand Calumet River 64 Burnham Avenue, Little Calumet River 65 Indiana Avenue, Little Calumet River 66 Wentworth Avenue, Little Calumet River 67 Wentworth Avenue, Little Calumet River 68 Joe Orr Road, Thorn Creek 69 170th Street, Thorn Creek 69 Ashland Avenue, Little Calumet River 69 Ashland Avenue, Calumet-Sag Channel 69 Cicero Avenue, Calumet-Sag Channel 69 Route 83, Calumet-Sag Channel	0/6 0/11 0/10 ND 0/7 0/10 0/10 1/11 6/9 5/11 2/10 0/10 0/11	0/7 0/10 0/9 ND 0/5 0/8 0/11 0/10 5/9 3/9 0/9 0/10 0/10	0/9 0/12 0/9 ND 0/10 0/9 0/12 0/10 8/8 6/11 4/10 0/12 0/11	0/10 0/11 0/10 ND 0/10 0/9 0/11 0/11 9/10 4/11 2/11 0/11 0/11	0/11 0/11 0/11 ND 0/11 0/11 0/11 0/11 9/9 5/11 3/11 0/11 0/11	0/11 0/12 0/11 ND 0/10 0/9 0/12 0/11 5/8 9/11 2/11 0/12 0/12	0/12 0/11 ND 0/9 0/9 0/9 0/12 0/9 6/7 6/11 4/10 0/12 0/12	0/12 0/10 ND 0/10 0/11 0/11 3/10 1/3 7/10 5/10 0/12 0/11
Des Plaines River System 90 Route 19, Poplar Creek Congmeadow Lane, West Branch DuPage River Walnut Lane, West Branch DuPage River	1/10 ND 1/12	0/11 ND 0/12	1/11 ND 1/12	1/11 ND 1/12	3/12 ND 1/12	3/11 ND 0/12	1/11 ND 2/11	1/10 0/1 2/11
Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River Higgins Road, Salt Creek Arlington Heights Road, Salt Creek Devon Avenue, Salt Creek Wolf Road, Salt Creek Brookfield Avenue, Salt Creek First Avenue, Salt Creek Elmhurst Road, Higgins Creek Wille Road, Higgins Creek Lake-Cook Road, Buffalo Creek Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River Willow Springs Road, Des Plaines River Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River Material Service Road, Des Plaines River Stephen Street, Des Plaines River Springinsguth Road, West Branch DuPage River	1/6 0/8 3/12 3/10 2/10 3/11 ND 1/1 1/9 1/7 1/11 2/11 2/11 2/11 2/12 1/12 1/12	0/12 0/8 0/12 0/11 1/12 1/11 ND 1/4 1/12 0/12 0/11 0/11 0/11 0/11 0/12	2/12 4/9 4/12 5/12 4/11 ND 3/5 2/12 3/11 0/12 1/11 2/12 3/12 2/11 3/12 3/12 3/12	1/12 5/10 2/12 2/12 1/11 ND 0/5 2/12 1/9 0/11 0/11 0/11 2/11 1/11 1/11 1/11	0/12 1/9 2/12 3/12 2/12 3/12 ND 2/7 2/12 2/12 2/12 2/12 2/12 2/12 1/12 1	1/12 4/9 2/12 4/12 3/12 3/12 ND 2/4 1/12 5/7 1/12 1/12 1/12 2/12 2/12 2/12 6/11	1/12 5/11 1/12 1/12 1/11 1/11 1/11 ND 3/6 0/11 1/7 0/11 2/11 1/11 1/11 1/11 1/11	1/12 1/19 1/12 1/12 2/12 2/12 1/10 ND 1/5 1/12 0/12 0/12 0/10 0/7 0/5 1/10 0/11 0/11

TABLE AII-9: PHENOLS VIOLATION HISTORY 2003 THROUGH 2010

	Ratio	of Vic	olations	/Sampl	ing Fre	quency	per Ye	ar
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System 30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River 106 Albany Avenue, North Branch Chicago River 107 Albany Avenue, North Branch Chicago River 108 Central Street, North Shore Channel 109 Oakton Street, North Shore Channel 101 Foster Avenue, North Shore Channel 102 Wilson Avenue, North Shore Channel 103 Wilson Avenue, North Branch Chicago River 104 Diversey Parkway, North Branch Chicago River 105 Lake Shore Drive, Chicago River 106 Wells Street, Chicago River 107 Wells Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River 109 Archer Avenue, South Fork South Branch Chicago River 100 Western Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal 108 Route 83, Chicago Sanitary & Ship Canal 109 Lockport Trebler, Chicago Sanitary & Ship Canal 109 Lockport Forebay, Chicago Sanitary & Ship Canal 107 Lockport Forebay, Chicago Sanitary & Ship Canal 108 Lockport Forebay, Chicago Sanitary & Ship Canal	ND 0/10 0/10 0/10 0/9 0/9 0/9 0/9 0/12 0/8 0/11 0/12 0/12 0/12 0/12 0/12 0/12 0/12	ND 0/11 0/11 0/10 0/10 0/12 0/12 0/12 0/12	ND 0/11 0/10 0/12 0/12 0/12 0/12 0/12 0/12	ND 0/4 0/11 0/10 0/11 0/11 0/11 0/12 0/12 0/12	ND 0/5 0/12 0/12 0/12 0/12 0/12 0/12 0/12 0/12	ND 0/4 0/10 0/10 0/12 0/11 0/12 0/12 0/12 0/12	ND 0/8 0/10 0/10 0/12 0/12 0/12 0/12 0/12 0/12	ND 0/3 0/8 0/9 0/3 0/9 0/12 0/10 0/12 0/12 0/12 0/12 0/12 0/12
Calumet River System 49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake 51 30th Street, Calumet River 51 IHB Railroad Bridge, Grand Calumet River 65 Indiana Avenue, Grand Calumet River 66 Indiana Avenue, Little Calumet River 67 Halsted Street, Little Calumet River 68 Wentworth Avenue, Little Calumet River 69 Joe Orr Road, Thorn Creek 60 Ashland Avenue, Little Calumet River 61 Ashland Avenue, Little Calumet River 62 Ashland Avenue, Calumet-Sag Channel 63 Cicero Avenue, Calumet-Sag Channel 64 Route 83, Calumet-Sag Channel	0/6 0/11 0/10 ND 0/7 0/10 0/10 0/11 0/9 0/11 0/10 0/10	0/7 0/10 0/9 ND 0/5 0/8 0/11 0/10 0/9 0/9 0/11 0/10 0/10	0/9 0/12 0/9 ND 0/10 0/9 0/12 0/10 0/9 0/11 0/10 0/12 0/11	0/10 0/11 0/10 ND 0/10 0/19 0/11 0/11 0/11 0/11 0/11	0/11 0/11 0/11 ND 0/11 0/11 0/11 0/11 0/11 0/11 0/11	0/11 0/12 0/11 ND 0/10 0/9 0/12 0/11 0/8 0/11 0/12 0/11	0/10 0/12 0/11 ND 0/9 0/9 0/12 0/9 0/7 0/11 0/10 0/12 0/12	0/12 0/12 0/10 ND 0/10 0/11 0/11 0/10 0/3 0/10 0/10 0/11 0/11
Des Plaines River System 90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek 11 Devon Avenue, Salt Creek 12 Wolf Road, Salt Creek 13 Brookfield Avenue, Salt Creek 14 Wile Road, Higgins Creek 15 Elmhurst Road, Higgins Creek 16 Lake-Cook Road, Buffalo Creek 17 Oakton Street, Des Plaines River 18 Belmont Avenue, Des Plaines River 19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River 21 Willow Springs Road, Des Plaines River 22 Stephen Street, Des Plaines River 23 Willow Springs Road, Des Plaines River 24 Material Service Road, Des Plaines River 25 Stephen Street, Des Plaines River 26 Material Service Road, Des Plaines River 27 Material Service Road, Des Plaines River 28 Striphen Street, Des Plaines River 29 Material Service Road, Des Plaines River 30 Springinsguth Road, West Branch DuPage River	0/10 ND 0/12 0/6 0/8 0/12 0/10 0/10 0/11 ND 0/1 0/1 0/1 0/11 0/11 0/11 0/11 0/11 0	0/11 0/11	0/12 0/12 0/11 ND 0/5 0/12 0/11 0/12 0/11 0/12 0/11 0/11	0/11 0/11 0/11 0/11 0/11 0/11 0/11	0/12 ND 0/12 0/12 0/12 0/12 0/12 0/12 0/12 0/12	0/12 0/12 0/12 0/11 0/12 0/12 0/12	0/11 ND 0/10 0/11 0/11 0/12 0/11 0/11 ND 0/6 0/11 0/1 0/11 0/11 0/11 0/11 0/11 0	0/10 0/1 0/11 0/12 0/9 0/12 0/12 0/12 0/10 0/15 0/12 0/10 0/12 0/7 0/5 0/11 0/11 0/12 ND

TABLE AII-10: SULFATE VIOLATION HISTORY 2003 THROUGH 2010

	Ratio of Violations/Sampling Frequency per Year							
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System 30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River 106 Frontage Road, Skokie River 107 Gempster Street, North Branch Chicago River 108 Albany Avenue, North Branch Chicago River 109 Oakton Street, North Shore Channel 100 Oakton Street, North Shore Channel 101 Foster Avenue, North Shore Channel 102 Oakton Street, North Shore Channel 103 Wilson Avenue, North Branch Chicago River 104 Owells Street, North Branch Chicago River 105 Grand Avenue, North Branch Chicago River 106 Wells Street, Chicago River 107 Wells Street, South Branch Chicago River 108 Madison Street, South Branch Chicago River 109 Archer Avenue, South Branch Chicago River 109 Archer Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal 107 Harlem Avenue, Chicago Sanitary & Ship Canal 108 Kephen Street, Chicago Sanitary & Ship Canal 109 Lockport Frebler, Chicago Sanitary & Ship Canal 100 Lockport Forebay, Chicago Sanitary & Ship Canal 100 Lockport Forebay, Chicago Sanitary & Ship Canal 107 Lockport Forebay, Chicago Sanitary & Ship Canal 108 Lockport Forebay, Chicago Sanitary & Ship Canal 109 Lockport Forebay, Chicago Sanitary & Ship Canal 100 Lockport Forebay, Chicago Sanitary & Ship Canal 100 Lockport Forebay, Chicago Sanitary & Ship Canal 100 Lockport Forebay, Chicago Sanitary & Ship Canal	ND 0/10 0/10 0/10 0/9 0/9 0/9 0/12 0/8 0/11 0/8 0/11 0/8 0/11 NA	ND 0/10 0/11 0/11 0/9 0/12 0/12 0/12 0/9 0/11 NA	ND 0/11 0/10 0/10 0/12 0/10 0/12 0/11 0/12 0/9 0/11 NA NA NA NA NA NA NA	ND 0/4 0/11 0/10 0/11 0/10 0/11 0/11 0/11	ND 0/5 0/12 0/12 0/12 0/12 0/12 0/12 0/12 0/12	ND 0/4 0/10 0/10 0/12 0/11 0/11 0/11 0/11 0/12 NA NA NA NA NA NA NA NA	ND 0/8 0/10 0/12 0/12 0/12 0/12 0/11 0/9 0/12 NA NA NA NA NA NA NA NA	ND 0/3 0/8 0/9 0/3 0/9 0/12 0/11 0/10 0/9 0/10 NA
Calumet River System 49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake 51 30th Street, Calumet River 51 IHB Railroad Bridge, Grand Calumet River 86 Burnham Avenue, Grand Calumet River 86 Indiana Avenue, Calumet River 87 Indiana Avenue, Little Calumet River 88 Wentworth Avenue, Little Calumet River 89 Joe Orr Road, Thorn Creek 80 Ashland Avenue, Little Calumet River 90 Circo Avenue, Calumet-Sag Channel 91 Cicero Avenue, Calumet-Sag Channel 92 Route 83, Calumet-Sag Channel	0/6 0/11 0/10 NA NA NA 0/11 4/9 3/11 0/10 NA NA	0/7 0/10 0/9 NA NA NA 0/10 4/9 1/9 0/9 NA NA	0/9 0/12 0/9 NA NA NA 0/10 9/9 3/11 0/10 NA NA	0/10 0/11 0/10 NA NA NA 0/11 4/10 3/11 1/11 NA NA	0/11 0/11 0/11 NA NA NA 0/11 6/8 3/10 0/11 NA NA	0/11 0/12 0/11 NA NA NA 0/11 4/8 4/11 1/11 NA NA	0/10 0/12 0/11 NA NA NA 0/9 5/7 4/11 0/10 NA NA	0/12 0/12 0/10 NA NA NA 0/10 1/3 6/10 1/10 NA NA
Des Plaines River System 90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek 19 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek 22 Elmhurst Road, Higgins Creek 23 Wille Road, Higgins Creek 24 Wille Road, Higgins Creek 25 Elmhurst Road, Buffalo Creek 16 Lake-Cook Road, Des Plaines River 17 Oakton Street, Des Plaines River 18 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River 21 Willow Springs Road, Des Plaines River 22 Stephen Street, Des Plaines River 23 Material Service Road, Des Plaines River 24 Material Service Road, Des Plaines River 25 Stephen Street, Des Plaines River 26 Springinsguth Road, West Branch DuPage River	0/10 ND 0/12 0/6 0/8 0/12 0/10 0/10 0/11 ND 0/1 0/9 0/7 0/11 0/11 0/11 0/12 0/12	0/11 ND 0/11 0/12 0/8 0/12 0/11 0/11 ND 0/4 0/12 0/8 0/11 0/11 0/11 0/11 0/11 0/11	0/11 ND 0/12 0/12 0/9 0/12 0/12 0/11 ND 0/5 0/11 0/12 0/11 0/12 0/11 0/12 0/11	0/11 ND 0/12 0/12 0/10 0/12 0/11 0/11 ND 0/5 0/12 0/11 0/11 0/11 0/11 0/11 0/11	0/12 ND 0/12 0/12 0/12 0/12 0/12 0/12 0/12 0/12	0/11 ND 0/12 0/12 0/19 0/12 0/12 0/12 0/12 0/12 0/12 0/12 0/12	0/11 ND 0/11 0/11 0/12 0/12 0/11 ND 0/6 0/11 0/11 0/11 0/11 0/11 0/11 0/11	0/10 0/1 0/11 0/12 0/9 0/12 0/12 0/10 ND 0/5 0/12 0/10 0/12 0/7 0/7 0/5 0/10 0/11 0/12 ND

NA = Not Applicable. ND = No Data.

TABLE AII-11: FATS, OILS, AND GREASES VIOLATION HISTORY 2003 THROUGH 2010

	Rat	io of V	iolation	s/Samp	oling Fr	equenc	y per Y	ear
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System								
30 Lake-Cook Road, West Fork North Branch	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	NA	NA	NA	NA	NΑ	NA	NA	NA NA
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA
32 Lake-Cook Road, Skokie River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
105 Frontage Road, Skokie River 34 Dempster Street, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
102 Oakton Street, North Shore Channel	NA 0/11	NA 0/10	NA 0/12	NA 0/10	NA 0/11	NA 0/12	NA 0/12	NA 0/12
36 Touhy Avenue, North Shore Channel 101 Foster Avenue, North Shore Channel	0/12	0/12	0/12	0/12	0/12	0/13	0/12	0/12
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12
46 Grand Avenue, North Branch Chicago River	0/12	0/12	0/12	0/11	0/12 NA	0/12 NA	0/12 NA	0/12 NA
74 Lake Shore Drive, Chicago River 100 Wells Street, Chicago River	NA NA	NA NA	NA NA	NA NA	NA	NA	NA	NA
39 Madison Street, South Branch Chicago River	0/12 0/11	0/11 0/12	0/12 0/11	0/11 0/12	0/12 0/12	0/12 0/10	0/12 0/12	0/10 0/12
108 Loomis Street, South Branch Chicago River 99 Archer Avenue, South Fork South Branch Chicago River	0/10	0/11	0/12	0/11	0/7	0/11	0/12	0/11
40 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal	0/12 ND	0/11 ND	0/12 ND	0/12 ND	0/12 ND	0/12 ND	0/12 ND	0/12 ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/12 0/9	0/12 0/12	0/12 0/12	0/12 0/12	0/13 0/13	0/12 0/12	0/12 0/12	0/11 0/12
41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal	0/12	0/10	0/12	0/11	0/13	0/11	1/12	0/11
48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal	0/12 ND	0/10 ND	0/12 ND	0/11 ND	0/13 ND	0/11 ND	1/12 ND	0/11 ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/51	0/50	0/50	0/51	0/53	0/52	0/52	2/49
Calumet River System							27.4	27.4
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
55 130th Street, Calumet River	NA	NA	NA	NA ND	NA ND	NA ND	NA ND	NA ND
51 IHB Railroad Bridge, Grand Calumet River 86 Burnham Avenue, Grand Calumet River	ND 0/7	ND 0/5	ND 0/10	0/10	0/11	0/10	0/9	1/10
 Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River 	0/10 0/10	0/8 0/11	0/9 0/12	0/ 9 0/11	0/11 0/11	0/9 0/12	0/9 0/12	0/11 0/11
52 Wentworth Avenue, Little Calumet River	NA	NA	NA	NA	NA	NA	NA NA	NA NA
54 Joe Orr Road, Thorn Creek 97 170th Street, Thorn Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA
57 Ashland Avenue, Little Calumet River	NA 0/10	NA 0/11	NA 0/12	NA 0/11	NA 0/11	NA 0/12	NA 0/12	NA 0/12
58 Ashland Avenue, Calumet-Sag Channel 59 Cicero Avenue, Calumet-Sag Channel	0/10	0/10	0/11	0/11	0/11	0/12	0/12	0/11
43 Route 83, Calumet-Sag Channel	0/11	1/10	0/10	0/11	0/11	0/11	0/10	0/11
Des Plaines River System	NTA	NTA	NT A	NIA	NIA	NA	NA	NA
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA	NA
89 Walnut Lane, West Branch DuPage River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	NA	NA	NA	NA	NA	NA	NA	NA
80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
24 Wolf Road, Salt Creek	NA	NA	NA	NA	NA	NA NA	NA NA	NA NA
109 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA	NA
77 Elmhurst Road, Higgins Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
12 Lake-Cook Road, Buffalo Creek	NA	NA	NA	NA	NA	NA	NA	NA
13 Lake-Cook Road, Des Plaines River 17 Oakton Street, Des Plaines River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
19 Belmont Avenue, Des Plaines River	NA	NA	NA	NA	NA NA	NA NA	NA NA	NA NA
20 Roosevelt Road, Des Plaines River 22 Ogden Avenue, Des Plaines River	NA NA	NA NA	NA NA	NA NA	NA	NA	NA	NA
23 Willow Springs Road, Des Plaines River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
91 Material Service Road, Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA
110 Springinsguth Road, West Branch DuPage River	NA	NA	NA	NA	NA	NA	NA	NA

NA = Not Applicable. ND = No Data.

TABLE AII-12: TOTAL CYANIDE VIOLATION HISTORY 2003 THROUGH 2010

		Rati	o of V	iolation	s/Samp	oling Fr	equenc	y per Y	ear
Sam	pling Station (No. Name)	10	09	08	07	06	05	04	03
Chic	rago River System								
30	Lake-Cook Road, West Fork North Branch	NA							
106	Dundee Road, West Fork North Branch Chicago River	ŊĄ	NA	NA	NA	NA	NA NA	NA NA	NA NA
103	Golf Road, West Fork North Branch Chicago River	NA NA							
31 104	Lake-Cook Road, Middle Fork North Branch Glenview Road, North Branch Chicago River	NA							
32	Lake-Cook Road, Skokie River	NA	NA	NA	NA	ŅA	ŅA	NA	NA
105	Frontage Road, Skokie River	NA NA							
34 96	Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River	NA NA	NA	NA	NA	NA	NA	ŇA	NA
35	Central Street, North Shore Channel	NA	ŅA						
102	Oakton Street, North Shore Channel	NA	NA	NA	NA	NA O(12	NA 0/12	NA 0/12	NA 0/12
36	Touhy Avenue, North Shore Channel	0/11 0/12	0/10 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12	0/12	0/12
101 37	Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River	0/12	0/12	0/12	0/12	0/12	0/12	0/12	0/12
73	Diversey Parkway, North Branch Chicago River	0/12 0/12	0/12	0/12	0/12	0/12	0/12	0/12	0/12
46	Grand Avenue, North Branch Chicago River	0/12	0/12	0/12	0/11 NA	0/12 NA	0/12 NA	0/12 NA	0/12 NA
74	Lake Shore Drive, Chicago River	NA NA	NA NA	NA NA	NA NA	NA	NA	NA	NA
100 39	Wells Street, Chicago River Madison Street, South Branch Chicago River	0/12	0/11	0/12	0/11	0/12	0/12	0/12	0/11
108	Loomis Street, South Branch Chicago River	0/11	0/12	0/11	0/12	0/12	0/10	0/12	0/12
99	Archer Avenue, South Fork South Branch Chicago River	0/10	0/11	0/12	0/11	0/7 0/12	0/11 0/12	0/12 0/12	0/12 0/12
40	Damen Avenue, Chicago Sanitary & Ship Canal	0/12 ND	0/11 ND	0/12 ND	0/12 ND	ND	ND	ND	ND
10 7 7 5	Western Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal	0/12	0/12	0/12	0/12	0/13	0/12	0/12	0/12
41	Harlem Avenue, Chicago Sanitary & Ship Canal	0/9	0/12	0/12	0/12	0/13	0/12	0/12	0/12 0/12
42	Route 83, Chicago Sanitary & Ship Canal	0/12	0/10 0/10	0/12 0/12	0/11 0/11	0/13 0/13	0/11 0/11	0/12 0/12	0/12
48	Stephen Street, Chicago Sanitary & Ship Canal	0/12 ND	ND						
82 92	Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal	0/51	0/51	0/51	0/51	0/53	0/52	0/52	0/52
Calı	imet River System							***	27.4
49	Ewing Avenue, Calumet River	NA	NA	ŅA	NA	NA NA	NA NA	NA NA	NA NA
50	Burnham Avenue, Wolf Lake	NA NA	NA NA	NA NA	NA NA	NA NA	NA .	NA	NA
55 51	130th Street, Calumet River IHB Railroad Bridge, Grand Calumet River	ND							
86	Burnham Avenue, Grand Calumet River	0 <i>/</i> 7	0/5	0/10	0/10	0/11	0/10	0/9	0/10
56	Indiana Avenue, Little Calumet River	0/10	0/8	0/9 0/12	0/9 0/11	0/11 0/11	0/9 0/12	0/9 0/12	0/11 0/11
76	Halsted Street, Little Calumet River	0/10 NA	0/11 NA	NA	NA	NA	NA	NA	NA
52 54	Wentworth Avenue, Little Calumet River Joe Orr Road, Thorn Creek	NA							
97	170th Street, Thorn Creek	NA	NA	ŅΑ	ŅA	ŅA	NA	NA	NA
57	Ashland Avenue, Little Calumet River	NA 0/10	NA 0/11	NA 0/12	NA 0/11	NA 0/11	NA 0/12	NA 0/12	NA 0/12
58 59	Ashland Avenue, Calumet-Sag Channel	0/10	0/10	0/11	0/11	ŏ/i i	0/12	0/12	0/11
43	Cicero Avenue, Calumet-Sag Channel Route 83, Calumet-Sag Channel	0/11	0/10	0/10	0/11	0/11	0/10	0/10	0/11
Des	Plaines River System								
90	Route 19. Poplar Creek	NA	NA	NA	NA	NA	NA	NA NA	NA NA
63	Longmeadow Lane, West Branch DuPage River	NA NA							
89	Walnut Lane, West Branch DuPage River	NA NA	NA NA	NA NA	NA	NA	NA	NA	NA
64 79	Lake Street, West Branch DuPage River Higgins Road, Salt Creek	NA							
8Ó	Arlington Heights Road, Salt Creek	NA	NA	NA	ŅA	ŅA	NA	NA NA	NA NA
18	Devon Avenue, Salt Creek	NA NA							
100	Wolf Road, Salt Creek Brookfield Avenue, Salt Creek	NA NA	NA NA	ŇÄ	NA	NA.	NA	NA	NA
10 9 21	First Avenue, Salt Creek	NA							
77	Elmhurst Road, Higgins Creek	ŅA	NA	NA	NA	NA NA	NA NA	NA NA	NA NA
78	Wille Road, Higgins Creek	NA NA							
12 13	Lake-Cook Road, Buffalo Creek Lake-Cook Road, Des Plaines River	NA NA	NA						
17	Oakton Street, Des Plaines River	NA	ŅĄ						
19	Belmont Avenue, Des Plaines River	ŅA	NA	NA	NA	NA NA	NA NA	NA Na	NA NA
20	Roosevelt Road, Des Plaines River	NA NA							
	Ogden Avenue, Des Plaines River	NA NA	NA NA	NA NA	NA	NA	NA	NA	NA
22	Willow Springs Road Des Plaines River								
23	Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River	NA	ŅĄ						
	Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River Material Service Road, Des Plaines River Springinsguth Road, West Branch DuPage River								NA NA NA

NA = Not Applicable. ND = No Data.

TABLE AII-13: WEAK ACID DISSOCIABLE CYANIDE VIOLATION HISTORY 2003 THROUGH 2010

	Rat	io of V	iolation	ns/Samp	oling Fr	equenc	y per Y	ear
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System								
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND
106 Dundee Road, West Fork North Branch Chicago River	0/10	0/11 0/11	0/11 0/10	0/4 0/11	0/5 0/12	0/4 0/10	0/8 0/10	0/3 0/8
103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch	0/10 0/ 9	0/10	0/10	0/10	0/11	0/10	0/10	0/9
104 Glenview Road, North Branch Chicago River	0/9	0/12	0/12	0/11	0/12	0/12	0/12	0/3
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River	0/9 0/12	0/10 0/12	0/10 0/12	0/10 0/11	0/12 0/12	0/10 0/12	0/10 0/12	0/9 0/12
34 Dempster Street, North Branch Chicago River	0/8	0/12	0/11	0/11	0/12	0/11	0/12	0/11
96 Albany Avenue, North Branch Chicago River	0/11 0/8	0/12 0/9	0/12 0/9	0/11 0/9	0/12 0/9	0/11 0/8	0/11 0/9	0/10 0/ 9
35 Central Street, North Shore Channel 102 Oakton Street, North Shore Channel	0/11	0/11	0/11	0/12	0/12	0/12	0/12	0/10
36 Touhy Avenue, North Shore Channel	NA	NA	NA	NA	NA	NA	NA	NA
101 Foster Avenue, North Shore Channel 37 Wilson Avenue, North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
73 Diversey Parkway, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
46 Grand Avenue, North Branch Chicago River	NA	NA 0/9	NA 0/10	NA 0/11	NA 0/11	NA 0/10	NA 0/9	NA 0/10
74 Lake Shore Drive, Chicago River 100 Wells Street, Chicago River	0/11 0/12	0/11	0/12	0/11	0/12	0/12	0/12	0/12
39 Madison Street, South Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
108 Loomis Street, South Branch Chicago River 99 Archer Avenue, South Fork South Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
40 Damen Avenue, Chicago Sanitary & Ship Canal	ŇA	NA	NA	NA	NA	NA	NA	NA
107 Western Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
75 Cicero Avenue, Chicago Sanitary & Ship Canal 41 Harlem Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA	NA	NA	NA	NA	NA
42 Route 83, Chicago Sanitary & Ship Canal	NA	NA	ŅΑ	NA	ŅA	ŅA	NA NA	NA
48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
Calumet River System								
49 Ewing Avenue, Calumet River	0/6	0/7	0/9	0/10	0/11	0/11	0/10 0/12	0/12 0/12
50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River	0/11 0/10	0/10 0/9	0/12 0/9	0/11 0/10	0/11 0/11	0/12 0/11	0/11	0/10
51 IHB Railroad Bridge, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
86 Burnham Avenue, Grand Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
56 Indiana Avenue, Little Calumet River 76 Halsted Street, Little Calumet River	NA	ŇÄ	NA	NA	NA	NA	NA	NA
52 Wentworth Avenue, Little Calumet River	0/11	0/10	0/10	0/11	0/11	0/11	0/9 0/7	0/10 0/3
54 Joe Orr Road, Thorn Creek 97 170th Street, Thorn Creek	0/9 0/11	0/9 0/9	0/9 0/11	0/10 0/11	0/8 0/11	0/8 0/11	0/11	0/10
57 Ashland Avenue, Little Calumet River	0/10	0/9	0/10	0/11	0/11	0/11	0/10	0/10
58 Ashland Avenue, Calumet-Sag Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
59 Cicero Avenue, Calumet-Sag Channel 43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/10	0/11	0/11	0/11	0/12	0/11	0/11	0/10
63 Longmeadow Lane, West Branch DuPage River	ND 0/12	ND 0/12	ND 0/12	ND 0/12	ND 0/12	ND 0/12	ND 0/11	0/1 0/11
 89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River 	0/12	0/12	0/12	0/12	0/12	0/12	0/12	0/12
79 Higgins Road, Salt Creek	0/8	0/8	0/9	0/10	0/9	0/9	0/11	0/9 0/12
80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	0/12 0/10	0/12 0/11	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12
24 Wolf Road, Salt Creek	0/10	0/12	0/12	0/11	0/12	0/12	0/11	0/12
109 Brookfield Avenue, Salt Creek	0/11 ND	0/11 ND	0/11 ND	0/11 ND	0/12 ND	0/12 ND	0/11 ND	0/10 ND
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	0/1	0/4	0/5	0/5	0/7	0/4	0/6	0/5
78 Wille Road, Higgins Creek	0/9	0/12	0/12	0/12	0/12	0/12	0/11	0/12
12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River	0/7 0/11	0/9 0/12	0/11 0/12	0/9 0/12	0/9 0/12	0/7 0/12	0/7 0/11	0/8 0/12
17 Oakton Street, Des Plaines River	0/11	0/11	0/11	0/11	0/12	0/12	0/11	0/10
19 Belmont Avenue, Des Plaines River	0/11	0/12	0/12	0/11	0/12	0/12	0/11 0/11	0/12 0/7
20 Roosevelt Road, Des Plaines River 22 Ogden Avenue, Des Plaines River	0/11 0/12	0/11 0/11	0/12 0/11	0/11 0/11	0/12 0/12	0/12 0/12	0/11	0/7
23 Willow Springs Road, Des Plaines River	0/11	0/11	0/11	0/11	0/12	0/12	0/11	0/10
29 Stephen Street, Des Plaines River	0/12	0/11	0/12	0/11	0/12	0/12	0/11 0/11	0/11 0/12
91 Material Service Road, Des Plaines River 110 Springinsguth Road, West Branch DuPage River	0/12 0/8	0/12 0/9	0/12 0/11	0/11 0/10	0/12 0/11	0/12 0/11	0/10	ND
								_

NA = Not Applicable. ND = No Data.

TABLE AII-14: FLUORIDE VIOLATION HISTORY 2003 THROUGH 2010

	Ratio	o of Vi	olation	s/Samp	ling Fre	quency	per Ye	ear
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System							MD	NID
30 Lake-Cook Road West Fork North Branch	ND	ND 0/11	ND 0/11	ND 0/4	ND 0/5	ND 0/4	ND 0/8	ND 0/3
106 Dundee Road, West Fork North Branch Chicago River	0/10 0/10	0/11	0/10	0/11	0/12	0/10	0/10	0/8
103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch	0/9	0/10	0/10	0/10	0/11	0/10 0/12	0/10 0/12	0/9 0/3
104 Glenview Road, North Branch Chicago River	0/9 0/9	0/12 0/10	0/12 0/10	0/11 0/10	0/12 0/12	0/11	0/10	0/9
32 Lake-Cook Road, Skokie River	0/9	0/12	0/12	0/11	0/12	0/12	0/12	0/12
Frontage Road, Skokie River Dempster Street, North Branch Chicago River	0/8	0/12	0/11	0/11	0/12 0/12	0/11 0/11	0/12 0/11	0/11 0/10
96 Albany Avenue, North Branch Chicago River	0/11 0/8	0/12 0/9	0/12 0/9	0/11 0/9	0/12	0/8	0/9	0/9
35 Central Street, North Shore Channel	0/11	0/11	0/11	0/12	0/12	0/12	0/12	0/10
102 Oakton Street, North Shore Channel 36 Touhy Avenue, North Shore Channel	0/11	0/10	0/12	0/12	0/12 0/12	0/12 0/13	0/12 0/12	0/12 0/12
101 Foster Avenue, North Shore Channel	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12	0/12	0/12	0/12
37 Wilson Avenue, North Branch Chicago River 73 Diversey Parkway, North Branch Chicago River	0/12	0/12	0/12	0/12	0/12	0/12	0/12	0/12 0/12
46 Grand Avenue, North Branch Chicago Rivel	0/12	0/12	0/12 0/10	0/11 0/11	0/12 0/11	0/12 0/10	0/12 0/9	0/10
74 Lake Shore Drive, Chicago River	0/11 0/12	0/9 0/11	0/10	0/11	0/12	0/12	0/12	0/12
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River	0/12	0/11	0/12	0/11	0/12	0/12	0/12	0/11 0/12
109 Loomis Street South Branch Chicago Kiver	0/11	0/12	0/11	0/12 0/11	0/12 0/7	0/10 0/11	0/12 0/12	0/12
og Archer Avenue, South Fork South Branch Chicago River	0/10 0/12	0/11 0/11	0/12 0/12	0/12	0/12	0/12	0/12	0/12
Damen Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND 0/12	ND 0/12	ND 0/12
75 Cicero Avenue, Chicago Sanitary & Ship Canai	0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/13 0/13	0/12 0/12	0/12	0/12
41 Harlem Avenue, Unicago Sanitary & Ship Callai	0/9 0/12	0/10	0/12	0/11	0/13	0/11	0/12	0/12
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal 50, Stephen Street, Chicago Sanitary & Ship Canal	0/12	0/10	0/12	0/11	0/13	0/11 ND	0/12 ND	0/12 ND
82 Locknort Trebler, Chicago Sanitary & Silip Callai	ND 0/51	ND 0/51	ND 0/51	ND 0/51	ND 0/53	0/52	0/52	0/52
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/31	0/51	0/51	0/51	0.22			
Calumet River System	0/6	0/7	0/9	0/10	0/11	0/11	0/10	0/12
49 Ewing Avenue, Calumet River	0/11	0/10	0/12	0/11	0/11	0/12	0/12	0/12 0/10
50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River	0/10	0/9	0/9	0/10 ND	0/11 ND	0/11 ND	0/11 ND	ND
51 IHB Railroad Bridge, Grand Calumet River	ND 0/7	ND 0/5	ND 0/10	0/10	0/11	0/10	0/9	0/10
86 Burnham Avenue, Grand Calumet River	0/10	0/8	0/9	0/9	0/11	0/9	0/ 9 0/12	0/11 0/11
76 Halsted Street, Little Calumet River	0/10	0/11	0/12 6/10	0/11 8/11	0/11 9/11	0/12 7/11	4/9	6/10
52 Wentworth Avenue, Little Calumet River	0/1 1 0/9	2/10 0/9	0/9	0/10	0/9	0/8	0/7	0/3
54 Joe Orr Road, Thorn Creek 97 170th Street, Thorn Creek	0/11	0/9	0/11	0/11	0/11	0/11	0/11 2/10	0/10 2/10
57 Ashland Avenue, Little Calumet River	0/10	1/9 0/11	1/10 0/12	0/11 0/11	2/11 0/11	3/11 0/12	0/12	0/12
58 Ashland Avenue, Calumet-Sag Channel	0/10 0/10	0/10	0/11	0/11	0/11	0/12	0/12	0/11
Cicero Avenue, Calumet-Sag ChannelRoute 83, Calumet-Sag Channel	0/11	0/10	0/10	0/11	0/11	0/11	0/10	0/11
Des Plaines River System					044	0/11	0/11	0/10
90 Route 19 Poplar Creek	0/10	0/11	0/11 ND	0/11 ND	0/12 ND	0/11 ND	0/11 ND	0/10 0/1
63 I ongmeadow Lane. West Branch DuPage River	ND 0/12	ND 0/12	ND 0/12	ND 0/12	0/12	0/12	0/11	0/11
89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River	0/6	0/12	0/12	0/12	0/12	0/12	0/12	0/12
70 Higgins Road, Salt Creek	0/8	0/8	0/9 0/12	0/10 0/12	0/9 0/12	0/9 0/12	0/11 0/12	0/9 0/12
80 Arlington Heights Road, Salt Creek	0/12 0/10	0/12 0/11	0/12	0/12	0/12	0/12	0/12	0/12
18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek	0/10	0/12	0/12	0/11	0/12	0/12	0/11	0/12 0/10
109 Brookfield Avenue, Salt Creek	0/11 ND	0/11	0/11 ND	0/11 ND	0/12 ND	0/12 ND	0/11 ND	ND
21 First Avenue, Salt Creek	ND 0/1	ND 0/4	0/5	0/5	0 <i>1</i> 7	0/4	0/6	0/5
77 Elmhurst Road, Higgins Creek 78 Wille Road, Higgins Creek	0/9	0/12	0/12	1/12	0/12	0/12	0/11 0/7	1/12 0/8
12 Lake-Cook Road, Buffalo Creek	0/7	0/9 0/12	0/11 0/12	0/9 0/12	0/9 0/12	0/7 0/12	0/11	0/12
13 Lake-Cook Road, Des Plaines River	0/11 0/11	0/12	0/12	0/11	0/12	0/12	0/11	0/10
17 Oakton Street, Des Plaines River 19 Belmont Avenue, Des Plaines River	0/11	0/12	0/12	0/11	0/12	0/12	0/11	0/12 0/7
20 Roosevelt Road, Des Plaines River	0/11	0/11 0/11	0/12 0/11	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/5
 Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River 	0/12 0/11	0/11	0/11	0/11	0/12	0/12	0/11	0/10
77 Willow Springs ROAD LIES Plaines RIVEL			0/12	0/11	0/12	0/12	0/11	0/11
20 Stanhan Street Des Plaines Kiver	0/12	0/11						0/12
29 Stephen Street, Des Plaines River 91 Material Service Road, Des Plaines River 110 Springinsguth Road, West Branch DuPage River	0/12 0/12 0/8	0/11 0/12 0/9	0/12 0/12 0/11	0/11 0/11	0/12 0/11	0/12 0/11	0/11 0/10	0/12 ND

TABLE AII-15: FECAL COLIFORM VIOLATION HISTORY 2003 THROUGH 2010

		Ratio of Violations/Sampling Frequency per Year									
Samp	oling Station (No. Name)	10	09	08	07	06	05	04	03		
Chica	ago River System										
30	Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND 8/8	ND 3/3		
	Dundee Road, West Fork North Branch Chicago River	9/10 6/10	11/11 8/11	10/11 9/10	3/4 8/11	4/5 8/12	3/4 8/10	7/10	3/3 8/8		
103 31	Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch	6/9	5/10	9/10	7/10	10/11	5/10	7/10	6/9		
104	Glenview Road, North Branch Chicago River	2/9	6/12	7/12	7/11	7/12	9/12 7/11	11/12 9/10	2/3 7/9		
32	Lake-Cook Road, Skokie River	4/9 2/12	6/10 3/12	6/10 1/12	10/10 1/11	5/12 1/12	2/12	1/12	5/12		
105 34	Frontage Road, Skokie River Dempster Street, North Branch Chicago River	6/8	6/12	9/11	7/11	11/12	9/11	11/12	10/11		
96	Albany Avenue, North Branch Chicago River	7/11	7/12	8/12	6/11 1/9	10/12 2/9	9/11 1/8	9/11 5/9	10/10 3/9		
	Central Street, North Shore Channel Oakton Street, North Shore Channel	2/8 6/11	1/9 4/11	2/9 8/11	8/12	9/12	7/12	9/12	6/10		
36	Touhy Avenue, North Shore Channel	NA	NA	NA	NA	NA	NA	NA	NA NA		
101	Foster Avenue, North Shore Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		
37 73	Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River	NA NA	NA NA	NA	NA	NA	ŇA	NA	NA		
46	Grand Avenue, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA 1/0	NA 2/10		
74	Lake Shore Drive, Chicago River	0/11 3/12	3/9 2/11	2/10 7/12	2/11 2/11	0/11 3/12	2/10 3/12	1/9 2/12	4/12		
100 39	Wells Street, Chicago River Madison Street, South Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA		
108	Loomis Street, South Branch Chicago River Archer Avenue, South Fork South Branch Chicago River	NA	NA	NA	NA	NA	NA NA	NA NA	NA NA		
99	Archer Avenue, South Fork South Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA		
107	Damen Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA		
75	Cicero Avenue, Chicago Sanitary & Ship Canal	ŅA	ŅĄ	NA	NA NA	NA NA	NA NA	NA NA	NA NA		
41	Harlem Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA	NA		
42 48	Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	ŅA		
82	Lockport Trebler, Chicago Sanitary & Ship Canal	NA	NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA		
92	Lockport Forebay, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	IVA	14/14	147.		
	met River System	016	0.07	0.60	0/10	0/11	0/11	0/10	0/12		
49	Ewing Avenue, Calumet River	0/6 0/11	0/7 0/10	0/9 0/12	0/10 2/11	0/11	2/12	1/12	0/12		
50 55	Burnham Avenue, Wolf Lake 130th Street, Calumet River	1/10	0/9	1/9	1/10	1/11	0/11	0/11	2/10		
51	IHB Railroad Bridge, Grand Calumet River	NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		
86	Burnham Avenue, Grand Calumet River Indiana Avenue, Little Calumet River	NA NA	NA NA	NA NA	NA	NA	NA	ΝA	NA		
56 76	Halsted Street, Little Calumet River	NA	NA	NA	NA	NA	NA	NA 8/0	NA 9/10		
52	Wentworth Avenue, Little Calumet River	11/11	10/10 9/9	8/10 8/9	10/11 8/10	10/11 9/9	10/11 8/8	8/9 5/7	2/3		
54 97	Joe Orr Road, Thorn Creek 170th Street, Thorn Creek	7/9 7/11	6/9	10/11	7/11	8/11	11/11	10/11	7/10		
57	Ashland Avenue, Little Calumet River	7/10	4/9	9/10	10/11	6/11	10/11	9/10	10/10		
58	Ashland Avenue, Calumet-Sag Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		
59 43	Cicero Avenue, Calumet-Sag Channel Route 83, Calumet-Sag Channel	NA NA	NA	NA	NA	NA	NA	NA	NA		
	Plaines River System	1/10	2/11	2/11	4/11	5/12	5/11	1/11	4/10		
90 63	Route 19, Poplar Creek Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	1/1		
89	Walnut Lane, West Branch DuPage River	7/12	7/12	8/12	8/12	7/12	10/12	7/11 7/12	9/11 9/12		
64	Lake Street, West Branch DuPage River	4/6 2/8	7/12	8/12 1/9	9/12 6/10	10/12 3/9	10/12 3/9	1/11	4/9		
79 80	Arlington Heights Road, Salt Creek	4/12	1/8 3/12	5/12	5/12	6/12	6/12	6/12	7/12		
18	Devon Avenue, Salt Creek	6/10	5/11	7/12	7/12	10/12 9/12	9/12 9/12	9/12 5/11	12/12 9/12		
24 109	Wolf Road, Salt Creek Brookfield Avenue, Salt Creek	5/10 6/11	7/12 7/11	4/12 6/11	6/11 8/11	10/12	10/12	9/1 i	10/10		
21	First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND		
77	Elmhurst Road, Higgins Creek	0/1 5/0	3/4 7/12	3/5 6/12	5/5 9/12	7/7 7/12	3/4 5/12	4/6 5/11	5/5 8/12		
	Wille Road, Higgins Creek Lake-Cook Road, Buffalo Creek	5/9 1/7	2/9	3/11	4/9	3/9	3/7	2/7	5/8		
12 13	Lake-Cook Road, Des Plaines River	3/11	2/9 2/12	5/12	6/12	4/12	6/12	2/11	6/12		
17	Oakton Street, Des Plaines River	4/11	2/11 4/12	6/11 5/12	4/11 5/11	7/12 8/12	7/12 7/11	5/11 5/11	5/10 8/12		
19 20	Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River	4/11 2/11	6/11	7/12	7/11	10/12	8/12	6/11	4/7		
20	Ogden Avenue, Des Plaines River	5/12	3/11	5/11	4/11	11/12	10/12	8/11	4/5		
23	Willow Springs Road, Des Plaines River	4/11	2/11	2/11	5/11	8/12	6/12	4/11 3/11	8/10 7/11		
29	Stephen Street, Des Plaines River	2/12 0/12	1/11 1/12	3/12 2/12	3/11 4/11	6/12 6/12	5/12 5/12	2/11	9/12		
91 110	Material Service Road, Des Plaines River Springinsguth Road, West Branch DuPage River	7/8	8/9	9/11	9/10	11/11	9/11	8/10	ND		

NA = Not Applicable. ND = No Data.

TABLE AII-16: GROSS BETA RADIOACTIVITY VIOLATION HISTORY 2003 THROUGH 2010

	Ratio of Violations/Sampling Frequency per Year								
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	
Chicago River System									
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	
	0/10	0/11	0/11	0/4	0/5	0/4	0/8	0/3	
103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch	0/10	0/11	0/10	0/11	0/12	0/10	0/10	0/8	
	0/9	0/10	0/10	0/10	0/11	0/10	0/10	0/9	
104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River	0/9	0/12	0/12	0/11	0/12	0/12	0/12	0/3	
	0/9	0/10	0/10	0/10	0/12	0/11	0/10	0/9	
105 Frontage Road, Skokie River 34 Dempster Street, North Branch Chicago River	0/12	0/12	0/12	0/11	0/12	0/12	0/12	0/12	
	0/8	0/12	0/11	0/11	0/12	0/11	0/12	0/11	
96 Albany Avenue, North Branch Chicago River	0/11	0/12	0/12	0/11	0/12	0/11	0/10	0/9	
35 Central Street, North Shore Channel	0/8	0/9	0/9	0/9	0/9	0/8	0/9	0/9	
102 Oakton Street, North Shore Channel 36 Touhy Avenue, North Shore Channel	0/10	0/11	0/11	0/12	0/12	0/12	0/12	0/9	
	NA	NA	NA	NA	NA	NA	NA	NA	
101 Foster Avenue, North Shore Channel 37 Wilson Avenue, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA	
	NA	NA	NA	NA	NA	NA	NA	NA	
73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA 0/9	
74 Lake Shore Drive, Chicago River 100 Wells Street, Chicago River	0/11	0/9	0/10	0/11	0/11	0/10	0/9	0/11	
	0/12	0/11	0/12	0/11	0/12	0/12	0/12	NA	
39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA NA	NA NA NA	NA NA	
99 Archer Avenue, South Fork South Branch Chicago River 40 Damen Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA NA	NA NA	NA NA	NA NA	
107 Western Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA	NA NA	NA NA	NA NA	
Harlem Avenue, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal Chicago Sanitary & Ship Canal	NA NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	
48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal	NA NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	
92 Lockport Forebay, Chicago Sanitary & Ship Canal Calumet River System		INA	NA.	IIA	11/3	142 \$	1171	• •• •	
49 Ewing Avenue, Calumet River	0/6	0/6	0/9	0/10	0/11	0/11	0/10	0/10	
50 Burnham Avenue, Wolf Lake	0/10	0/10	0/12	0/11	0/11	0/12	0/12	0/10	
55 130th Street, Calumet River	0/10	0/9	0/ 9	0/10	0/11	0/11	0/11	0/8	
51 IHB Railroad Bridge, Grand Calumet River 86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA	
	NA	NA	NA	NA	NA	NA	NA	NA	
 Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River 	NA	NA	NA	NA	NA	NA	NA	NA	
	NA	NA	NA	NA	NA	NA	NA	NA	
52 Wentworth Avenue, Little Calumet River	0/11	0/10	0/10	0/11	0/11	0/11	0/9	0/8	
54 Joe Orr Road, Thorn Creek	0/9	0/9	0/9	0/10	0/9	0/8	0/7	0/1	
97 170th Street, Thorn Creek	0/11	0/9	0/11	0/11	0/11	0/11	0/11	0/7	
57 Ashland Avenue, Little Calumet River	0/9	0/8	0/10	0/11	0/11	0/11	0/10	0/8	
58 Ashland Avenue, Calumet-Sag Channel 59 Cicero Avenue, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA	
	NA	NA	NA	NA	NA	NA	NA	NA	
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA	
Des Plaines River System 90 Route 19, Poplar Creek	0/10	0/11	0/11	0/11	0/12	0/11	0/11	0/10	
63 Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	0/1	
89 Walnut Lane, West Branch DuPage River	0/12	0/12	0/12	0/12	0/12	0/12	0/11	0/11	
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	0/6	0/12	0/12	0/12	0/12	0/12	0/12	0/12	
	0/8	0/8	0/9	0/10	0/9	0/9	0/11	0/9	
80 Arlington Heights Road, Salt Creek	0/12	0/12	0/12	0/12	0/12	0/12	0/12	0/12	
18 Devon Avenue, Salt Creek	0/10	0/10	0/12	0/12	0/12	0/12	0/12	0/12	
24 Wolf Road, Salt Creek	0/10	0/12	0/12	0/11	0/12	0/12	0/11	0/12	
109 Brookfield Avenue, Salt Creek	0/11	0/11	0/11	0/11	0/12	0/12	0/11	0/10	
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND	
	0/1	0/4	0/5	0/5	0/7	0/4	0/6	0/5	
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	0/9	0/11	0/12	0/12	0/12	0/12	0/11	0/12	
	0/7	0/9	0/11	0/9	0/9	0/7	0/7	0/8	
13 Lake-Cook Road, Des Plaines River	0/11	0/12	0/12	0/12	0/12	0/12	0/11	0/12	
17 Oakton Street, Des Plaines River	0/11	0/11	0/11	0/11	0/12	0/12	0/11	0/10	
19 Belmont Avenue, Des Plaines River	0/10	0/12	0/12 0/12	0/11 0/11 0/11	0/12 0/12 0/12	0/12 0/12 0/12	0/11 0/11 0/11	0/10 0/12 0/7	
20 Roosevelt Road, Des Plaines River 22 Ogden Avenue, Des Plaines River 23 River Briver	0/11 0/12	0/11 0/11	0/11	0/11	0/12	0/12	0/11	0/7 0/5 0/10	
23 Willow Springs Road, Des Plaines River	0/11	0/11	0/11	0/11	0/12	0/12	0/11	0/11	
29 Stephen Street, Des Plaines River	0/12	0/11	0/12	0/11	0/12	0/12	0/11		
91 Material Service Road, Des Plaines River	0/12	0/12	0/12	0/11	0/11	0/12	0/11	0/12	
110 Springinsguth Road, West Branch DuPage River	0/7	0/8	0/11	0/10	0/11	0/11	0/10	ND	

NA = Not Applicable. ND = No Data.

TABLE AII-17: BENZENE VIOLATION HISTORY 2003 THROUGH 2010 (HUMAN HEALTH STANDARD) 1

	Rat	io of V	iolation	ns/Sam	pling F	requenc	cy per Y	/ear
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System								
30 Lake-Cook Road, West Fork North Branch	NA	NA	NA	NA	NA	NA	NA	NA
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	0/5	0/6	0/5	0/2	0/2	0/8	0/7	0/4
103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch	0/5 0/4	0/6 0/5	0/4 0/4	0/ 5 0/4	0/4 0/4	0/4 0/5	0/3 0/3	0/3 0/3
104 Glenview Road, North Branch Chicago River	0/5	0/6	0/6	0/5	0/4	0/5	0/4	0/1
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River	0/4 0/6	0/ 5 0/ 6	0/4 0/6	0/4 0/ 5	0/4 0/4	0/5 0/5	0/3 0/4	0/3 0/4
34 Dempster Street, North Branch Chicago River	0/4	0/6	0/5	0/5	0/3	0/5	0/4	0/4
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	0/6 0/3	0/ 6 0/4	0/6 0/4	0/5 0/4	0/4 0/3	0/ 5 0/4	0/8 0/3	0/4 0/3
102 Oakton Street, North Shore Channel	0/5	0/6	0/5	0/6	0/4	0/5	0/4	0/3
36 Touhy Avenue, North Shore Channel 101 Foster Avenue, North Shore Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
37 Wilson Avenue, North Branch Chicago River	NA	NA	NA	NA	NA	NA	ŇĀ	NA
73 Diversey Parkway, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA NA
46 Grand Avenue, North Branch Chicago River 74 Lake Shore Drive, Chicago River	NA 0/5	NA 0/4	NA 0/5	NA 0/ 5	NA 0/3	NA 0/5	NA 0/3	NA 0/3
100 Wells Street, Chicago River	0/6	0/5	0/6	0/5	0/3	0/6	0/4	0/4
39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
99 Archer Avenue, South Fork South Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
40 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
75 Cicero Avenue, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal	NA NA	NA	NA	NA	NA	NA	NA	NA NA
48 Stephen Street, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
82 Lockport Trebler, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
. ,, ,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	NA	NA	NA	NA	NA	NA	NA	NA
Calumet River System	0.11	0.14	o		0.14	0.4	0.14	0.45
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	0/4 0/6	0/4 0/5	0/5 0/6	0/ 6 0/ 6	0/4 0/4	0/ 5 0/ 6	0/4 0/4	0/ 5 0/ 4
55 130th Street, Calumet River	0/6	0/5	0/4	0/6	0/4	0/5	0/4	0/4
51 IHB Railroad Bridge, Grand Calumet River 86 Burnham Avenue, Grand Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
56 Indiana Avenue, Little Calumet River	NA	NA	NA NA	NA NA	NA	NA	NA	NA
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River	NA 0/6	NA 0/5	NA O/5	NA OK	NA 0/4	NA 0/5	NA	NA 0/3
54 Joe Orr Road, Thorn Creek 97 170th Street, Thorn Creek	0/6	0/4	0/5 0/4	0/ 6 0/ 5	0/4	0/4	0/2 0/3	NA
	0/6	0/5	0/6	0/6	0/4	0/6	0/3	0/3
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	0/5 NA	0/5 NA	0/5 NA	0/6 NA	0/4 NA	0/5 NA	0/2 NA	0/4 NA
59 Cicero Avenue, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System				-				
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	0/5 NA	0/5 NA	0/5 NA	0/6 NA	0/4 NA	0/5 NA	0/4 NA	0/3 0/1
89 Walnut Lane, West Branch DuPage River	0/6	0/6	0/6	0/6	0/4	0/6	0/4	0/4
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	0/3	0/6	0/6	0/6	0/4	0/6	0/4	0/4
80 Arlington Heights Road, Salt Creek	0/4 0/6	0/4 0/6	0/4 0/6	0/ 5 0/5	0/3 0/4	0/4 0/ 6	0/4 0/4	0/3 0/4
18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek	0/4	0/5	0/6	0/6	0/4	0/6	0/4	0/4
24 Wolf Road, Salt Creek 109 Brookfield Avenue, Salt Creek	0/5 0/6	0/ 6 0/ 5	0/6 0/5	0/5 0/5	0/4 0/4	0/ 6 NA	0/4 NA	0/4 NA
21 First Avenue, Salt Creek	NA	NA	NA	NA	NA	NA	NA	NA
77 Elmhurst Road, Higgins Creek 78 Wille Road, Higgins Creek	0/1 0/4	0/2 0/6	0/2 0/6	0/4 0/ 6	0/1 0/4	0/3 0/5	0/3 0/3	0/3 0/4
12 Lake-Cook Road, Buffalo Creek	0/4	0/4	0/6	0/5	0/2	0/3	0/3	0/2
13 Lake-Cook Road, Des Plaines River 17 Oakton Street, Des Plaines River	0/5 0/6	0/6 0/5	0/6 0/5	0/6 0/5	0/4 0/4	0/ 6 0/ 6	0/4 0/4	0/4 0/3
19 Belmont Avenue, Des Plaines River	0/6	0/6	0/6	0/5	0/4	0/6	0/4	0/4
20 Roosevelt Road, Des Plaines River	0/6	0/5	0/6	0/5	0/4	0/6	0/4	0/2
22 Ogden Avenue, Des Plaines River 23 Willow Springs Road, Des Plaines River	0/6 0/6	0/ 5 0/ 5	0/5 0/5	0/5 0/5	0/4 0/4	0/ 6 0/ 6	0/4 0/4	0/ 1 0/3
29 Stephen Street, Des Plaines River	0/6	0/5	0/6	0/5	0/4	0/6	0/4	0/3
91 Material Service Road, Des Plaines River 110 Springinsguth Road, West Branch DuPage River	0/6 0/4	0/6 0/5	0/6 0/5	0/ 5 0/4	0/4 0/4	0/6 0/5	0/4 0/4	0/4 NA
	VI 7	013	013	V/-T	U/ -	0,5	017	1471

¹Human Health Standard in General Use Waters became effective in December 2002. NA = Not Applicable.

TABLE AII-18: BENZENE VIOLATION HISTORY 2003 THROUGH 2010¹

		Ra	tio of V	iolation	ıs/Sam	pling F	requenc	y per \	(ear
San	npling Station (No. Name)	10	09	08	07	06	05	04	03
Chi	cago River System								
30	Lake-Cook Road, West Fork North Branch	NA	NA	NA	NA	NA	NA	NA	NA
106	Dundee Road, West Fork North Branch Chicago River	0/5	0/6	0/5	0/2	0/2	0/8	0/7	0/4
103 31	Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch	0/5 0/4	0/6 0/ 5	0/4 0/4	0/5 0/4	0/4 0/4	0/4 0/ 5	0/3 0/3	0/3 0/3
104	Glenview Road, North Branch Chicago River	0/5	0/6	0/6	0/5	0/4	0/5	0/4	0/1
32	Lake-Cook Road, Skokie River	0/4	0/5	0/4	0/4	0/4	0/5	0/3	0/3
105 34	Frontage Road, Skokie River Dempster Street, North Branch Chicago River	0/6 0/4	0/6 0/ 6	0/6 0/5	0/5 0/5	0/4 0/3	0/5 0/5	0/4 0/4	0/4 0/4
96	Albany Avenue, North Branch Chicago River	0/6	0/6	0/6	0/5	0/4	0/5	0/8	0/4
35	Central Street, North Shore Channel	0/3	0/4	0/4	0/4	0/3	0/4	0/3	0/3
102 36	Oakton Street, North Shore Channel Touhy Avenue, North Shore Channel	0/5 NA	0/6 NA	0/5 NA	0/6 NA	0/4 NA	0/5 NA	0/4 NA	0/3 NA
101	Foster Avenue, North Shore Channel	NA	NA	NA	NA	NA	NA	ŇA	NA
37 73	Wilson Avenue, North Branch Chicago River	NA NA	NA	NA	NA	NA	NA	NA	NA
46	Diversey Parkway, North Branch Chicago River Grand Avenue, North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
74	Lake Shore Drive, Chicago River	0/5	0/4	0/5	0/5	0/3	0/5	0/3	0/3
100	Wells Street, Chicago River	0/6	0/5	0/6	0/5	0/3	0/6	0/4	0/4
39 108	Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
99	Archer Avenue, South Fork South Branch Chicago River	NA	NA	NA	NA	NA	ŇΑ	NA	NA
40	Damen Avenue, Chicago Sanitary & Ship Canal	NA NA	NA	NA	NA	NA	NA	NA	NA
107 75	Western Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
41	Harlem Avenue, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
42 48	Route 83, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
82	Stephen Street, Chicago Sanitary & Ship Canal Lockport Trebler, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
92	Lockport Forebay, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
	umet River System								
49	Ewing Avenue, Calumet River	0/4	0/4	0/5	0/6	0/4	0/5	0/4	0/5
50 55	Burnham Avenue, Wolf Lake 130th Street, Calumet River	0/6 0/6	0/5 0/5	0/6 0/4	0/6 0/6	0/4 0/4	0/6 0/5	0/4 0/4	0/4 0/4
51	IHB Railroad Bridge, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
86	Burnham Avenue, Grand Calumet River	NA	ŅA	NA	NA	NA	NA	NA	ŅĄ
56 76	Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
52	Wentworth Avenue, Little Calumet River	0/6	0/5	0/5	0/6	0/4	0/5	0/2	0/3
54	Joe Orr Road, Thorn Creek	0/6	0/4	0/4	0/5	0/3	0/4	0/3	NA
97 57	170th Street, Thorn Creek Ashland Avenue, Little Calumet River	0/6 0/5	0/5 0/5	0/6 0/5	0/ 6 0/ 6	0/4 0/4	0/6 0/5	0/3 0/2	0/3 0/4
58	Ashland Avenue, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
59 43	Cicero Avenue, Calumet-Sag Channel Route 83, Calumet-Sag Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
	Plaines River System	INA	IVA	14/4	NA	IVA	MA	INA	IVA
90	Route 19, Poplar Creek	0/5	0/5	0/5	0/6	0/4	0/5	0/4	0/3
63	Longmeadow Lane, West Branch DuPage River	NA	NA	NA	NA	NA.	NA	NA	0/1
89	Walnut Lane, West Branch DuPage River	0/6	0/6	0/6	0/6	0/4	0/6	0/4	0/4
64 79	Lake Street, West Branch DuPage River Higgins Road, Salt Creek	0/3 0/4	0/6 0/4	0/6 0/4	0/6 0/5	0/4 0/3	0/6 0/4	0/4 0/4	0/4 0/3
80	Arlington Heights Road, Salt Creek	0/6	0/6	0/6	0/5	0/4	0/6	0/4	0/4
18 24	Devon Avenue, Salt Creek Wolf Road, Salt Creek	0/4	0/5	0/6	0/6	0/4	0/6	0/4	0/4
109	Brookfield Avenue, Salt Creek	0/5 0/6	0/6 0/ 5	0/6 0/5	0/5 0/5	0/4 · 0/4	0/6 NA	0/4 NA	0/4 NA
21 77	First Avenue, Salt Creek	NA	NA	NA	NA	NA	NA	NA	NA
77 78	Elmhurst Road, Higgins Creek Wille Road, Higgins Creek	0/1 0/4	0/2 0/6	0/2 0/6	0/4 0/ 6	0/1 0/4	0/3 0/5	0/3	0/3 0/4
12	Wille Road, Higgins Creek Lake-Cook Road, Buffalo Creek	0/4	0/ 6 0/4	0/6	0/6	0/4	0/3	0/3 0/3	0/4
13	Lake-Cook Road, Des Plaines River	0/5	0/6	0/6	0/6	0/4	0/6	0/4	0/4
17 19	Oakton Street, Des Plaines River Belmont Avenue, Des Plaines River	0/6 0/6	0/5 0/6	0/5 0/6	0/ 5 0/ 5	0/4 0/4	0/6 0/6	0/4 0/4	0/3 0/4
20	Roosevelt Road, Des Plaines River	0/ 6	0/5	0/6	0/3 0/ 5	0/4	0/6 0/6	0/4	0/4
22	Ogden Avenue, Des Plaines River	0/6	0/5	0/5	0/5	0/4	0/6	0/4	0/1
23 29	Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River	0/6	0/5 0/5	0/5	0/5 0/5	0/4	0/6	0/4	0/3
4.7		0/6		0/6		0/4	0/6	0/4	0/3 0/4
91	Material Service Road, Des Plaines River	0/6	0/6	0/6	0/5	0/4	0/6	0/4	()/4

¹Based on General Use Water quality standards. NA = Not Applicable.

TABLE AII-19: ETHYLBENZENE VIOLATION HISTORY 2003 THROUGH 2010

	Ratio of Violations/Sampling Frequency per Year									
Sampling Station (No. Name)	10	09	08	07	06	05	04	03		
Chicago River System										
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND		
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	0/5 0/5	0/6 0/6	0/5 0/4	0/2 0/5	0/2 0/4	0/8 0/4	0/7 0/3	0/4 0/3		
31 Lake-Cook Road, Middle Fork North Branch	0/4	0/5	0/4	0/4	0/4	0/5	0/3	0/3		
104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River	0/5	0/6	0/6	0/5 0/4	0/4 0/4	0/5 0/5	0/4 0/3	0/1 0/3		
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River	0/4 0/6	0/5 0/6	0/4 0/6	0/5	0/4	0/5	0/3	0/4		
34 Dempster Street, North Branch Chicago River	0/4	0/6	0/5	0/5 0/5	0/3 0/4	0/ 5 0/ 5	0/4 0/8	0/4 0/4		
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	0/6 0/3	0/6 0/4	0/6 0/4	0/3	0/4	0/3	0/3	0/3		
102 Oakton Street, North Shore Channel	0/5	0/6	0/5	0/6	0/4	0/5	0/4	0/3		
36 Touhy Avenue, North Shore Channel 101 Foster Avenue, North Shore Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		
37 Wilson Avenue, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA		
73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		
46 Grand Avenue, North Branch Chicago River 74 Lake Shore Drive, Chicago River	0/5	0/4	0/5	0/5	0/3	0/5	0/3	0/3		
100 Wells Street, Chicago River	0/6	0/5	0/6	0/5	0/3	0/6	0/4	0/4 NA		
39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA		
99 Archer Avenue, South Fork South Branch Chicago River	NA	NA	NA	NA	ŅA	NA	NA	NA		
40 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		
75 Cicero Avenue, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA		
41 Harlem Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA	NA	NA	NA	NA	NA		
82 Lockport Trebler, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA NA	NA NA	NA NA		
92 Lockport Forebay, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA		
Calumet River System	044	044	0/5	ΛK	0/4	0/5	0/4	0/5		
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	0/4 0/6	0/4 0/5	0/5 0/6	0/6 0/6	0/4	0/6	0/4	0/4		
55 130th Street, Calumet River	0/6	0/5	0/4	0/6	0/4	0/5	0/4	0/4		
51 IHB Railroad Bridge, Grand Calumet River 86 Burnham Avenue, Grand Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		
56 Indiana Avenue, Little Calumet River 76 Halsted Street, Little Calumet River	NA	NA	NA	NA	NA	NA	NA	NA		
	NA 0/6	NA 0/5	NA 0/5	NA 0/6	NA 0/4	NA 0/5	NA 0/2	NA 0/3		
54 Joe Orr Road, Thorn Creek	0/6	0/4	0/4	0/5	0/3	0/4	0/3	ND		
97 170th Street, Thorn Creek	0/6	0/5	0/6	0/6	0/4	0/6	0/3 0/2	0/3 0/4		
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	0/5 NA	0/5 NA	0/5 NA	0/6 NA	0/4 N A	0/5 NA	NA	NA		
59 Cicero Avenue, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA		
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA		
Des Plaines River System			~ · =		0.14	0.45	044	0.00		
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	0/5 ND	0/5 ND	0/5 ND	0/6 ND	0/4 ND	0/5 ND	0/4 ND	0/3 0/1		
89 Walnut Lane, West Branch DuPage River	0/6	0/6	0/6	0/6	0/4	0/6	0/4	0/4		
64 Lake Street, West Branch DuPage River	0/3	0/6	0/6	0/6	0/4 0/3	0/6	0/4 0/4	0/4 0/3		
79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek	0/4 0/6	0/4 0/6	0/4 0/6	0/5 0/5	0/4	0/4 0/6	0/4	0/4		
18 Devon Avenue, Salt Creek	0/4	0/5	0/6	0/6	0/4	0/6	0/4	0/4		
24 Wolf Road, Salt Creek 109 Brookfield Avenue, Salt Creek	0/5 0/6	0/6 0/5	0/6 0/5	0/5 0/5	0/4 0/4	0/6 ND	0/4 ND	0/4 ND		
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND		
77 Elmhurst Road, Higgins Creek 78 Wille Road, Higgins Creek	0/1 0/4	0/2 0/6	0/2 0/6	0/4 0/6	0/1 0/4	0/3 0/5	0/3 0/3	0/3 0/4		
12 Lake-Cook Road, Buffalo Creek	0/4	0/4	0/6	0/5	0/2	0/3	0/3	0/2		
13 Lake-Cook Road, Des Plaines River	0/5 0/6	0/6 0/5	0/6 0/5	0/6 0/5	0/4 0/4	0/6 0/6	0/4 0/4	0/4 0/3		
 17 Oakton Street, Des Plaines River 19 Belmont Avenue, Des Plaines River 	0/6	0/6	0/5 0/6	0/5 0/5	0/4	0/6	0/4	0/4		
20 Roosevelt Road, Des Plaines River	0/6	0/5	0/6	0/5	0/4	0/6	0/4	0/2		
 Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River 	0/6 0/6	0/5 0/5	0/5 0/5	0/5 0/5	0/4 0/4	0/6 0/6	0/4 0/4	0/1 0/3		
29 Stephen Street, Des Plaines River	0/6	0/5	0/6	0/5	0/4	0/6	0/4	0/3		
91 Material Service Road, Des Plaines River	0/6 0/4	0/6 0/ 5	0/6 0/5	0/5 0/4	0/4 0/4	0/6 0/5	0/4 0/4	0/4 ND		
110 Springinsguth Road, West Branch DuPage River	0/4	درن	013	0/4			U/4	110		

NA = Not Applicable. ND = No Data.

TABLE AII-20: TOLUENE VIOLATION HISTORY 2003 THROUGH 2010

	Ratio of Violations/Sampling Frequency per Year								
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	
Chicago River System									
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River 106 Albany Avenue, North Branch Chicago River 107 Albany Avenue, North Branch Chicago River 108 Central Street, North Shore Channel 109 Oakton Street, North Shore Channel 100 Cakton Street, North Shore Channel 101 Foster Avenue, North Shore Channel 102 Oakton Street, North Shore Channel 103 Wilson Avenue, North Branch Chicago River 104 Grand Avenue, North Branch Chicago River 105 Grand Avenue, North Branch Chicago River 106 Wells Street, Chicago River 107 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River 109 Archer Avenue, South Fork South Branch Chicago River 109 Archer Avenue, South Fork South Branch Chicago River 100 Western Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal 107 Cicero Avenue, Chicago Sanitary & Ship Canal	ND 0/5 0/5 0/4 0/5 0/4 0/6 0/3 0/5 NA NA NA NA NA NA	ND 0/6 0/6 0/5 0/6 0/6 0/6 0/6 NA NA NA NA NA NA NA	ND 0/5 0/4 0/4 0/6 0/5 0/5 NA NA NA NA NA NA NA	ND 0/2 0/5 0/4 0/5 0/5 0/5 0/6 NA NA NA NA NA NA NA	ND 0/2 0/4 0/4 0/4 0/4 0/3 0/3 0/4 NA NA NA NA NA NA NA	ND 0/8 0/4 0/5 0/5 0/5 0/5 0/5 0/5 NA NA NA NA NA NA	ND 0/7 0/3 0/3 0/4 0/4 0/4 0/3 0/4 NA NA NA NA NA NA	ND 0/4 0/3 0/3 0/1 0/4 0/4 0/4 0/3 0/3 NA NA NA NA NA NA NA	
41 Harlem Avenue, Chicago Sanitary & Ship Canal	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	
 42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal 	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	
Calumet River System	044	044	0.15	046	044	0.5	044	015	
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake 51 130th Street, Calumet River 51 IHB Railroad Bridge, Grand Calumet River 86 Burnham Avenue, Grand Calumet River 87 Indiana Avenue, Little Calumet River 88 Halsted Street, Little Calumet River 89 Uentworth Avenue, Little Calumet River 90 Orr Road, Thorn Creek 91 Toth Street, Thorn Creek 92 Ashland Avenue, Little Calumet River 93 Ashland Avenue, Calumet-Sag Channel 94 Route 83, Calumet-Sag Channel 95 Cicero Avenue, Calumet-Sag Channel 96 Route 83, Calumet-Sag Channel	0/4 0/6 NA NA NA NA 0/6 0/6 0/5 NA NA	0/4 0/5 0/5 NA NA NA 0/5 0/4 0/5 0/5 NA NA	0/5 0/6 0/4 NA NA NA 0/5 0/4 0/6 0/5 NA NA	0/6 0/6 0/6 NA NA NA 0/6 0/5 0/6 0/6 NA NA	0/4 0/4 0/4 NA NA NA 0/4 0/3 0/4 0/4 NA NA	0/5 0/6 0/5 NA NA NA 0/5 0/4 0/6 0/5 NA NA	0/4 0/4 0/4 NA NA NA 0/2 0/3 0/3 0/2 NA NA	0/5 0/4 0/4 NA NA NA 0/3 ND 0/3 0/4 NA	
Des Plaines River System									
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek 118 Devon Avenue, Salt Creek 129 Brookfield Avenue, Salt Creek 109 Brookfield Avenue, Salt Creek 117 Elmhurst Road, Higgins Creek 120 Wille Road, Higgins Creek 13 Lake-Cook Road, Buffalo Creek 14 Lake-Cook Road, Des Plaines River	0/5 ND 0/6 0/3 0/4 0/6 0/4 0/5 0/6 ND 0/1 0/4 0/4	0/5 ND 0/6 0/6 0/6 0/5 0/5 ND 0/5 ND 0/2 0/6 0/4	0/5 ND 0/6 0/6 0/6 0/6 0/6 0/5 ND 0/2 0/6 0/6	0/6 ND 0/6 0/5 0/5 0/5 0/5 ND 0/5 ND 0/6 0/5	0/4 ND 0/4 0/4 0/3 0/4 0/4 0/4 ND 0/1 0/4 0/2 0/4	0/5 ND 0/6 0/6 0/6 0/6 0/6 ND 0/3 0/5 0/3	0/4 ND 0/4 0/4 0/4 0/4 ND 0/3 0/3 0/3 0/4	0/3 0/1 0/4 0/4 0/3 0/4 0/4 ND ND 0/3 0/4 0/2	
17 Oakton Street, Des Plaines River 19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River 22 Ogden Avenue, Des Plaines River 23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River 91 Material Service Road, Des Plaines River 110 Springinsguth Road, West Branch DuPage River	0/6 0/6 0/6 0/6 0/6 0/6 0/6 0/6	0/5 0/6 0/5 0/5 0/5 0/5 0/6 0/5	0/5 0/6 0/6 0/5 0/5 0/6 0/6	0/5 0/5 0/5 0/5 0/5 0/5 0/5 0/4	0/4 0/4 0/4 0/4 0/4 0/4 0/4 0/4	0/6 0/6 0/6 0/6 0/6 0/6 0/6 0/5	0/4 0/4 0/4 0/4 0/4 0/4 0/4 0/4	0/3 0/4 0/2 0/1 0/3 0/3 0/4 ND	

NA = Not Applicable. ND = No Data.

TABLE AII-21: XYLENE VIOLATION HISTORY 2003 THROUGH 2010

	Ra	tio of V	iolatio ⁷	ns/Sam	pling F	requenc	y per Y	ear
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System								
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River	ND 0/5	ND 0/6	ND 0/5	ND 0/2	ND 0/2	ND 0/8	ND 0/7	ND 0/4
103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch	0/5 0/4	0/6 0/5	0/4 0/4	0/5 0/4	0/4 0/4	0/4 0/5	0/3 0/3	0/3 0/3
104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River	0/5	0/6	0/6	0/5 0/4	0/4 0/4	0/5 0/5	0/4 0/3	0/1 0/3
105 Frontage Road, Skokie River	0/4 0/6	0/5 0/6	0/4 0/6	0/5	0/4	0/5	0/4	0/4
34 Dempster Street, North Branch Chicago River 96 Albany Avenue, North Branch Chicago River	0/4 0/6	0/6 0/6	0/5 0/6	0/5 0/5	0/3 0/4	0/5 0/5	0/4 0/8	0/4 0/4
35 Central Street, North Shore Channel 102 Oakton Street, North Shore Channel	0/3 0/5	0/4 0/6	0/4 0/5	0/4 0/6	0/3 0/4	0/4 0/5	0/3 0/4	0/3 0/3
36 Touhy Avenue, North Shore Channel	NA	NA	NA	NA	NA	NA	NA	NA
101 Foster Avenue, North Shore Channel 37 Wilson Avenue, North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
74 Lake Shore Drive, Chicago River	0/5	0/4	0/5	0/5	0/3	0/5	0/3	0/3
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River	0/6 NA	0/5 NA	0/6 NA	0/5 NA	0/3 NA	0/6 NA	0/4 NA	0/4 NA
108 Loomis Street, South Branch Chicago River 99 Archer Avenue, South Fork South Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
40 Damen Avenue, Chicago Sanitary & Ship Canal	NA NA	NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA
75 Cicero Avenue, Chicago Sanitary & Ship Canal	NA	NA NA	NA NA	NA	NA	NA	NA	NA
41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
92 Lockport Forebay, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
Calumet River System								
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	0/4 0/6	0/4 0/5	0/5 0/6	0/6 0/6	0/4 0/4	0/5 0/6	0/4 0/4	0/5 0/4
55 130th Street, Calumet River	0/6	0/5	0/4	0/6	0/4	0/5	0/4	0/4
51 IHB Railroad Bridge, Grand Calumet River 86 Burnham Avenue, Grand Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
56 Indiana Avenue, Little Calumet River 76 Halsted Street, Little Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
52 Wentworth Avenue, Little Calumet River	0/6	0/5	0/5	0/6	0/4	0/5	0/2	0/3 ND
54 Joe Orr Road, Thorn Creek 97 170th Street, Thorn Creek	0/6 0/6	0/4 0/5	0/4 0/6	0/ 5 0/ 6	0/3 0/4	0/4 0/6	0/3 0/3	0/3
 57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel 	0/5 NA	0/5 NA	0/5 NA	0/6 NA	0/4 NA	0/5 NA	0/2 NA	0/4 NA
59 Cicero Avenue, Calumet-Sag Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
43 Route 83, Calumet-Sag Channel Des Plaines River System	NA	IVA	IVA	NA	IVA	1474	NA	IVA
90 Route 19, Poplar Creek	0/5	0/5	0/5	0/6	0/4	0/5	0/4	0/3
63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River	ND 0/6	ND 0/6	ND 0/6	ND 0/6	ND 0/4	ND 0/6	ND 0/4	0/1 0/4
64 Lake Street, West Branch DuPage River	0/3	0/6	0/6	0/6	0/4	0/6	0/4	0/4
79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek	0/4 0/6	0/4 0/6	0/4 0/6	0/5 0/5	0/3 0/4	0/4 0/6	0/4 0/4	0/3 0/4
18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek	0/4 0/5	0/5 0/6	0/6 0/6	0/6 0/5	0/4 0/4	0/6 0/6	0/4 0/4	0/4 0/4
109 Brookfield Avenue, Salt Creek	0/6	0/5	0/5	0/5	0/4	ND	ND	ND ND
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	ND 0/1	ND 0/2	ND 0/2	ND 0/4	ND 0/1	ND 0/3	ND 0/3	0/3
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	0/4 0/4	0/6 0/4	0/6 0/6	0/6 0/5	0/4 0/2	0/5 0/3	0/3 0/3	0/4 0/2
13 Lake-Cook Road, Des Plaines River	0/5 0/6	0/6	0/6 0/5	0/6 0/5	0/4 0/4	0/6 0/6	0/4 0/4	0/2 0/4 0/3
19 Belmont Avenue, Des Plaines River	0/6	0/5 0/6	0/6	0/5	0/4	0/6	0/4	0/4
20 Roosevelt Road, Des Plaines River 22 Ogden Avenue, Des Plaines River	0/6 0/6	0/5 0/5	0/6 0/5	0/5 0/5	0/4 0/4	0/6 0/ 6	0/4 0/4	0/2 0/1
23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River	0/6	0/5	0/5	0/5 0/5	0/4 0/4	0/6 0/6	0/4 0/4	0/3 0/3
91 Material Service Road, Des Plaines River	0/6 0/6	0/5 0/6	0/6 0/ 6	0/5	0/4	0/6	0/4	0/4 ND
110 Springinsguth Road, West Branch DuPage River	0/4	0/5	0/5	0/4	0/4	0/5	0/4	ND

NA = Not Applicable. ND = No Data.

TABLE AII-22: TOTAL SILVER VIOLATION HISTORY 2003 THROUGH 2010

	Rat	io of V	iolation	s/Samp	ling Fr	equenc	y per Y	ear
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System								
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
	0/10	0/11	0/11	0/4	0/5	0/4	0/8	0/3
103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch	0/10	0/11	0/10	0/11	0/12	0/10	0/10	0/8
	0/9	0/10	0/10	0/10	0/11	0/10	0/10	0/9
104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River	0/9	0/1 2	0/12	0/11	0/12	0/12	0/12	0/3
	0/9	0/1 0	0/10	0/10	0/12	0/11	0/10	0/9
105 Frontage Road, Skokie River 34 Dempster Street, North Branch Chicago River	0/12	0/12	0/12	0/11	0/12	0/12	0/12	0/12
	0/8	0/12	0/11	0/11	0/12	0/11	0/12	0/11
96 Albany Avenue, North Branch Chicago River	0/11	0/12	0/12	0/11	0/12	0/11	0/11	0/10
35 Central Street, North Shore Channel	0/8	0/9	0/9	0/9	0/9	0/8	0/9	0/9
102 Oakton Street, North Shore Channel	0/11	0/11	0/11	0/12	0/12	0/12	0/12	0/10
	0/11	0/1 0	0/12	0/12	0/12	0/12	0/12	0/12
Touhy Avenue, North Shore Channel Officer Avenue, North Shore Channel	0/12	0/12	0/12	0/12	0/12	0/13	0/12	0/12
	0/12	0/12	0/12	0/12	0/12	0/12	0/12	0/12
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 	0/12	0/12 0/12 0/12	0/12 0/12 0/12	0/12 0/12 0/11	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12
46 Grand Avenue, North Branch Chicago River 74 Lake Shore Drive, Chicago River	0/12 0/11	0/9	0/10	0/11	0/11	0/10 0/12	0/9 0/12	0/10 0/12
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River	0/12 0/12	0/11 0/11	0/12 0/12	0/11 0/11	0/12 0/12	0/12	0/12	0/11 0/11 0/12
108 Loomis Street, South Branch Chicago River 99 Archer Avenue, South Fork South Branch Chicago River	0/11 0/10	0/12 0/11	0/11 0/12	0/12 0/11	0/12 0/7	0/10 0/11	0/11 0/12	0/12
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/12	0/11	0/12	0/12	0/12	0/12	0/12	0/12
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/12	0/12	0/12	0/12	0/13	0/12	0/12	0/12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/9	0/12	0/12	0/12	0/13	0/12	0/12	0/12
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal	0/12	0/10	0/12	0/11	0/13	0/11	0/12	0/12
	0/12	0/10	0/12	0/11	0/13	0/11	0/12	0/12
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/51	0/51	0/51	0/51	0/53	0/52	0/52	0/52
Calumet River System								
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	0/6	0/7	0/9	0/10	0/11	0/11	0/10	0/12
	0/11	0/10	0/12	0/11	0/11	0/12	0/12	0/12
55 130th Street, Calumet River	0/10	0/9	0/9	0/10	0/11	0/11	0/11	0/10
51 IHB Railroad Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River	0/7	0/5	0/10	0/10	0/11	0/10	0/9	0/10
	0/10	0/8	0/9	0/9	0/11	0/9	0/9	0/11
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River	0/10	0/11	0/12	0/11	0/11	0/12	0/12	0/11
	0/11	0/10	0/10	0/11	0/11	0/11	0/9	0/10
54 Joe Orr Road, Thorn Creek	0/9	0/9	0/9	0/10	0/9	0/8	0/7	0/3
	0/11	0/9	0/11	0/11	0/11	0/11	0/11	0/10
97 170th Street, Thorn Creek	0/10	0/9	0/10	0/11	0/11	0/11	0/10	0/10
57 Ashland Avenue, Little Calumet River	0/10	0/11	0/12	0/11	0/11	0/12	0/12	0/12
58 Ashland Avenue, Calumet-Sag Channel 59 Cicero Avenue, Calumet-Sag Channel	0/10	0/10	0/11	0/11	0/11 0/11	0/12 0/11	0/12 0/10	0/11 0/11
43 Route 83, Calumet-Sag Channel Des Plaines River System	0/11	0/10	0/10	0/11	0/11	0/11	0/10	0/11
90 Route 19, Poplar Creek	0/10	0/11	0/11	0/11	0/12	0/11	0/11	0/10
63 Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	0/1
89 Walnut Lane, West Branch DuPage River	0/12	0/12	0/12	0/12	0/12	0/12	0/11	0/11
64 Lake Street, West Branch DuPage River	0/6	0/12	0/12	0/12	0/12	0/12	0/12	0/12
	0/8	0/8	0/9	0/10	0/9	0/9	0/11	0/9
80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	0/12 0/10	0/12 0/11	0/12 0/12	0/12 0/12	0/12 0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12
24 Wolf Road, Salt Creek	0/10	0/12	0/12	0/11	0/12	0/12	0/11	0/12
109 Brookfield Avenue, Salt Creek	0/11	0/11	0/11	0/11	0/12	0/12	0/11	0/10
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND
	0/1	0/4	0/5	0/5	0/7	0/4	0/6	0/5
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	0/9	0/12	0/12	0/12	0/12	0/12	0/11	0/12
	0/7	0/9	0/11	0/9	0/9	0/7	0/7	0/8
13 Lake-Cook Road, Des Plaines River	0/11	0/12	0/12 0/11	0/12 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/12 0/10
17 Oakton Street, Des Plaines River 19 Belmont Avenue, Des Plaines River	0/11 0/11	0/11 0/12	0/12	0/11	0/12	0/12	0/11	0/12
20 Roosevelt Road, Des Plaines River 22 Ogden Avenue, Des Plaines River	0/11	0/11	0/12	0/11	0/12	0/12	0/11	0/7
	0/12	0/11	0/11	0/11	0/12	0/12	0/11	0/5
 Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River 	0/12	0/11	0/11	0/11	0/12	0/12	0/11	0/10
	0/12	0/11	0/12	0/11	0/12	0/12	0/11	0/11
91 Material Service Road, Des Plaines River	0/12	0/12	0/12	0/11	0/12	0/12	0/11	0/12
110 Springinsguth Road, West Branch DuPage River	0/8	0/9	0/11	0/10	0/11	0/11	0/10	ND
ND - No Date								

TABLE AII-23: TOTAL ARSENIC VIOLATION HISTORY 2003 THROUGH 2010

		Ratio of Violations/Sampling Frequency per Year									
Sam	pling Station (No. Name)	10	09	08	07	06	05	04	03		
Chic	rago River System										
30	Lake-Cook Road, West Fork North Branch	NA	NA	NA	NA	NA	NA	NA	NA		
106	Dundee Road, West Fork North Branch Chicago River	ŅĄ	NA	NA	NA	NA	ŅĄ	ŅA	ŅĄ		
103 31	Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		
104	Glenview Road, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA		
32	Lake-Cook Road, Skokie River	ŅĄ	NA.	NA	NA	NA	ŅĄ	NA	NA		
105 34	Frontage Road, Skokie River Dempster Street, North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		
96	Albany Avenue, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA		
35	Central Street, North Shore Channel	ŅĄ	NA	NA	NA	ŅA	ŅΑ	NA	NA		
102 36	Oakton Street, North Shore Channel	NA 0/11	NA 0/10	NA 0/12	NA 0/12	NA 0/12	NA 0/12	NA 0/12	NA 0/12		
101	Touhy Avenue, North Shore Channel Foster Avenue, North Shore Channel	0/12	0/12	0/12	0/12	0/12	0/13	0/12	0/12		
37	Wilson Avenue, North Branch Chicago River	0/12	0/12	0/12	0/12	0/12	0/12	0/12	0/12		
73	Diversey Parkway, North Branch Chicago River	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/11	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12		
46 74	Grand Avenue, North Branch Chicago River Lake Shore Drive, Chicago River	NA	NA	NA	NA	NA	NA	NA	NA		
100	Wells Street, Chicago River	NA	NA	NA	NA	NA	NA	NA	NA		
39	Madison Street, South Branch Chicago River	0/12	0/11 0/12	0/12 0/11	0/11 0/12	0/12 0/12	0/12 0/10	0/12 0/12	0/11 0/12		
108 99	Loomis Street, South Branch Chicago River Archer Avenue, South Fork South Branch Chicago River	0/11 0/10	0/12	0/12	0/11	0/7	0/11	0/12	0/12		
40	Damen Avenue, Chicago Sanitary & Ship Canal	0/12	0/11	0/12	0/12	0/12	0/12	0/12	0/12		
107	Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND 0/12	ND 0/12	ND 0/13	ND 0/12	ND 0/12	ND 0/12		
75 41	Cicero Avenue, Chicago Sanitary & Ship Canal Harlem Avenue, Chicago Sanitary & Ship Canal	0/12 0/9	0/12 0/12	0/12	0/12	0/13	0/12	0/12	0/12		
42	Route 83, Chicago Sanitary & Ship Canal	0/12	0/10	0/12	0/11	0/13	0/11	0/12	0/12		
48	Stephen Street, Chicago Sanitary & Ship Canal	0/12	0/10	0/12	0/11	0/13	0/11	0/12 ND	0/12 ND		
82 92	Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal	ND 0/51	ND 0/51	ND 0/51	ND 0/51	ND 0/53	ND 0/52	ND 0/52	0/52		
		0/51	0,51	0.51	0,21	57-2-					
49	Imet River System	NA	NA	NA	NA	NA	NA	NA	NA		
50	Ewing Avenue, Calumet River Burnham Avenue, Wolf Lake	NA	NA	NA	NA	NA	NA	NA	NA		
55	130th Street, Calumet River	NA	NA	NA	NA	NA	NA	NA	NA		
51 86	IHB Railroad Bridge, Grand Calumet River	ND 0/7	ND 0/5	ND 0/10	ND 0/10	ND 0/11	ND 0/10	ND 0/9	ND 0/10		
56	Burnham Avenue, Grand Calumet River Indiana Avenue, Little Calumet River	0/10	0/8	0/10	0/10	0/11	0/9	0/9	0/11		
76	Halsted Street, Little Calumet River	0/10	0/11	0/12	0/11	0/11	0/12	0/12	0/11		
52 54	Wentworth Avenue, Little Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		
97	Joe Orr Road, Thorn Creek 170th Street, Thorn Creek	NA	NA	NA	NA	NA	NA	NA	NA		
57	Ashland Avenue, Little Calumet River	NA	NA	NA	NA	NA	NA	NA	NA		
58 59	Ashland Avenue, Calumet-Sag Channel	0/10 0/10	0/11 0/10	0/12 0/11	0/11 0/11	0/11 0/11	0/12 0/12	0/12 0/12	0/12 0/11		
43	Cicero Avenue, Calumet-Sag Channel Route 83, Calumet-Sag Channel	0/11	0/10	0/10	0/11	0/11	11/0	ŏ/1ō	ő/i i		
Des	Plaines River System										
90	Route 19, Poplar Creek	NA	NA	NA	NA	NA	NA	NA	NA		
63	Longmeadow Lane, West Branch DuPage River	NA	NA	NA	NA	NA	NA	NA	NA		
89	Walnut Lane, West Branch DuPage River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		
64 79	Lake Street, West Branch DuPage River Higgins Road, Salt Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA		
80	Arlington Heights Road, Salt Creek	NA	NA	NA	NA	NA	NA	NA	NA		
18	Devon Avenue, Salt Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		
24 109	Wolf Road, Salt Creek Brookfield Avenue, Salt Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA		
21	First Avenue, Salt Creek	NA	NA	NA	NA	NA	NA	NA	NA		
77 78	Elmhurst Road, Higgins Creek Wills Bood, Higgins Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		
12	Wille Road, Higgins Creek Lake-Cook Road, Buffalo Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA		
13	Lake-Cook Road, Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA		
17	Oakton Street, Des Plaines River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		
19 20	Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		
22	Ogden Avenue, Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA		
23	Willow Springs Road, Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA NA		
23							D. C.A.		NΔ		
29 91	Stephen Street, Des Plaines River Material Service Road, Des Plaines River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA		

NA = Not Applicable. ND = No Data.

TABLE AII-24: TOTAL BARIUM VIOLATION HISTORY 2003 THROUGH 2010

	Ratio of Violations/Sampling Frequency per Y							
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System								
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND
106 Dundee Road, West Fork North Branch Chicago River	0/10 0/10	0/11 0/11	0/11 0/10	0/4 0/11	0/5 0/12	0/4 0/10	0/8 0/10	0/3 0/8
103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch	0/9	0/10	0/10	0/10	0/11	0/10	0/10	0/9
104 Glenview Road, North Branch Chicago River	0/9 0/9	0/12 0/10	0/12 0/10	0/11 0/10	0/12 0/12	0/12 0/11	0/12 0/10	0/3 0/9
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River	0/12	0/12	0/12	0/11	0/12	0/12	0/12	0/12
34 Dempster Street, North Branch Chicago River	0/8 0/11	0/12 0/12	0/11 0/12	0/11 0/11	0/12 0/12	0/11 0/11	0/12 0/11	0/11 0/10
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	0/8	0/9	0/9	0/9	0/9	0/8	0/9	0/9
102 Oakton Street, North Shore Channel	0/11	0/11	0/11	0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/10 0/12
36 Touhy Avenue, North Shore Channel 101 Foster Avenue, North Shore Channel	0/11 0/12	0/10 0/12	0/12 0/12	0/12 0/12	0/12	0/13	0/12	0/12
37 Wilson Avenue, North Branch Chicago River	0/12	0/12	0/12	0/12	0/12	0/12	0/12	0/12
73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/11	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12
74 Lake Shore Drive, Chicago River	0/11	0/9	0/10	0/11	0/11	0/10	0/9	0/10
100 Wells Street, Chicago River	0/12 0/12	0/11 0/11	0/12 0/12	0/11 0/11	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/11
39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River	0/11	0/12	0/11	0/12	0/12	0/10	0/12	0/12
99 Archer Avenue, South Fork South Branch Chicago River	0/10	0/11	0/12 0/12	0/11 0/12	0/7 0/12	0/11 0/12	0/12 0/12	0/12 0/12
40 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal	0/12 ND	0/11 ND	ND	ND	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/12	0/12	0/12	0/12	0/13	0/12	0/12 0/12	0/12 0/12
41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal	0/9 0/12	0/12 0/10	0/12 0/12	0/12 0/11	0/13 0/13	0/12 0/11	0/12	0/12
48 Stephen Street, Chicago Sanitary & Ship Canal	0/12	0/10	0/12	0/11	0/13	0/11	0/12	0/12
 82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal 	ND 0/51	ND 0/51	ND 0/51	ND 0/51	ND 0/53	ND 0/52	ND 0/52	ND 0/52
	0,51	0,51	3,01	5.25	****			
Calumet River System	0/6	0/7	0/9	0/10	0/11	0/11	0/10	0/12
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	0/11	0/10	0/12	0/11	0/11	0/12	0/12	0/12
55 130th Street, Calumet River	0/10	0/9	0/9 ND	0/10 ND	0/11 ND	0/11 ND	0/11 ND	0/10 ND
51 IHB Railroad Bridge, Grand Calumet River 86 Burnham Avenue, Grand Calumet River	ND 0/7	ND 0/5	0/10	0/10	0/11	0/10	0/9	0/10
56 Indiana Avenue, Little Calumet River	0/10	0/8	0/9	0/9	0/11 0/11	0/9 0/12	0/9 0/12	0/11 0/11
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River	0/10 0/11	0/11 0/10	0/12 0/10	0/11 0/11	0/11	0/11	0/9	0/10
54 Joe Orr Road, Thorn Creek	0/9	0/9	0/9	0/10	0/9	0/8	0/7	0/3
97 170th Street, Thorn Creek 57 Ashland Avenue, Little Calumet River	0/11 0/10	0/9 0/9	0/11 0/10	0/11 0/11	0/11 0/11	0/11 0/11	0/11 0/10	0/10 0/10
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	0/10	0/11	0/12	0/11	0/11	0/12	0/12	0/12
59 Cicero Avenue, Calumet-Sag Channel	0/10 0/11	0/10 0/10	0/11 0/10	0/11 0/11	0/11 0/11	0/12 0/11	0/12 0/10	0/11 0/11
	0/11	0/10	0/10	0/11	0.11	0,11	5. T 5	
Des Plaines River System	0/10	0/11	0/11	0/11	0/12	0/11	0/11	0/10
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	0/10 ND	0/11 ND	0/11 ND	ND	ND	ND	ND	0/1
89 Walnut Lane, West Branch DuPage River	0/12	0/12	0/12	0/12	0/12	0/12	0/11 0/12	0/11 0/12
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	0/6 0/8	0/12 0/8	0/1 2 0/9	0/12 0/10	0/12 0/9	0/12 0/9	0/11	0/12
80 Arlington Heights Road, Salt Creek	0/12	0/12	0/12	0/12	0/12	0/12	0/12	0/12
18 Devon Avenue, Salt Creek	0/10 0/10	0/11 0/12	0/12 0/12	0/12 0/11	0/12 0/12	0/12 0/12	0/12 0/11	0/12 0/12
109 Brookfield Avenue, Salt Creek	0/11	0/11	0/11	0/11	0/12	0/12	0/11	0/10
21 First Avenue, Salt Čreek 77 Elmhurst Road, Higgins Creek	ND 0/1	ND 0/4	ND 0/5	ND 0/5	ND 0/7	ND 0/4	ND 0/6	ND 0/5
78 Wille Road, Higgins Creek	0/9	0/12	0/12	0/12	0/12	0/12	0/11	0/12
12 Lake-Cook Road, Buffalo Creek	0/7 0/11	0/9 0/12	0/1 1 0/12	0/9 0/12	0/9 0/12	0/7 0/12	0/7 0/11	0/8 0/12
13 Lake-Cook Road, Des Plaines River 17 Oakton Street, Des Plaines River	0/11	0/12	0/12	0/11	0/12	0/12	0/11	0/10
19 Belmont Avenue, Des Plaines River	0/11	0/12	0/12	0/11	0/12	0/12	0/11 0/11	0/12 0/7
20 Roosevelt Road, Des Plaines River 22 Ogden Avenue, Des Plaines River	0/11 0/12	0/11 0/11	0/12 0/11	0/11 0/11	0/12 0/12	0/12 0/12	0/11	0//
23 Willow Springs Road, Des Plaines River	0/12	0/11	0/11	0/11	0/12	0/12	0/11	0/10
29 Stephen Street, Des Plaines River 91 Material Service Road, Des Plaines River	0/12 0/12	0/11 0/12	0/12 0/12	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/11 0/12
110 Springinsguth Road, West Branch DuPage River	0/8	0/9	0/11	0/10	0/11	0/11	0/10	ND

TABLE AII-25: TOTAL BORON VIOLATION HISTORY 2003 THROUGH 2010

	Rai	io of V	iolatio ¹	ns/Sam	pling F	requenc	y per Y	/ear
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System								
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River 107 Golf Road, West Fork North Branch Chicago River 108 Lake-Cook Road, Middle Fork North Branch 109 Glenview Road, North Branch Chicago River 109 Lake-Cook Road, Skokie River 100 Dempster Street, North Branch Chicago River 101 Dempster Street, North Branch Chicago River 102 Oakton Street, North Branch Chicago River 103 Central Street, North Shore Channel 104 Oakton Street, North Shore Channel 105 Touhy Avenue, North Shore Channel 106 Foster Avenue, North Shore Channel 107 Wilson Avenue, North Branch Chicago River 108 Cand Avenue, North Branch Chicago River 109 Madison Street, South Branch Chicago River 100 Wells Street, Chicago River 101 Madison Street, South Branch Chicago River 102 Oamen Avenue, North Branch Chicago River 103 Mells Street, South Branch Chicago River 104 Mells Street, South Branch Chicago River 105 Archer Avenue, South Fork South Branch Chicago River 106 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal 108 Cicero Avenue, Chicago Sanitary & Ship Canal 109 Cicero Avenue, Chicago Sanitary & Ship Canal 110 Cicero Avenue, Chicago Sanitary & Ship Canal 121 Cicero Avenue, Chicago Sanitary & Ship Canal 122 Route 83, Chicago Sanitary & Ship Canal 123 Stephen Street, Chicago Sanitary & Ship Canal 124 Route 83, Chicago Sanitary & Ship Canal 125 Stephen Street, Chicago Sanitary & Ship Canal 126 Stephen Street, Chicago Sanitary & Ship Canal 127 Stephen Street, Chicago Sanitary & Ship Canal 128 Stephen Street, Chicago Sanitary & Ship Canal 139 Stephen Street, Chicago Sanitary & Ship Canal 140 Stephen Street, Chicago Sanitary & Ship Canal	ND 0/10 0/10 0/9 0/9 0/9 0/12 0/8 0/11 NA	ND 0/11 0/10 0/12 0/12 0/12 0/12 0/12 0/11 NA NA NA NA NA NA NA NA	ND 0/10 0/10 0/10 0/12 0/10 0/12 0/9 0/11 NA NA NA NA NA NA NA NA NA	ND 0/4 0/11 0/10 0/11 0/11 0/11 0/9 0/12 NA NA NA NA NA NA NA NA NA NA	ND 0/5 0/12 0/11 0/12 0/12 0/12 0/12 0/12 0/12	ND 0/4 0/10 0/10 0/12 0/11 0/12 0/11 0/8 0/12 NA NA NA NA NA NA NA NA NA NA	ND 0/8 0/10 0/10 0/10 0/12 0/12 0/12 0/12 0/12	ND 0/3 0/8 0/9 0/12 0/110 0/10 NA NA NA 0/10 0/12 NA NA NA NA NA
 Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal 	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
Calumet River System 49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River 51 IHB Railroad Bridge, Grand Calumet River 56 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River 57 Halsted Street, Little Calumet River 58 Joe Orr Road, Thorn Creek 59 170th Street, Thorn Creek 50 Ashland Avenue, Little Calumet River 51 Ashland Avenue, Little Calumet River 52 Ashland Avenue, Calumet-Sag Channel 53 Cicero Avenue, Calumet-Sag Channel 54 Route 83, Calumet-Sag Channel	0/6 0/11 0/10 NA NA NA 0/11 0/9 0/11 0/10 NA NA	0/7 0/10 0/9 NA NA NA 0/10 0/9 0/9 0/9 NA NA	0/9 0/12 0/9 NA NA NA 0/10 0/9 0/11 0/10 NA NA	0/10 0/11 0/10 NA NA NA 0/11 0/10 0/11 0/11 NA NA	0/11 0/11 0/11 NA NA NA 0/11 0/9 0/11 0/11 NA NA	0/11 0/12 0/11 NA NA NA 0/11 0/8 0/11 0/11 NA NA	0/10 0/12 0/11 NA NA NA 0/9 0/7 0/11 0/10 NA NA	0/12 0/10 NA NA NA 0/10 0/3 0/10 0/10 NA NA
Des Plaines River System Polar Creek	0/10 ND 0/12 0/6 0/8 0/10 0/10 0/11 ND 0/1 0/9 0/7 0/11 0/11 0/11 0/12 0/12 0/12	0/11 ND 0/12 0/12 0/12 0/11 0/12 0/11 ND 0/4 0/12 0/11 0/12 0/11 0/12 0/11 0/11 0/11	0/11 ND 0/12 0/12 0/12 0/12 0/12 0/112 0/11 0/12 0/11 0/12 0/11 0/12 0/11 0/11	0/11 ND 0/12 0/10 0/12 0/11 0/11 0/11 0/11 0/11	0/12 ND 0/12 0/12 0/12 0/12 0/12 0/12 0/12 0/12	0/11 ND 0/12 0/12 0/12 0/12 0/12 0/12 0/12 0/12	0/11 ND 0/11 0/12 0/11 0/12 0/11 0/11 0/11 0/6 0/11 0/11 0/11 0/11	0/10 0/1 0/11 0/12 0/9 0/12 0/12 0/11 0/10 0/12 0/7 0/12 0/7 0/12 0/9 0/10 0/12 0/9 0/10 0/12

NA = Not Applicable. ND = No Data.

TABLE AII-26: TOTAL CADMIUM VIOLATION HISTORY 2003 THROUGH 2010

		Ratio of Violations/Sampling Frequency per Yea							
San	npling Station (No. Name)	10	09	08	07	06	05	04	03
Chi	cago River System								
30	Lake-Cook Road, West Fork North Branch	NA	NA	NA	NA	NA	NA	NA	NA
106	Dundee Road, West Fork North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	ŅA
103 31	Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
104	Glenview Road, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
32	Lake-Cook Road, Skokie River	NA	NA	NA	NA	NA	NA	NA	NA
105 34	Frontage Road, Skokie River Dempster Street, North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
96	Albany Avenue, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	ŇA
35	Central Street, North Shore Channel	NA	NA	NA	NA	ŅΑ	NA	ŅA	ŅA
102 36	Oakton Street, North Shore Channel Touhy Avenue, North Shore Channel	NA 0/11	NA 0/10	NA 0/12	NA 0/12	NA 0/12	NA 0/12	NA 0/12	NA 0/12
101	Foster Avenue, North Shore Channel	0/12	0/12	0/12	0/12	0/12	0/13	0/12	0/12
37	Wilson Avenue, North Branch Chicago River	0/12	0/12	0/12	0/12	0/12	0/12	0/12	0/12
73 46	Diversey Parkway, North Branch Chicago River Grand Avenue, North Branch Chicago River	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/11	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12
74	Lake Shore Drive, Chicago River	ŇÁ	NA						
100	Wells Street, Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
39 108	Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River	0/12 0/11	0/11 0/12	0/12 0/11	0/11 0/12	0/12 0/12	0/12 0/10	0/12 0/12	0/11 0/12
99	Archer Avenue, South Fork South Branch Chicago River	0/10	0/11	0/12	0/11	0/7	0/11	0/12	0/12
40	Damen Avenue, Chicago Sanitary & Ship Canal	0/12	0/11	0/12	0/12	0/12	0/12	0/12	0/12
107 75	Western Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal	ND 0/12	ND 0/12	ND 0/12	ND 0/12	ND 0/13	ND 0/12	ND 0/12	ND 0/12
41	Harlem Avenue, Chicago Sanitary & Ship Canal	0/9	0/12	0/12	0/12	0/13	0/12	0/12	0/12
42	Route 83, Chicago Sanitary & Ship Canal	0/12	0/10	0/12	0/11	0/13	0/11	0/12	0/12
48 82	Stephen Street, Chicago Sanitary & Ship Canal Lockport Trebler, Chicago Sanitary & Ship Canal	0/12 ND	0/10 ND	0/12 ND	0/11 ND	0/13 ND	0/11 ND	0/12 ND	0/12 ND
92	Lockport Forebay, Chicago Sanitary & Ship Canal	0/51	0/51	0/51	0/51	0/53	0/52	0/52	0/52
Cal	umet River System								
49	Ewing Avenue, Calumet River	NA	NA	NA	NA	NA	NA	ŅΑ	NA
50	Burnham Avenue, Wolf Lake 130th Street, Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
55 51	IHB Railroad Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	0/7	0/5	0/10	0/10	0/11	0/10	0/9	0/10
56 76	Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River	0/10 0/10	0/8 0/11	0/9 0/12	0/9 0/11	0/11 0/11	0/9 0/12	0/9 0/12	0/11 0/11
52	Wentworth Avenue, Little Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
54	Joe Orr Road, Thorn Creek	ŅĄ	ŅA	ŅA	NA	ŅĄ	NA	NA	ŅA
97 57	170th Street, Thorn Creek Ashland Avenue, Little Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
58	Ashland Avenue, Calumet-Sag Channel	0/10	0/11	0/12	0/11	ο/1 ì	0/12	0/12	0/12
59	Cicero Avenue, Calumet-Sag Channel	0/10	0/10	0/11	0/11	0/11	0/12	0/12	0/11
43	Route 83, Calumet-Sag Channel	0/11	0/10	0/10	0/11	0/11	0/11	0/10	0/11
	Plaines River System								
90	Route 19, Poplar Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
63 89	Longmeadow Lane, West Branch DuPage River Walnut Lane, West Branch DuPage River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
64	Lake Street, West Branch DuPage River	NA	NA	NA	NA	NA	NA	NA	NA
79 80	Higgins Road, Salt Creek Arlington Heights Road, Salt Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
18	Devon Avenue, Salt Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
24	Wolf Road, Salt Creek	NA	NA	NA	NA	NA	NA	NA	NΑ
109 21	Brookfield Avenue, Salt Creek First Avenue, Salt Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
77	Elmhurst Road, Higgins Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
78	Wille Road, Higgins Creek	NA	NA	NA	NA	NA	NA	NA	NA
12 13	Lake-Cook Road, Buffalo Creek Lake-Cook Road, Des Plaines River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
17	Oakton Street, Des Plaines River	NA NA	NA	NA NA	NA	NA	NA NA	NA NA	NA NA
19	Belmont Avenue, Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA
20 22	Roosevelt Road, Des Plaines River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
23	Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
29	Stephen Street, Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA
91 110	Material Service Road, Des Plaines River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
110	Springinsguth Road, West Branch DuPage River	INA	NA						

NA = Not Applicable. ND = No Data.

TABLE AII-27: TOTAL COPPER VIOLATION HISTORY 2003 THROUGH 2010

		Ratio of Violations/Sampling Frequency per Y							
San	npling Station (No. Name)	10	09	08	07	06	05	04	03
Chi	cago River System								
30	Lake-Cook Road, West Fork North Branch	NA	NA	NA	NA	NA	NA	NA	NA
106 103	Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
31	Lake-Cook Road, Middle Fork North Branch	NA	NA	NA	NA	NA	NA	NA	NA
104 32	Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
105	Frontage Road, Skokie River	NA	NA	NA	NA	NA	NA	NA	NA
34 96	Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
35	Central Street, North Shore Channel	NA	NA	NA	NA	NA	NA	NA	NA
102 36	Oakton Street, North Shore Channel	NA 0/11	NA 0/10	NA 0/12	NA 0/12	NA 0/12	NA 0/12	NA 0/12	NA 0/12
101	Touhy Avenue, North Shore Channel Foster Avenue, North Shore Channel	0/12	0/12	0/12	0/12	0/12	0/13	0/12	0/12
37 73	Wilson Avenue, North Branch Chicago River	0/12	0/12	0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12
46	Diversey Parkway, North Branch Chicago River Grand Avenue, North Branch Chicago River	0/12 0/12	0/12 0/12	0/12 0/12	0/11	0/12	0/12	0/12	0/12
74 100	Lake Shore Drive, Chicago River	NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
39	Wells Street, Chicago River Madison Street, South Branch Chicago River	NA 0/12	NA 0/11	NA 0/12	0/11	0/12	0/12	0/12	0/11
108	Loomis Street, South Branch Chicago River	0/11	0/12	0/11	0/12	0/12	0/10	0/12 0/12	0/12
99 40	Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal	0/10 0/12	0/11 0/11	0/12 0/12	0/11 0/12	0/7 0/12	0/11 0/12	0/12	0/12 0/12
107	Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
75 41	Cicero Avenue, Chicago Sanitary & Ship Canal Harlem Avenue, Chicago Sanitary & Ship Canal	0/12 0/9	0/12 0/12	0/12 0/12	0/12 0/12	0/13 0/13	0/12 0/12	0/12 0/12	0/12 0/12
42	Route 83, Chicago Sanitary & Ship Canal	0/12	0/10	0/12	0/11	0/13	0/11	0/12	0/12
48 82	Stephen Street, Chicago Sanitary & Ship Canal Lockport Trebler, Chicago Sanitary & Ship Canal	0/12 ND	0/10 ND	0/12 ND	0/11 ND	0/13 ND	0/11 ND	0/12 ND	0/12 ND
92	Lockport Forebay, Chicago Sanitary & Ship Canal	0/51	0/51	0/51	0/51	0/53	0/52	0/52	0/52
	umet River System								
49 50	Ewing Avenue, Calumet River Burnham Avenue, Wolf Lake	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
50 55	130th Street, Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
51 86	IHB Railroad Bridge, Grand Calumet River Burnham Avenue, Grand Calumet River	ND 0/7	ND 0/5	ND 0/10	ND 0/10	ND 0/11	ND 0/10	ND 0/9	ND 0/10
56 76	Indiana Avenue, Little Calumet River	0/10	0/8	0/9	0/9	0/11	0/9	0/9	0/11
76 52	Halsted Street, Little Calumet River Wentworth Avenue, Little Calumet River	0/10 NA	0/1 1 NA	0/12 NA	0/11 NA	0/11 NA	0/12 NA	0/12 NA	0/11 NA
54	Joe Orr Road, Thorn Creek	NA NA	NA						
97 57	170th Street, Thorn Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
58	Ashland Avenue, Little Calumet River Ashland Avenue, Calumet-Sag Channel	NA 0/10	NA 0/11	NA 0/12	0/11	0/11	0/12	0/12	0/12
59 43	Cicero Avenue, Calumet-Sag Channel	0/10	0/10 0/10	0/11	0/11 0/11	0/11 0/11	0/12 0/11	0/12 0/10	0/11 0/11
	Route 83, Calumet-Sag Channel Plaines River System	0/11	0/10	0/10	0/11	0/11	0/11	0/10	0/11
90	Route 19, Poplar Creek	NA	NA	NA	NA	NA	NA	NA	NA
63	Longmeadow Lane, West Branch DuPage River	NA	NA	NA	NA	NA	NA	NA	NA
89 64	Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
79	Higgins Road, Salt Creek	NA	NA	NA	NA	NA	NA	NA	NA
80 18	Arlington Heights Road, Salt Creek Devon Avenue, Salt Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
24	Wolf Road, Salt Creek	NA	NA	NA	NA	NA	NA	NA	NA
10 9 21	Brookfield Avenue, Salt Creek First Avenue, Salt Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
77	Elmhurst Road, Higgins Creek	NA NA	NA	NA NA	NA NA	NA.	NA	NA	NA
78	Wille Road, Higgins Creek	NA	NA	NA	NA	NA	NA	NA	NA
12 13	Lake-Cook Road, Buffalo Creek Lake-Cook Road, Des Plaines River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
17	Oakton Street, Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA
19 20	Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
22	Ogden Avenue, Des Plaines River	NA	NA	NA	NA	NA	NA	NA.	NA
23 29	Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
91	Material Service Road, Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA
110	Springinsguth Road, West Branch DuPage River	NA	NA	NA	NA	NA	NA	NA	NA

NA = Not Applicable. ND = No Data.

TABLE AII-28: TOTAL HEXAVALENT CHROMIUM VIOLATION HISTORY 2003 THROUGH 2010

		Ratio of Violations/Sampling Frequency per							
Sam	apling Station (No. Name)	10	09	08	07	06	05	04	03
Chie	cago River System								
30	Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND
106	Dundee Road, West Fork North Branch Chicago River	0/10 0/10	0/11 0/11	0/11 0/10	0/4 0/11	0/5 0/12	0/4 0/10	0/8 0/10	0/3 0/8
103 31	Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch	0/10	0/10	0/10	0/10	0/11	0/10	0/10	0/9
104	Glenview Road, North Branch Chicago River	0/9	0/12	0/12	0/11	0/12	0/12	0/12	0/3
32	Lake-Cook Road, Skokie River	0/9 0/12	0/10 0/12	0/10 0/12	0/10 0/11	0/12 0/12	0/11 0/12	0/10 0/12	0/9 0/12
105 34	Frontage Road, Skokie River Dempster Street, North Branch Chicago River	0/8	0/12	0/11	ŏ/i i	0/12	0/11	0/12	0/11
96	Albany Avenue, North Branch Chicago River	0/11	0/12	0/12	0/11	0/12	0/11	0/11 0/9	0/10 0/9
35 102	Central Street, North Shore Channel Oakton Street, North Shore Channel	0/ 8 0/1 1	0/9 0/11	0/9 0/11	0/9 0/12	0/9 0/12	0/8 0/12	0/12	0/10
36	Touhy Avenue, North Shore Channel	0/11	0/10	0/12	0/12	0/12	0/12	0/12	0/12
101	Foster Avenue, North Shore Channel	0/12	0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/13 0/12	0/12 0/12	0/12 0/12
37 73	Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River	0/12 0/12	0/12 0/12	0/12	0/12	0/12	0/12	0/12	0/12
46	Grand Avenue, North Branch Chicago River	0/12	0/12	0/12	0/11	0/12	0/12	0/12	0/12
74	Lake Shore Drive, Chicago River	0/11	0/9	0/10 0/12	0/11 0/11	0/11 0/12	0/10 0/12	0/9 0/12	0/10 0/12
100 39	Wells Street, Chicago River Madison Street, South Branch Chicago River	0/12 0/12	0/11 0/11	0/12	0/11	0/12	0/12	0/12	0/11
108	Loomis Street, South Branch Chicago River	0/11	0/12	0/11	0/12	0/12	0/10	0/12	0/12
99	Archer Avenue, South Fork South Branch Chicago River	0/10 0/12	0/11 0/11	0/12 0/12	0/11 0/12	0/7 0/12	0/11 0/12	0/12 0/12	0/12 0/12
40 107	Damen Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
75	Cicero Avenue, Chicago Sanitary & Ship Canal	0/12	0/12	0/12	0/12	0/13	0/12	0/12	0/12
41	Harlem Avenue, Chicago Sanitary & Ship Canal	0/9 0/12	0/12	0/11 0/12	0/12 0/11	0/13 0/13	0/12 0/11	0/12 0/12	0/12 0/12
42 48	Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal	0/12	0/10 0/10	0/12	0/11	0/13	0/11	0/12	0/12
82	Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
92	Lockport Forebay, Chicago Sanitary & Ship Canal	0/51	0/51	0/51	0/50	0/53	0/52	0/52	0/52
Cal	umet River System			0.10	0.44.0	041	0111	0110	0110
49	Ewing Avenue, Calumet River	0/6 0/11	0/7 0/10	0/9 0/12	0/10 0/11	0/11 0/11	0/11 0/12	0/10 0/12	0/12 0/12
50 55	Burnham Avenue, Wolf Lake 130th Street, Calumet River	0/10	0/9	0/9	0/10	0/11	0/11	0/11	0/10
51	IHB Railroad Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	0/7 0/10	0/5 0/8	0/10 0/9	0/10	0/11 0/11	0/10 0/ 9	0/9 0/9	0/10 0/11
56 76	Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River	0/10	0/11	0/12	0/8 0/11	0/1 i	0/12	0/12	0/11
52	Wentworth Avenue, Little Calumet River	0/11	0/10	0/10	0/11	0/11	0/11	0/9	0/10
54 97	Joe Orr Road, Thorn Creek	0/9 0/11	0/9 0/9	0/9 0/11	0/10 0/11	0/9 0/11	0/8 0/11	0/7 0/11	0/3 0/10
57	170th Street, Thorn Creek Ashland Avenue, Little Calumet River	0/10	0/9	0/10	0/11	0/11	0/1 i	0/10	0/10
58	Ashland Avenue, Calumet-Sag Channel	0/10	0/11	0/12	0/11	0/11	0/12	0/12	0/12
59 43	Cicero Avenue, Calumet-Sag Channel Route 83, Calumet-Sag Channel	0/10 0/11	0/10 0/10	0/11 0/10	0/11 0/11	0/11 0/11	0/12 0/11	0/12 0/10	0/11 0/11
	Plaines River System	3,11	5, 25	•,					
90	Route 19, Poplar Creek	0/10	0/11	0/11	0/11	0/12	0/11	0/11	0/10
63	Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	0/1
89	Walnut Lane, West Branch DuPage River	0/12	0/12	0/12 0/12	0/12	0/12 0/12	0/12 0/12	0/11 0/12	0/11 0/12
64 79	Lake Street, West Branch DuPage River Higgins Road, Salt Creek	0/6 0/8	0/12 0/8	0/12	0/12 0/10	0/12	0/9	0/11	0/9
8ó	Arlington Heights Road, Salt Creek	0/12	0/8 0/12	0/12	0/12	0/12	0/12	0/12	0/12
18	Devon Avenue, Salt Creek	0/10 0/10	0/11 0/12	0/12 0/12	0/12 0/11	0/12 0/12	0/12	0/12 0/11	0/12 0/12
24 109	Wolf Road, Sait Creek Brookfield Avenue, Sait Creek	0/10	0/12	0/11	0/11	1/12	0/12 0/12	0/11	0/10
21	First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77	Elmhurst Road, Higgins Creek	0/1 0/9	0/4 0/12	0/5 0/12	0/5 0/12	0/7 0/12	0/4 0/12	0/6 0/11	0/5 0/12
78 12	Wille Road, Higgins Creek Lake-Cook Road, Buffalo Creek	0/9	0/12	0/12	0/12	0/9	0/7	0/7	0/8
13	Lake-Cook Road, Des Plaines River	0/11	0/12	0/12	0/12	0/12	0/12	0/11	0/12
17	Oakton Street, Des Plaines River	0/11 0/11	0/11 0/12	0/11 0/12	0/11 0/11	0/12 0/12	0/12 1/12	0/1 1 0/1 1	0/10 0/12
19 20	Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River	0/11	0/12	0/12	0/11	0/12	1/12	0/11	0/7
22	Ogden Avenue, Des Plaines River	0/12	0/11	0/11	0/11	0/12	0/12	0/11	0/5
23	Willow Springs Road, Des Plaines River	1/12 0/12	0/11 0/11	0/11 0/12	0/11 0/11	0/12 0/12	1/12 0/12	0/11 0/11	0/10 0/11
29 91	Stephen Street, Des Plaines River Material Service Road, Des Plaines River	0/12	0/11	0/12	0/11	0/12	0/12	0/11	0/12
/ 1	Springinsguth Road, West Branch DuPage River	0/8	0/9	0/11	0/10	0/11	0/11	0/10	ND

TABLE AII-29: TOTAL IRON VIOLATION HISTORY 2003 THROUGH 2010

	Rat	io of V	iolatio:	ns/Sam	pling Fi	requenc	y per Y	ear
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System								
30 Lake-Cook Road, West Fork North Branch	NA	NA	NA	NA	NA	NA	NA	NA
106 Dundee Road, West Fork North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch	NA	NA	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA	NA	NA
104 Glenview Road, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
32 Lake-Cook Road, Skokie River	NA	NA	NA	NA	NA	NA	NA	NA
105 Frontage Road, Skokie River	NA	NA	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA	NA	NA
96 Albany Avenue, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
35 Central Street, North Shore Channel	NA	NA	NA	NA	NA	NA	NA	NA
102 Oakton Street, North Shore Channel	NA	NA	NA	NA	NA	NA	NA	NA
Touhy Avenue, North Shore Channel Foster Avenue, North Shore Channel	0/11	0/10	0/12	0/12	0/12	0/12	0/12	0/12
	0/12	0/12	0/12	0/12	0/12	0/13	0/12	0/12
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 	0/12	0/12	0/12	0/12	0/12	0/12	0/12	0/12
	0/12	1/12	0/12	0/12	0/12	0/12	0/12	0/12
 46 Grand Avenue, North Branch Chicago River 74 Lake Shore Drive, Chicago River 	0/12	0/12	0/12	0/11	0/12	0/12	0/12	0/12
	NA	NA	NA	NA	NA	NA	NA	NA
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
	0/12	0/11	0/12	0/11	0/12	0/12	0/12	0/11
108 Loomis Street, South Branch Chicago River	0/11	0/12	0/11	0/12	0/12	0/10	0/12 0/12	0/12 0/12
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/10 0/12	0/11 0/11	0/12 0/12	0/11 0/12	0/7 0/12	0/11 0/12	0/12	0/12
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/12	0/12	0/12	0/12	0/13	0/12	0/12	0/12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/9	0/12	0/12	0/12	0/13	0/12	0/12	0/12
42 Route 83, Chicago Sanitary & Ship Canal	0/12	0/10	0/12	0/11	0/13	0/11	0/12	0/12
48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal	0/12	0/10	0/12	1/11	0/13	0/11	0/12	0/12
	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/51	2/51	2/51	0/51	0/53	0/52	0/52	0/52
Calumet River System	27.4	B7.4	N7.A	NIA	MA	NIA	NΙΑ	NA
49 Ewing Avenue, Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
50 Burnham Avenue, Wolf Lake	NA	NA	NA	NA	NA	NA	NA	
55 130th Street, Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
51 IHB Railroad Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River	1/7	0/ 5	1/10	2/10	0/11	2/10	1/9	3/10
	0/10	0/8	0/9	0/9	0/11	0/9	0/9	0/11
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River	0/10	0/11	1/12	0/11	0/11	0/12	0/12	0/11
	NA	NA	NA	NA	NA	NA	NA	NA
54 Joe Orr Road, Thorn Creek	NA	NA	NA	NA	NA	NA	NA	NA
97 170th Street, Thorn Creek	NA	NA	NA	NA	NA	NA	NA	NA
57 Ashland Avenue, Little Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
59 Cicero Avenue, Calumet-Sag Channel	1/10	0/11	0/12	0/11	0/11	0/12	0/12	1/12
	1/10	0/10	0/11	0/11	1/11	0/12	0/12	0/11
43 Route 83, Calumet-Sag Channel	0/11	1/10	0/10	0/11	0/11	0/11	0/10	1/11
Des Plaines River System 90 Route 19, Poplar Creek	NA	NA	NA	NA	NA	NA	NA	NA
63 Longmeadow Lane, West Branch DuPage River	NA	NA	NA	NA	NA	NA	NA	NA
89 Walnut Lane, West Branch DuPage River	NA	NA	NA	NA	NA	NA	NA	NA
64 Lake Street, West Branch DuPage River	NA	NA	NA	NA	NA	NA	NA	NA
79 Higgins Road, Salt Creek	NA	NA	NA	NA	NA	NA	NA	NA
80 Arlington Heights Road, Salt Creek	NA	NA	NA	NA	NA	NA	NA	NA
18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek	NA	NA	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA	NA	NA
109 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek	NA	NA	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA	NA	NA
77 Elmhurst Road, Higgins Creek	NA	NA	NA	NA	NA	NA	NA	NA
78 Wille Road, Higgins Creek	NA	NA	NA	NA	NA	NA	NA	NA
12 Lake-Cook Road, Buffalo Creek	NA	NA	NA	NA	NA	NA	NA	NA
13 Lake-Cook Road, Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA
17 Oakton Street, Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA
19 Belmont Avenue, Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA
20 Roosevelt Road, Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA
23 Willow Springs Road, Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA	NA	NA
29 Stephen Street, Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA
91 Material Service Road, Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA
Springinsguth Road, West Branch DuPage River	NA	NA	NA	NA	NA	NA	NA	NA

NA = Not Applicable. ND = No Data.

TABLE AII-30: TOTAL LEAD VIOLATION HISTORY 2003 THROUGH 2010

73 Diversey Parkway, North Branch Chícago River			Rat	io of V	iolation	ıs/Sam	pling Fi	requenc	equency per Year			
30 Lake-Cook Noad, West Fork North Branch NA	San	npling Station (No. Name)	10	09	08	07	06	05	04	03		
30 Lake-Cook Noad, West Fork North Branch NA	Chi	cago River System										
103 Golf Road, West Fork North Branch Chicago River	30	Lake-Cook Road, West Fork North Branch										
104 Gienview Road, North Branch Chicago River	103	Golf Road, West Fork North Branch Chicago River	NA	NA	NA	NA.	NA	NA	NA	NA		
105 Frontage Road, Skokie River NA	104	Glenview Road, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA		
96 Albainy Avenue, North Branch Chicago River 37 Central Street, North Shore Channel 38 Central Street, North Shore Channel 39 Albainy Avenue, North Shore Channel 30 Touthy Avenue, North Shore Channel 40 Touthy Avenue, North Shore Channel 40 Touthy Avenue, North Branch Chicago River 40 Touthy Avenue, North Branch Chicago River 40 Touthy Albain Shore Channel 40 Touthy Albain Shore Channel	105									NA		
35 Central Street, North Shore Channel NA												
36 Touhy Avenue, North Shore Channel 0/11 0/12 0	35	Central Street, North Shore Channel	NA	NA	NA	NA	NA	NA	NA	NA		
Wilson Avenue, North Branch Chicago River	36	Touhy Avenue, North Shore Channel	0/11	0/10	0/12	0/12	0/12	0/12	0/12	0/12		
73 Diversey Parkway, North Branch Chicago River 0/12	37	Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River	0/12 0/12		0/12 0/12		0/12 0/12			0/12 1/12		
Lake Shore Drive, Chicago River	73	Diversey Parkway, North Branch Chicago River	0/12	0/12	0/12	0/12	0/12	0/12	0/12	1/12		
Madison Street, South Branch Chicago River	74	Lake Shore Drive, Chicago River	NA	NA	NA	NA	NA	NA	NA	NA		
99 Archer Avenue, South Fork South Branch Chicago River 40 Damen Avenue, Chicago Sanitary & Ship Canal 71 Western Avenue, Chicago Sanitary & Ship Canal 72 Western Avenue, Chicago Sanitary & Ship Canal 73 Ciccro Avenue, Chicago Sanitary & Ship Canal 74 Harlem Avenue, Chicago Sanitary & Ship Canal 75 Ciccro Avenue, Chicago Sanitary & Ship Canal 76 Ciccro Avenue, Chicago Sanitary & Ship Canal 77 Ciccro Avenue, Chicago Sanitary & Ship Canal 78 Ciccro Avenue, Chicago Sanitary & Ship Canal 79 O/12 0/12 0/12 0/12 0/13 0/12 0/12 0/12 80 Stephen Street, Chicago Sanitary & Ship Canal 80 O/12 0/10 0/12 0/11 0/13 0/11 0/12 0/12 81 Lockport Trebler, Chicago Sanitary & Ship Canal 82 Lockport Forebay, Chicago Sanitary & Ship Canal 84 Event System 84 Ewing Avenue, Calumet River 85 Burnham Avenue, Wolf Lake 86 NA	39	Madison Street, South Branch Chicago River	0/12	0/11	0/12	0/11	0/12	0/12	0/12	0/11		
Damen Avenue, Chicago Sanitary & Ship Canal O/12 O/11 O/12 O/1				0/12 0/11								
The property of the property	40	Damen Avenue, Chicago Sanitary & Ship Canal	0/12	0/11			0/12					
A	75	Cicero Avenue, Chicago Sanitary & Ship Canal	0/12	0/12	0/12	0/12	0/13	0/12	0/12	0/12		
Section	42	Route 83, Chicago Sanitary & Ship Canal	0/12	0/10	0/12	0/11	0/13	0/11	0/12	0/12		
Calumet River System												
A9												
So Burnham Avenue, Wolf Lake												
55 130th Street, Calumet River	50											
86 Burnham Avenue, Cirand Calumet River 0/7 0/5 0/10 0/11 1/10 0/9 0/10 56 Indiana Avenue, Little Calumet River 0/10 0/8 0/9 0/9 0/11 0/9 0/9 0/11 76 Halsted Street, Little Calumet River 0/10 0/11 1/12 1/11 0/12 0/12 0/11 54 Wentworth Avenue, Little Calumet River NA	55 51											
76 Halsted Street, Little Calumet River 0/10 0/11 0/12 1/11 0/11 0/12 0/12 0/11 52 Wentworth Avenue, Little Calumet River NA NA NA NA NA NA NA N	86	Burnham Avenue, Grand Calumet River	0 <i>/</i> 7	0/5	0/10	0/10	0/11	1/10	0/9	0/10		
54 Joe Orr Road, Thorn Creek NA	76	Halsted Street, Little Calumet River	0/10	0/11	0/12	1/11	0/11	0/12	0/12	0/11		
97 170th Street, Thorn Creek	52 54											
58 Ashland Avenue, Calumet-Sag Channel 0/10 0/11 0/11 0/11 0/11 0/11 0/12 0/12 0/12 0/12 0/12 0/12 0/12 0/11	97	170th Street, Thorn Creek	NA	NA		NA						
A	58	Ashland Avenue, Calumet-Sag Channel	0/10	0/11	0/12	0/11	0/11	0/12	0/12	0/12		
NA												
63 Longmeadow Lane, West Branch DuPage River NA NA </td <td>Des</td> <td>Plaines River System</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Des	Plaines River System										
89 Walnut Lane, West Branch DuPage River NA		Route 19, Poplar Creek										
79 Higgins Road, Salt Creek NA N	89	Walnut Lane, West Branch DuPage River	NA	NA	NA	NA	NA	NA	NA	NA		
18 Devon Avenue, Salt Creek NA	64 79	Lake Street, West Branch DuPage River Higgins Road, Salt Creek						NA		NA NA		
24 Wolf Road, Salt Creek NA NA </td <td></td> <td>Arlington Heights Road, Salt Creek</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		Arlington Heights Road, Salt Creek										
21 First Avenue, Salt Creek NA NA NA NA NA NA NA NA 77 Elmhurst Road, Higgins Creek NA NA NA NA NA NA NA NA 78 Wille Road, Higgins Creek NA NA NA NA NA NA NA NA	24	Wolf Road, Salt Creek	NA	NA	NA	NA	NA	NA	NA	NA		
78 Wille Road, Higgins Creek NA NA NA NA NA NA NA NA NA	21	First Avenue, Salt Creek	NA	NA	NA	NA	NA	NA	NA	NA		
13 Lake-Cook Road, Des Plaines River NA NA NA NA NA NA NA NA NA	12	Lake-Cook Road, Buffalo Creek	NA	NA	NA	NA	NA	NA	NA	NA		
17 Oakton Street, Des Plaines River NA	17	Oakton Street, Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA		
19 Belmont Avenue, Des Plaines River NA	20	Roosevelt Road, Des Plaines River	NA	NA	NA	NA	NA	ŊΑ	NA	NA		
22 Ogden Avenue, Des Plaines River NA	22 23	Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River	NA NA									
29 Stephen Street, Des Plaines River NA NA NA NA NA NA NA NA NA	29	Stephen Street, Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA		
91 Material Service Road, Des Plaines River NA NA NA NA NA NA NA NA 110 Springinsguth Road, West Branch DuPage River NA												

NA = Not Applicable. ND = No Data.

TABLE AII-31: TOTAL NICKEL VIOLATION HISTORY 2003 THROUGH 2010

	Ratio of Violations/Sampling Frequency per							
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System								
30 Lake-Cook Road, West Fork North Branch	NA	NA	NA	NA	NA	NA	NA	NA
106 Dundee Road, West Fork North Branch Chicago River	ŅA	NA						
103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
104 Glenview Road, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
32 Lake-Cook Road, Skokie River	NA	ŅA	NA	NA	NA	NA	NA	NA
105 Frontage Road, Skokie River 34 Dempster Street, North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
96 Albany Avenue, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
35 Central Street, North Shore Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
102 Oakton Street, North Shore Channel 36 Touhy Avenue, North Shore Channel	NA 0/11	NA 0/10	NA 0/12	NA 0/12	NA 0/12	NA 0/12	NA 0/12	NA 0/12
101 Foster Avenue, North Shore Channel	0/12	0/12	0/12	0/12	0/12	0/13	0/12	0/12
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 	0/12	0/12	0/12	0/12	0/12	0/12	0/12 0/12	0/12 0/12
73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/11	0/12 0/12	0/12 0/12	0/12	0/12
74 Lake Shore Drive, Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
100 Wells Street, Chicago River	NA 0/12	NA O/11	NA 0/12	NA 0/11	NA 0/12	NA 0/12	NA 0/12	NA 0/11
 Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River 	0/12 0/11	0/11 0/12	0/11	0/12	0/12	0/10	0/12	0/12
99 Archer Avenue, South Fork South Branch Chicago River	0/10	0/11	0/12	0/11	0/7	0/11	0/12	0/12
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/12 ND	0/11	0/12	0/12 ND	0/12	0/12 ND	0/12 ND	0/12 ND
107 Western Avenue, Chicago Sanitary & Ship Canal 75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND 0/12	ND 0/12	ND 0/12	0/12	ND 0/13	0/12	0/12	0/12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/9	0/12	0/12	0/12	0/13	0/12	0/12	0/12
42 Route 83, Chicago Sanitary & Ship Canal	0/12 0/12	0/10 0/10	0/12 0/12	0/11 0/11	0/13 0/13	0/11 0/11	0/12 0/12	0/12 0/12
48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/51	0/51	0/51	0/51	0/53	0/52	0/52	0/52
Calumet River System								
49 Ewing Avenue, Calumet River	ŅĄ	NA	NA	NA	NA	ŅA	NA	ŅA
50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
51 IHB Railroad Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0/7	0/5	0/10	0/10	0/11	0/10	0/9	0/10
56 Indiana Avenue, Little Calumet River 76 Halsted Street, Little Calumet River	0/10 0/10	0/8 0/11	0/9 0/12	0/9 0/11	0/11 0/11	0/9 0/12	0/9 0/12	0/11 0/11
52 Wentworth Avenue, Little Calumet River	ŇA	NA						
54 Joe Orr Road, Thorn Creek	NA	NA	NA	NA	NA	NA	NA	NA
97 170th Street, Thorn Creek 57 Ashland Avenue, Little Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
58 Ashland Avenue, Calumet-Sag Channel	0/10	0/11	0/12	0/11	0/11	0/12	0/12	0/12
59 Cicero Avenue, Calumet-Sag Channel	0/10	0/10	0/11	0/11	0/11	0/12	0/12	0/11
43 Route 83, Calumet-Sag Channel	0/11	0/10	0/10	0/11	0/11	0/11	0/10	0/11
Des Plaines River System	NTA	NT A	NIA	NTA	NTA	NA	NTA	NTA
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
89 Walnut Lane, West Branch DuPage River	NA	NA	ŇA	NA	NA	NA	NA	NA
64 Lake Street, West Branch DuPage River	ŅA	NA	NA	NA	ŅA	ŅA	ŅA	NA
79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
18 Devon Avenue, Salt Creek	NA	NA	NA	NA	NA	NA	NA	NA
24 Wolf Road, Salt Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
109 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
77 Elmhurst Road, Higgins Creek	NA	NA	NA.	NA	NA	NA	NA	NA
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA Na	NA NA	NA NA
12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
17 Oakton Street, Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA
19 Belmont Avenue, Des Plaines River	NA NA	NA NA	NA.	NA NA	NA NA	NA	NA	NA NA
20 Roosevelt Road, Des Plaines River 22 Ogden Avenue, Des Plaines River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
23 Willow Springs Road, Des Plaines River	NA	ŇÄ	NA	NA	NA	NA	NA	NA
29 Stephen Street, Des Plaines River	NA	NA	NA.	NA	NA	NA	NA	NA
91 Material Service Road, Des Plaines River 110 Springinsguth Road, West Branch DuPage River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
Springmagauttoud, man station but age tirror	1773		. 1/ %		. ** •	2 1		

NA = Not Applicable. ND = No Data.

TABLE AII-32: TOTAL MANGANESE VIOLATION HISTORY 2003 THROUGH 2010

	Rat	io of V	iolation	ıs/Samp	ling Fr	equenc	y per Y	ear
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System								
30 Lake-Cook Road, West Fork North Branch	ND 0/10	ND 0/11	ND 0/11	ND 0/4	ND 0/5	ND 0/4	ND 0/8	ND 0/3
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	0/10	0/11	0/10	0/11	0/12	0/10	0/10	0/8
31 Lake-Cook Road, Middle Fork North Branch	0/9 0/9	0/10 0/12	0/10 0/12	0/10 0/11	0/11 0/12	0/10 0/12	0/10 0/12	0/9 0/3
104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River	0/9	0/10	0/10	0/10	0/12	0/11	0/10	0/9
105 Frontage Road, Skokie River 34 Dempster Street, North Branch Chicago River	0/12 0/8	0/12 0/12	0/12 0/11	0/11 0/11	0/12 0/12	0/12 0/11	0/12 0/12	0/12 0/11
96 Albany Avenue, North Branch Chicago River	0/11	0/12	0/12	0/11	0/12	0/11	0/11	0/10
35 Central Street, North Shore Channel 102 Oakton Street, North Shore Channel	0/8 0/11	0/9 0/11	0/9 0/11	0/9 0/12	0/9 0/12	0/8 0/12	0/9 0/12	0/9 0/10
36 Touhy Avenue, North Shore Channel	0/11	0/10	0/12	0/12	0/12	0/12	0/12	0/12
101 Foster Avenue, North Shore Channel	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/13 0/12	0/12 0/12	0/12 0/12
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 	0/12 0/12 0/12	0/12	0/12	0/12	0/12	0/12	0/12	0/12
46 Grand Avenue, North Branch Chicago River	0/12 0/11	0/12 0/8	0/12 0/10	0/11 0/11	0/12 0/11	0/12 0/10	0/12 0/9	0/12 0/10
74 Lake Shore Drive, Chicago River 100 Wells Street, Chicago River	0/12	0/11	0/12	0/11	0/12	0/12	0/12	0/12
39 Madison Street, South Branch Chicago River	0/12 0/11	0/11 0/12	0/12 -0/11	0/11 0/12	0/12 0/12	0/12 0/10	0/12 0/12	0/11 0/12
108 Loomis Street, South Branch Chicago River 99 Archer Avenue, South Fork South Branch Chicago River	0/10	0/11	0/12	0/11	0/7	0/11	0/12	0/12
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/12 ND	0/11 ND	0/12 ND	0/12 ND	0/11 ND	0/12 ND	0/12 ND	0/12 ND
107 Western Avenue, Chicago Sanitary & Ship Canal 75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/12	0/11	0/12	0/12	0/13	0/12	0/12	0/12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/9 0/12	0/12 0/10	0/12 0/12	0/12 0/11	0/13 0/13	0/12 0/11	0/12 0/12	0/12 0/12
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal	0/12	0/10	0/12	0/11	0/13	0/11	0/12	0/12
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND 0/51	ND	ND	ND 0/51	ND 0/53	ND 0/52	ND 0/52	ND 0/52
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/51	0/51	1/51	0/31	0/33	0/52	0/32	0,52
Calumet River System		0.47	0.40	0/10	0/11	0/11	0/10	0/12
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	0/6 0/11	0/7 0/10	0/9 0/12	0/10 0/11	0/11 0/11	0/11 0/12	0/10 0/12	0/12 0/12
55 130th Street, Calumet River	0/10	0/9	0/9	0/10	0/11	0/11	0/11	0/10
51 IHB Railroad Bridge, Grand Calumet River	ND 0/7	ND 0/5	ND 0/10	ND 0/10	ND 0/11	ND 0/10	ND 0/9	ND 0/10
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River	0/10	0/8	0/9	0/9	0/11	0/9	0/9	0/11
76 Halsted Street, Little Calumet River	0/10 0/11	0/11 0/10	0/12 0/10	0/11 0/11	0/11 0/11	0/12 0/11	0/12 0/9	0/11 0/10
54 Joe Orr Road, Thorn Creek	0/9	0/9	0/9	0/10	0/9	0/8	0/7	0/3
97 170th Street, Thorn Creek	0/11 0/10	0/9 0/9	0/11 0/10	0/11 0/11	0/11 0/11	0/11 0/11	0/11 0/10	0/10 0/10
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	0/10	0/11	0/12	0/11	0/11	0/12	0/12	0/12
59 Cicero Avenue, Calumet-Sag Channel	0/9 0/10	0/10 0/10	0/11 0/10	0/11 0/11	0/11 0/11	0/12 0/11	0/12 0/10	0/11 0/11
43 Route 83, Calumet-Sag Channel	0/10	0/10	0/10	0/11	0/11	0,11	0.10	
Des Plaines River System	0/10	0/11	0/11	0/11	0/12	0/11	0/11	0/10
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	0/10 ND	0/11 ND	0/11 ND	ND	ND	ND	ND	0/1
89 Walnut Lane, West Branch DuPage River	0/12	0/12	0/12	0/12	0/12 0/12	0/12 0/12	0/11 0/12	0/11 0/12
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	0/6 0/8	0/12 0/8	0/12 0/9	0/12 0/10	0/9	0/12 0/9 0/12	0/11	0/9
80 Arlington Heights Road, Salt Creek	0/11	0/12	0/12	0/12	0/12	0/12 0/12	0/12 0/12	0/12 0/12
18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek	0/9 0/10	0/11 0/12	0/12 0/12	0/12 0/11	0/12 0/12	0/12	0/11	0/12
109 Brookfield Avenue, Salt Creek	0/11	0/11	0/11	0/11	0/12	0/12 ND	0/11 ND	0/10 ND
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	ND 0/1	ND 0/4	ND 0/5	ND 0/5	ND 0/7	0/4	0/6	0/5
78 Wille Road, Higgins Creek	0/9	0/12	0/12	0/12	0/12	0/12	0/11	0/12
12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River	0/7 0/11	0/9 0/12	0/11 0/12	0/9 0/12	0/9 0/12	0/7 0/12	0/7 0/11	0/8 0/12
17 Oakton Street, Des Plaines River	0/11	0/11	0/11	0/11	0/12	0/12	0/11	0/10
19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River	0/11 0/11	0/12 0/11	0/12 0/12	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/12 0/7
22 Ogden Avenue, Des Plaines River	0/12	0/11	0/11	0/11	0/12	0/12	0/11	0/5
23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River	0/12 0/12	0/11 0/11	0/11 0/12	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/10 0/11
91 Material Service Road, Des Plaines River	0/12	0/12	0/12	0/11	0/12	0/12	0/11	0/12
110 Springinsguth Road, West Branch DuPage River	0/7	0/9	0/11	0/10	0/11	1/11	0/10	ND
ND No Date								

TABLE AII-33: TOTAL MERCURY VIOLATION HISTORY 2003 THROUGH 2010 (HUMAN HEALTH STANDARD)¹

		Ratio of Violations/Sampling Frequency per Y							
Samp	pling Station (No. Name)	10	09	08	07	06	05	04	03
	ago River System								
30 106	Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River	NA 0/10	NA 0/11	NA 0/11	NA 1/4	NA 0/5	NA 0/4	NA 4/8	NA 0/3
103	Golf Road, West Fork North Branch Chicago River	0/10	0/11	0/10	0/11	3/12	5/10	4/10	2/8
31 104	Lake-Cook Road, Middle Fork North Branch Glenview Road, North Branch Chicago River	0/9 0/9	0/1 0 0/1 2	0/10 0/12	0/1 0 1/11	2/11 4/12	2/10 6/12	3/10 5/12	2/9 1/3
32	Lake-Cook Road, Skokie River Frontage Road, Skokie River	0/9 0/12	0/10	0/10	1/10	4/12	3/11	5/10	2/9
34	Dempster Street, North Branch Chicago River	0/8	0/12 0/12	0/12 0/11	1/11 2/11	2/12 2/12	5/12 4/11	5/12 6/12	4/12 2/11
96 35	Albany Avenue, North Branch Chicago River Central Street, North Shore Channel	0/11 0/8	0/12 0/9	0/12 0/9	3/11 0/9	1/12 1/9	4/11 1/8	2/11 0/9	2/10 1/9
102	Oakton Street, North Shore Channel	0/11	0/11	0/11	2/12	2/12	3/12	6/12	0/10
101	Touhy Avenue, North Shore Channel Foster Avenue, North Shore Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
37 73	Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
46	Grand Avenue, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
100	Lake Shore Drive, Chicago River Wells Street, Chicago River	0/11 0/12	0/ 9 0/11	0/10 0/12	2/11 1/11	1/11 3/12	0/10 3/12	4/9 3/12	3/10 3/12
39	Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
99	Archer Avenue, South Fork South Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
40 107	Damen Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
75	Cicero Avenue, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
42	Harlem Avenue, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
48	Stephen Street, Chicago Sanitary & Ship Canal Lockport Trebler, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
92	Lockport Forebay, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
	met River System								
	Ewing Avenue, Calumet River Burnham Avenue, Wolf Lake	0/6 0/11	0/7 0/10	0/9 0/12	0/10	1/11	0/11	2/10	2/12 5/12
55	130th Street, Calumet River	0/10	0/9	0/9	2/11 0/10	2/11 2/11	1/12 3/11	3/12 2/11	2/10
	IHB Railroad Bridge, Grand Calumet River Burnham Avenue, Grand Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
56	Indiana Avenue, Little Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
52	Halsted Street, Little Calumet River Wentworth Avenue, Little Calumet River	NA 0/11	NA 0/10	NA 0/10	NA 0/11	NA 2/11	NA 5/11	NA 2/9	NA 3/10
	Joe Orr Road, Thorn Creek 170th Street, Thorn Creek	0/ 9 0/11	0/9 0/9	0/9 0/11	0/10 1/11	2/9 2/11	2/8 5/11	0/7 3/11	1/3 3/10
57	Ashland Avenue, Little Calumet River	0/10	0/9	0/10	1/11	2/11	4/11	3/10	4/10
59	Ashland Avenue, Calumet-Sag Channel Cicero Avenue, Calumet-Sag Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
43	Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
	Plaines River System								
63	Route 19, Poplar Creek Longmeadow Lane, West Branch DuPage River	0/1 0 NA	0/11 NA	0/11 NA	2/11 NA	1/12 NA	3/11 NA	4/11 NA	2/10 0/1
89	Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River	0/12	0/12	0/12	1/12	1/12	2/12	4/11	1/11
79	Higgins Road, Salt Creek	0/6 0/8	0/12 0/8	0/12 0/9	3/12 2/10	2/12 0/9	2/12 1/9	3/12 1/11	4/12 4/9
80 18	Arlington Heights Road, Salt Creek Devon Avenue, Salt Creek	0/12 0/10	0/12 0/11	0/12 0/12	0/12 1/12	2/12 3/12	2/12 2/12	2/12 4/12	3/12 2/12
24	Wolf Road, Salt Creek	0/10	0/12	0/12	2/11	2/12	2/12	2/11	3/12
21	Brookfield Avenue, Salt Creek First Avenue, Salt Creek	0/11 NA	0/11 NA	0/11 NA	1/11 NA	2/12 NA	0/11 NA	7/11 NA	2/10 NA
77 78	Elmhurst Road, Higgins Creek Wille Road, Higgins Creek	0/1 0/9	0/4 0/12	0/5 0/12	1/5 1/12	0/7 2/12	0/4 2/12	2/6 3/11	2/5 3/12
12	Wille Road, Higgins Creek Lake-Cook Road, Buffalo Creek	0/7	0/9	0/11	1/9	1/9	1/7	2/7	3/8
17	Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River	0/11 0/11	0/12 0/11	0/12 0/11	1/12 2/11	3/12 2/12	1/12 2/12	3/11 2/11	3/12 4/10
19	Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River	0/11	0/12	0/12	0/11	2/12	0/12	4/11	3/12
22	Ogden Avenue, Des Plaines River	0/11 0/12	0/11 0/11	0/12 0/11	1/11 1/11	2/12 3/12	2/12 2/12	3/11 2/11	3/7 1/5
29	Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River	0/12 0/12	0/11 0/11	0/11 0/12	1/11 2/11	3/12 2/12 2/12	2/12 2/12 2/12	1/11 2/11	3/10 2/11
91 1	Material Service Road, Des Plaines River	0/12	0/12	0/12	1/11	2/12	2/12	2/11	2/12
110 :	Springinsguth Road, West Branch DuPage River	0/8	0/9	0/11	1/10	1/11	3/11	3/10	NA

¹Human Health Standard in General Use Waters became effective in December 2002. NA = Not Applicable.

TABLE AII-34: TOTAL MERCURY VIOLATION HISTORY 2003 THROUGH 2010^1

		Rat	io of V	iolation	ıs/Samı	oling Fr	equenc	y per Y	ear/
Samp	oling Station (No. Name)	10	09	08	07	06	05	04	03
	ago River System								
30	Lake-Cook Road, West Fork North Branch	NA							
	Dundee Road, West Fork North Branch Chicago River	NA NA	NA	NA	NA	NA	NA NA	NA NA	NA NA
	Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch	NA NA							
104	Glenview Road, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NΑ	NA
	Lake-Cook Road, Skokie River	NA							
105 34	Frontage Road, Skokie River Dempster Street, North Branch Chicago River	NA NA							
9 6	Albany Avenue, North Branch Chicago River	NA							
35	Central Street, North Shore Channel	NA	ŅĄ	NA	ŅA	NA	ŅA	NA	NA
	Oakton Street, North Shore Channel Touhy Avenue, North Shore Channel	NA 0/11	NA 0/10	NA 0/12	NA 0/12	NA 0/12	NA 0/12	NA 0/12	NA 0/12
101	Foster Avenue, North Shore Channel	0/12	0/12	0/12	0/12	0/12	0/13	0/12	0/12
37	Wilson Avenue, North Branch Chicago River	0/12	0/12	0/12	0/12	0/12	0/12	0/12	0/12
73 46	Diversey Parkway, North Branch Chicago River Grand Avenue, North Branch Chicago River	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/11	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12
74	Lake Shore Drive, Chicago River	NA							
100	Wells Street, Chicago River	NA							
39 108	Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River	0/12 0/11	0/11 0/12	0/12 0/11	0/11 0/12	0/12 0/12	0/12 0/10	0/12 0/12	0/11 0/12
99	Archer Avenue, South Fork South Branch Chicago River	0/10	0/11	0/12	0/11	0/12	0/11	0/12	0/12
40	Damen Avenue, Chicago Sanitary & Ship Canal	0/12	0/11	0/12	0/12	0/12	0/12	0/12	0/12
107	Western Avenue, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA O/L2	NA	NA	NA
	Cicero Avenue, Chicago Sanitary & Ship Canal Harlem Avenue, Chicago Sanitary & Ship Canal	0/12 0/9	0/12 0/12	0/12 0/12	0/12 0/12	0/13 0/13	0/12 0/12	0/12 0/12	0/12 0/12
42	Route 83, Chicago Sanitary & Ship Canal	0/12	0/10	0/12	0/11	0/13	0/11	0/12	0/12
48	Stephen Street, Chicago Sanitary & Ship Canal	0/12	0/10	0/12	0/11	0/13	0/11	0/12	0/12
	Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal	NA 0/51	NA 0/51	NA 0/51	NA 0/51	NA 0/53	NA 0/52	NA 0/52	NA 0/52
		0,51	0,51	0,51	0,51	0,55	0,52	0,54	0.52
	met River System								
	Ewing Avenue, Calumet River Burnham Avenue, Wolf Lake	NA	NA NA						
	130th Street, Calumet River	NA NA	NA NA	NA	NA NA	NA NA	NA	NA	NA
51	IHB Railroad Bridge, Grand Calumet River	NA							
	Burnham Avenue, Grand Calumet River	0/7	0/5	0/10	0/10	0/11	1/10	0/9	0/9
	Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River	0/10 0/10	0/8 0/11	0/9 0/12	0/9 0/11	0/11 0/11	0/9 0/12	0/9 0/12	0/11 0/11
52	Wentworth Avenue, Little Calumet River	NA	ŇA	NA	NA	NA	NA	NA	NA
	Joe Orr Road, Thorn Creek	NA	NA	ŊĄ	NA	NA	NA	ŅA	NA
	170th Street, Thom Creek Ashland Avenue, Little Calumet River	NA NA							
58	Ashland Avenue, Calumet-Sag Channel	ó/iò	ó/i i	0/12	0/11	ó/i i	0/12	0/12	0/12
59	Cicero Avenue, Calumet-Sag Channel	0/10	0/10	0/11	0/11	0/11	0/12	0/12	0/11
43	Route 83, Calumet-Sag Channel	0/11	0/10	0/10	0/11	0/11	0/11	0/10	0/11
	Plaines River System								
90	Route 19, Poplar Creek	NA							
63 89	Longmeadow Lane, West Branch DuPage River	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA NA	NA NA
	Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River	NA NA	NA NA	NA NA	NA NA	NA	NA NA	NA NA	NA
79	Higgins Road, Salt Creek	NA							
	Arlington Heights Road, Salt Creek Devon Avenue, Salt Creek	NA	NA	NA	NA	NA	NA	NA NA	NA
	Wolf Road, Salt Creek	NA NA							
109	Brookfield Avenue, Salt Creek	NA							
	First Avenue, Salt Creek Elmhurst Road, Higgins Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA NA	NA NA
78 1	Wille Road, Higgins Creek	NA NA							
12	Lake-Cook Road, Buffalo Creek	NA							
13 1	Lake-Cook Road, Des Plaines River	NA							
	Oakton Street, Des Plaines River Belmont Avenue, Des Plaines River	NA NA							
20 1	Roosevelt Road, Des Plaines River	NA							
22 (Ogden Avenue, Des Plaines River	NA							
23 Y 29 S	Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River	NA NA	NA NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA
91 1	Material Service Road, Des Plaines River	NA NA							
	Springinsguth Road, West Branch DuPage River	NA							
		·							

¹Based upon Secondary Contact Water quality standards which became effective in December 2002. NA = Not Applicable.

TABLE AII-35: TOTAL ZINC VIOLATION HISTORY 2003 THROUGH 2010

	Ratio of Violations/Sampling Frequency per Year							
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System								
30 Lake-Cook Road, West Fork North Branch	NA	NA	NA	NA	NA	NA	NA	NA
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
31 Lake-Cook Road, Middle Fork North Branch	NA	NA	NA	NA	NA	NA	NA	NA
104 Glenview Road, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
34 Dempster Street, North Branch Chicago River	NA	NA	NA	ŇÄ	NA	ŇÄ	NA	NA
96 Albany Avenue, North Branch Chicago River	ŅA	NA	NA	NA	NA	NA	NA	NA
35 Central Street, North Shore Channel 102 Oakton Street, North Shore Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
36 Touhy Avenue, North Shore Channel	0/11	0/10	0/12	0/12	0/12	0/12	0/12	0/12
101 Foster Avenue, North Shore Channel	0/12	0/12	0/12	0/12	0/12	0/13	0/12	0/12
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12
73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River	0/12	0/12	0/12	0/11	0/12	0/12	0/12	0/12
74 Lake Shore Drive, Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River	NA 0/12	NA 0/11	NA 0/12	NA 0/11	NA 0/12	NA 0/12	NA 0/12	NA 0/11
39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River	0/12	0/12	0/11	0/12	0/12 0/12	0/12 0/10	0/12 0/12	0/12
99 Archer Avenue, South Fork South Branch Chicago River	0/10	0/11	0/12	0/11	0/7	0/11	0/12	0/12
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/12	0/11	0/12	0/12	0/12	0/12	0/12	0/12
107 Western Avenue, Chicago Sanitary & Ship Canal 75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND 0/12	ND 0/12	ND 0/12	ND 0/12	ND 0/13	ND 0/12	ND 0/12	ND 0/12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/9	0/12	0/12	0/12	0/13	0/12	0/12	0/12
42 Route 83, Chicago Sanitary & Ship Canal	0/12	0/10	0/12	0/11	0/13	0/11	0/12	0/12
48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal	0/12 ND	0/10 ND	0/12 ND	0/11 ND	0/13 ND	0/11 ND	0/12 ND	0/12 ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/51	0/51	0/51	0/51	0/53	0/52	0/52	0/52
Calumet River System								
49 Ewing Avenue, Calumet River	NA	NA	NA.	NA	NA	NA	NA	NA
50 Burnham Avenue, Wolf Lake	NA	NA	NA	NA	NA	NA	NA	ŅĄ
55 130th Street, Calumet River 51 IHB Railroad Bridge, Grand Calumet River	NA ND	NA ND	NA ND	NA ND	NA ND	NA ND	NA ND	NA ND
86 Burnham Avenue, Grand Calumet River	ο'n	0/5	0/10	0/10	0/11	0/10	0/9	0/10
56 Indiana Avenue, Little Calumet River	0/10	0/8	0/9	0/9	0/11	0/9	0/9	0/11
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River	0/10 NA	0/11 NA	0/12 NA	0/11 NA	0/11 NA	0/12 NA	0/12 NA	0/11 NA
54 Joe Orr Road, Thorn Creek	NA	NA	ŇA	NA	NA	NA	NA	NA
97 170th Street, Thorn Creek	ŅA	NA	ŅA	NA	NA	NA	NA	ŅΑ
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	NA 0/10	NA 0/11	NA 0/12	NA 0/11	NA 0/11	NA 0/12	NA 0/12	NA 0/12
59 Cicero Avenue, Calumet-Sag Channel	ŏ/iŏ	0/10	0/11	0/11	0/11	0/12	0/12	0/11
43 Route 83, Calumet-Sag Channel	0/11	0/10	0/10	0/11	0/11	0/11	0/10	0/11
Des Plaines River System								
90 Route 19, Poplar Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
64 Lake Street, West Branch DuPage River	NA	NA	ŇA	NA	NA	NA	NA	NA
79 Higgins Road, Salt Creek	ŅA	ŅĄ	ŅĄ	ŅA	ŅA	NA	ŅA	ŅĄ
80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
24 Wolf Road, Salt Creek	NA	NA	NA	NA	NA	NA	NA	NA
109 Brookfield Avenue, Salt Creek	NA	NA	NA	NA	NA	NA	NA	NA
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
78 Wille Road, Higgins Creek	NA	NA NA	NA	NA	NA	NA	NA	NA
12 Lake-Cook Road, Buffalo Creek	NA	NA	NA	NA	NA	NA	NA	NA
13 Lake-Cook Road, Des Plaines River 17 Oakton Street, Des Plaines River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
19 Belmont Avenue, Des Plaines River	NA NA	NA NA	NA	NA NA	NA NA	NA NA	NA NA	NA
20 Roosevelt Road, Des Plaines River	NA	NA	NA	NA	NA	NA	NA	NA
 Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River 	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
 Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River 	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
91 Material Service Road, Des Plaines River	NA	NA	NA	NA	NΑ	NA	NA	NA
110 Springinsguth Road, West Branch DuPage River	NA	NA	NA	NA	NA	NA	NA	NA

NA = Not Applicable. ND = No Data.

TABLE AII-36: TOTAL SELENIUM VIOLATION HISTORY 2003 THROUGH 2010

Chicago River System 30 Lake-Cook Road, West Fork North Branch ND ND ND ND ND ND ND N	03 ND 0/3 0/8 0/9 0/3 0/9 0/12 0/10 0/9 0/10
30 Lake-Cook Road, West Fork North Branch Chicago River Ol10 Ol11 Ol11 Ol10 Ol12 Ol10 Ol10 Ol11 Ol11 Ol10 Ol1	0/3 0/8 0/9 0/3 0/9 0/12 0/11 0/10 0/9 0/10
30 Lake-Cook Road, West Fork North Branch Chicago River Ol10 Ol11 Ol11 Ol10 Ol12 Ol10 Ol10 Ol11 Ol11 Ol10 Ol1	0/3 0/8 0/9 0/3 0/9 0/12 0/11 0/10 0/9 0/10
103 Golf Road, West Fork North Branch Chicago River	0/9 0/3 0/9 0/12 0/11 0/10 0/9 0/10
Glenview Road, North Branch Chicago River	0/9 0/12 0/11 0/10 0/9 0/10
105 Frontage Road, Skokie River 0/12 0/12 0/12 0/12 0/12 0/12 0/12 0/12 0/12 0/12 0/12 0/12 0/12 0/13 0/12 0/13 0/14 0/15	0/12 0/11 0/10 0/9 0/10
Albany Avenue, North Branch Chicago River Albany Avenue, North Branch Chicago River O/11	0/10 0/9 0/10
35 Central Street, North Shore Channel 0/8 0/9	0/10
101	
Wilson Avenue, North Branch Chicago River O/12	0/12 0/12
46 Grand Avenue, North Branch Chicago River 74 Lake Shore Drive, Chicago River 75 Lake Shore Drive, Chicago River 76 Uvells Street, Chicago River 77 Lake Shore Drive, Chicago River 78 Madison Street, Chicago River 79 Madison Street, South Branch Chicago River 70 Madison Street, Onlia Ovila	0/12 0/12
74 Lake Shore Drive, Chicago River (0) Wells Street, Chicago River (0) Wells Street, Chicago River (0) Wells Street, Chicago River (0) Madison Street, South Branch Chicago River (0) Madison Street, South March March Chicago River (0) March March March March March Chicago River (0) March Ma	0/12
Madison Street, South Branch Chicago River 0/12 0/11 0/12 0/11 0/12 0/12 0/12 0/12 0/12 0/13 0/12 0/13 0/12 0/13 0/12 0/13 0/12 0/13 0/12 0/13 0/12 0/13	0/10 0/12
99 Archer Avenue, South Fork South Branch Chicago River 40 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal 108 Western Avenue, Chicago Sanitary & Ship Canal 109 ND	0/11 0/12
107 Western Avenue, Chicago Sanitary & Ship Canal ND	0/12 0/12
75 Cicero Avenue, Chicago Sanitary & Ship Canal 0/12 0/12 0/12 0/12 0/13 0/12 0/14 41 Harlem Avenue, Chicago Sanitary & Ship Canal 0/9 0/12 0/12 0/13 0/12 0/13 42 Route 83, Chicago Sanitary & Ship Canal 0/12 0/10 0/12 0/11 0/13 0/11 0/12 48 Stephen Street, Chicago Sanitary & Ship Canal 0/12 0/10 0/12 0/11 0/13 0/11 0/12 82 Lockport Trebler, Chicago Sanitary & Ship Canal ND ND ND ND ND ND ND N	ND
42 Route 83, Chicago Sanitary & Ship Canal 0/12 0/10 0/12 0/11 0/13 0/11 0/12 0/14 0/15 0/	0/12 0/12
ND ND ND ND ND ND ND ND	0/12 0/12
Calumet River System We wing Avenue, Calumet River So Burnham Avenue, Wolf Lake O/10	ND 0/52
49 Ewing Avenue, Calumet River 0/6 0/7 0/9 0/10 0/11 0/11 0/10 0/12 0/15 0/12 0/12 0/12 0/12 0/12 0/13 0/12 0/12 0/13 0/12 0/13 0/13 0/13 0/13 0/13 0/13 0/13 0/13	0/32
50 Burnham Avenue, Wolf Lake 0/11 0/10 0/12 0/11 0/11 0/12 0/12 0/15 130th Street, Calumet River 0/10 0/9 0/9 0/10 0/11 0/11 0/11 0/11 0	0/12
55 150th Steet, Calumet River	0/12 0/10
51 IHB Railroad Bridge, Grand Calumet River	ND
50 Burniam Avenue, Chang Calomet River	0/10 0/11
76 Halsted Street, Little Calumet River 0/10 0/11 0/12 0/11 0/12 0/11 0/12 0/11 0/12 0/11 0/12 0/11 0/12 0/11 0/12 0/11 0/12 0/11 0/12 0/11 0/12 0/12	0/11 0/10
54 Joe Orr Road, Thorn Creek 0/9 0/9 0/10 0/9 0/11 0/11 0/11 0/11	0/3 0/10
57 Ashland Avenue, Little Calumet River 0/10 0/9 0/10 0/11 0/11 0/11 0/10 0/10	0/10
58 Ashland Avenue, Calumet-Sag Channel 0/10 0/11 0/12 0/11 0/12 0/12 0/12 0/10 0/10	0/12 0/11
43 Route 83, Calumet-Sag Channel 0/11 0/10 0/10 0/11 0/11 0/11 0/10 0/10	0/11
Des Plaines River System	0/10
63 Longmeadow Lane. West Branch DuPage River ND	0/10 0/1
80 Walnut Lane West Branch DuPage River 0/12 0/12 0/12 0/12 0/12 0/12	0/11 0/12
79 Higgins Road, Salt Creek 0/8 0/8 0/9 0/10 0/9 0/9 0/11 0	0/9 0/12
18 Devon Avenue, Salt Creek 0/10 0/11 0/12 0/12 0/12 0/12 0/12 0/12	0/12
24 Wolf Road, Salt Creek 0/10 0/12 0/11 0/12 0/12 0/11 0/12 1/19 8rookfield Avenue, Salt Creek 0/11 0/11 0/11 0/11 0/11 0/12 0/12 0/11 0/11	0/12 0/10
21 First Avenue, Salt Creek ND	ND 0/5
78 Wille Road, Higgins Creek 0/9 0/12 0/12 0/12 0/12 0/12 0/13 0/14 0/15	0/12 0/8
13 Lake-Cook Road, Des Plaines River 0/11 0/12 0/12 0/12 0/12 0/11	0/12
17 Oakton Street, Des Plaines River 0/11 0/11 0/11 0/12 0/12 0/11 0/11 0/12 0/12	0/10 0/12
20 Roosevelt Road, Des Plaines River 0/11 0/12 0/11 0/12 0/12 0/12 0/11 0/12 0/12	0/7 0/5
23 Willow Springs Road, Des Plaines River 0/12 0/11 0/11 0/11 0/12 0/12 0/11 0/11	0/10
29 Stephen Street, Des Plaines River 0/12 0/11 0/12 0/12	0/11
110 Springinsguth Road, West Branch DuPage River 0/8 0/9 0/11 0/10 0/11 0/10 0/10	0/12 ND

ND = No Data.

TABLE AII-37: SOLUBLE ARSENIC VIOLATION HISTORY 2003 THROUGH 2010

		Rai	io of V	iolatio	ns/Sam	pling Fr	equenc	y per Y	'ear
San	npling Station (No. Name)	10	09	08	07	06	05	04	03
Chi	cago River System								
30	Lake-Cook Road, West Fork North Branch	ND 0/0	ND	ND	ND	ND	ND	ND	ND
106 103	Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River	0/ 9 0/9	0/11 0/11	0/11 0/1 0	0/4 0/11	0/5 0/12	0/4 0/10	0/8 0/10	0/3 0/8
31	Lake-Cook Road, Middle Fork North Branch	0/8	0/10	0/10	0/10	0/11	0/10	0/10	0/9
104 32	Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River	0/8 0/8	0/12 0/10	0/12 0/10	0/11 0/10	0/12 0/12	0/12 0/11	0/12 0/10	0/3 0/9
105 34	Frontage Road, Skokie River	0/11	0/12 0/12	0/12	0/11	0/12 0/12	0/12	0/12 0/12	0/12 0/11
96	Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River	0/7 0/10	0/12	0/11 0/12	0/11 0/11	0/12	0/11 0/11	0/12	0/10
35 102	Central Street, North Shore Channel	0/7 0/10	0/ 9 0/11	0/9 0/11	0/9 0/12	0/9 0/12	0/8 0/12	0/9 0/12	0/9 0/10
36	Oakton Street, North Shore Channel Touhy Avenue, North Shore Channel	NA	NA	NA	NA	NA	NA	NA	NA
101 37	Foster Avenue, North Shore Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
73	Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River	NA NA	NA	NA	NA NA	NA NA	NA NA	NA	NA
46 74	Grand Avenue, North Branch Chicago River	NA 0/10	NA 0/9	NA 0/10	NA 0/11	NA 0/11	NA 0/10	NA 0/9	NA 0/10
100	Lake Shore Drive, Chicago River Wells Street, Chicago River	0/10	0/11	0/10	0/11	0/12	0/12	0/12	0/12
39 108	Madison Street, South Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
99	Loomis Street, South Branch Chicago River Archer Avenue, South Fork South Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
40 107	Damen Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
75	Cicero Avenue, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
41 42	Harlem Avenue, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
48	Stephen Street, Chicago Sanitary & Ship Canal	NΑ	NA	NA	NA	NA	NA	NA	NA
82 92	Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
	umet River System								
49	Ewing Avenue, Calumet River	0/5	0/7	0/9	0/10	0/11	0/11	0/10	0/12
50 55	Burnham Avenue, Wolf Lake	0/10 0/9	0/10 0/9	0/12 0/9	0/11 0/10	0/11 0/11	0/12 0/11	0/12 0/11	0/12 0/10
51	130th Street, Calumet River IHB Railroad Bridge, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
86 56	Burnham Avenue, Grand Calumet River Indiana Avenue, Little Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
56 76	Halsted Street, Little Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
52 54	Wentworth Avenue, Little Calumet River Joe Orr Road, Thorn Creek	0/10 0/9	0/10 0/9	0/10 0/9	0/11 0/10	0/11 0/9	0/11 0/8	0/9 0/7	0/10 0/3
97	170th Street, Thorn Creek	0/10	0/9	0/11	0/11	0/11	0/11	0/11	0/10
57 58	Ashland Avenue, Little Calumet River Ashland Avenue, Calumet-Sag Channel	0/9 NA	0/9 NA	0/10 NA	0/11 NA	0/11 NA	0/11 NA	0/10 NA	0/10 NA
59	Cicero Avenue, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
43	Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
	Plaines River System	242	0/14	0411	0414	0/10	0/11	0/11	0/10
90 63	Route 19, Poplar Creek Longmeadow Lane, West Branch DuPage River	0/10 ND	0/11 ND	0/11 ND	0/11 ND	0/12 ND	0/11 ND	0/11 ND	0/10 0/1
89	Walnut Lane, West Branch DuPage River	0/12	0/12	0/12	0/12	0/12	0/12	0/11	0/11
64 79	Lake Street, West Branch DuPage River Higgins Road, Salt Creek	0/6 0/8	0/12 0/8	0/12 0/9	0/12 0/10	0/12 0/9	0/12 0/9	0/12 0/11	0/12 0/9
80	Arlington Heights Road, Salt Creek	0/12	0/12	0/12	0/12	0/12	0/12 0/12	0/12	0/12
18 24	Devon Avenue, Salt Creek Wolf Road, Salt Creek	0/10 0/10	0/11 0/12	0/12 0/12	0/12 0/11	0/12 0/12	0/12 0/12	0/12 0/11	0/12 0/12
109	Brookfield Avenue, Salt Creek	0/11	0/11	0/11	0/11	0/12	0/12	0/11	0/10
21 77	First Avenue, Salt Creek Elmhurst Road, Higgins Creek	ND 0/1	ND 0/4	ND 0/5	ND 0/5	ND 0/7	ND 0/4	ND 0/6	ND 0/5
78	Wille Road, Higgins Creek Lake-Cook Road, Buffalo Creek	0/9	0/12	0/12	0/12	0/12	0/12	0/10	0/12
12 13	Lake-Cook Road, Buffalo Creek Lake-Cook Road, Des Plaines River	0/7 0/11	0/9 0/12	0/11 0/12	0/9 0/12	0/9 0/12	0/7 0/12	0/7 0/11	0/8 0/12
17	Oakton Street, Des Plaines River	0/11	0/11	0/11	0/11	0/12 0/12	0/12	0/11	0/10
19 20	Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River	0/11 0/11	0/12 0/11	0/12 0/12	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/12 0/7
22	Ogden Avenue, Des Plaines River	0/12	0/11	0/11	0/11	0/12	0/12	0/11	0/5
23 29	Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River	0/12 0/12	0/11 0/11	0/11 0/12	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/10 0/11
91	Material Service Road, Des Plaines River	0/12	0/12	0/12	0/11	0/12	0/12	0/11	0/12
110	Springinsguth Road, West Branch DuPage River	0/8	0/9	0/11	0/10	0/11	0/11	0/10	ND

NA = Not Applicable. ND = No Data.

TABLE AII-38: SOLUBLE CADMIUM VIOLATION HISTORY 2003 THROUGH 2010

		Rat	io of V	iolation	ıs/Samı	oling Fr	equenc	y per Y	ear
Sam	pling Station (No. Name)	10	09	08	07	06	05	04	03
Chic	rago River System								
30	Lake-Cook Road, West Fork North Branch	ND							
106	Dundee Road, West Fork North Branch Chicago River	0/9	0/11	0/11	0/4	0/5	0/4	0/8	0/3
103	Golf Road, West Fork North Branch Chicago River	0/9	0/11	0/10	0/11 0/10	0/12 0/11	0/10 0/10	0/10 0/10	0/8 0/9
31 104	Lake-Cook Road, Middle Fork North Branch Glenview Road, North Branch Chicago River	0/8 0/8	0/10 0/12	0/10 0/12	0/10	0/12	0/12	0/12	0/3
32	Lake-Cook Road, Skokie River	0/8	ŏ/1ō	0/10	0/10	0/12	0/11	0/10	0/9
105	Frontage Road, Skokie River	0/11	0/12	0/12	0/11	0/12 0/12	0/12	0/12 0/12	0/12
34 96	Dempster Street, North Branch Chicago River	0/7 0/10	0/12 0/12	0/11 0/12	0/11 0/11	0/12	0/11 0/11	0/12	0/11 0/10
35	Albany Avenue, North Branch Chicago River Central Street, North Shore Channel	0/10	0/9	0/12	0/9	0/9	0/8	0/9	0/9
102	Oakton Street, North Shore Channel	0/10	0/11	0/11	0/12	0/12	0/12	0/12	0/10
36	Touhy Avenue, North Shore Channel	ŅĄ	NA	NA	NA	NA	NA NA	NA NA	NA NA
101	Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River	NA NA							
37 73	Diversey Parkway, North Branch Chicago River	NA							
46	Grand Avenue, North Branch Chicago River	NA							
74	Lake Shore Drive, Chicago River	0/10	0/9	0/10	0/11	0/11	0/10 0/12	0/9 0/12	0/10 0/12
100 39	Wells Street, Chicago River Madison Street, South Branch Chicago River	0/11 NA	0/11 NA	0/12 NA	0/11 NA	0/12 NA	NA	NA	NA
108	Loomis Street, South Branch Chicago River	NA	NA	ŇA	NA	NA	NA	NA	NA
99	Archer Avenue, South Fork South Branch Chicago River	NA	ŅA						
40	Damen Avenue, Chicago Sanitary & Ship Canal	NA NA	NA	NA NA	NA NA	NA.	NA NA	NA NA	NA NA
107 75	Western Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA
41	Harlem Avenue, Chicago Sanitary & Ship Canal	NA	NA	NA	ŇA	NA	NA	NA	NA
42	Route 83, Chicago Sanitary & Ship Canal	NA							
48	Stephen Street, Chicago Sanitary & Ship Canal	NA NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
82 92	Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA	NA	NA	NA	NA	NA
	met River System								
	Ewing Avenue, Calumet River	0/5	0/7	0/9	0/10	0/11	0/11	0/10	0/12
50	Burnham Avenue, Wolf Lake	0/10	0/10	0/12	0/11	0/11	0/12	0/12	0/12
55	130th Street, Calumet River	0/9	0/9	0/9	0/10	0/11	0/11	0/11	0/10
51 86	IHB Railroad Bridge, Grand Calumet River Burnham Avenue, Grand Calumet River	NA NA							
56	Indiana Avenue, Little Calumet River	NA	NA	NA	ŇA	NA	NA	NA	NA
76	Halsted Street, Little Calumet River	NA							
52	Wentworth Avenue, Little Calumet River	0/10	0/10	0/10 0/9	0/11 0/10	0/11 0/9	0/11 0/8	0/9 0/7	0/10 0/3
54 97	Joe Orr Road, Thorn Creek 170th Street, Thorn Creek	0/9 0/10	0/9 0/9	0/11	0/10	0/11	0/11	0/11	0/10
ŚŻ	Ashland Avenue, Little Calumet River	0/9	0/9	0/10	0/1 i	0/11	0/11	0/10	0/10
58	Ashland Avenue, Calumet-Sag Channel	ŅA	NA	NA	NA	ŅA	ŅA	ŅA	NA
59 43	Cicero Avenue, Calumet-Sag Channel Route 83, Calumet-Sag Channel	NA NA							
_	Plaines River System	101							
	Route 19, Poplar Creek	0/10	0/11	0/11	0/11	0/12	0/11	0/11	0/10
63	Longmeadow Lane, West Branch DuPage River	ND	0/1						
89	Walnut Lane, West Branch DuPage River	0/12	0/12	0/12	0/12	0/12	0/12	0/11	0/11
64	Lake Street, West Branch DuPage River	0/6	0/12	0/12	0/12	0/12	0/12	0/12	0/12
79	Higgins Road, Salt Creek Arlington Heights Road, Salt Creek	0/8 0/12	0/8 0/12	0/9 0/12	0/10 0/12	0/9 0/12	0/9 0/12	0/11 0/12	0/9 0/12
08 18	Devon Avenue, Salt Creek	0/12	0/12	0/12	0/12	0/12	0/12	0/12	0/12
24	Wolf Road, Salt Creek	0/10	0/12	0/12	0/11	0/12	0/12	0/11	0/12
109	Brookfield Avenue, Salt Creek	0/11	0/11	0/11	0/11	0/12	0/12	0/11	0/10
21 77	First Avenue, Salt Creek Elmhurst Road, Higgins Creek	ND 0/1	ND 0/4	ND 0/5	ND 0/5	ND 0/7	ND 0/4	ND 0/6	ND 0/5
78	Wille Road, Higgins Creek	0/1	0/12	0/12	0/12	0/12	0/12	0/10	0/5 0/12
12	Lake-Cook Road, Buffalo Creek	0/7	0/9	0/11	0/9	0/9	0/7 0/12	0/7	0/8
13	Lake-Cook Road, Des Plaines River	0/11	0/12	0/12	0/12	0/12	0/12	0/11	0/12
17 19	Oakton Street, Des Plaines River	0/11	0/11 0/12	0/11 0/12	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/10 0/12
20	Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River	0/11 0/11	0/12	0/12	0/11	0/12	0/12	0/11	0/7
22	Ogden Avenue, Des Plaines River		0/11	0/11	0/11	0/12	0/12	0/11	0/5
	Willow Springs Road, Des Plaines River	0/12 0/12	0/11	0/11	0/11	0/12	0/12	0/11	0/10
23									
23 29 91	Stephen Street, Des Plaines River Material Service Road, Des Plaines River	0/12 0/12	0/11 0/12	0/12 0/12	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/11 0/12

NA = Not Applicable. ND = No Data.

TABLE AII-39: SOLUBLE COPPER VIOLATION HISTORY 2003 THROUGH 2010

		Rat	io of V	iolatio	ns/Sam	pling F	requenc	y per Y	'ear
Sam	opling Station (No. Name)	10	09	08	07	06	05	04	03
Chi	cago River System								
30	Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND
106 103	Dundee Road, West Fork North Branch Chicago River	0/9	0/11	0/11	0/4	0/5 0/12	0/4 0/10	0/8	0/3 0/8
31	Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch	0/9 0/8	0/11 0/10	0/10 0/10	0/11 0/10	0/11	0/10	0/10 0/10	0/9
104	Glenview Road, North Branch Chicago River	0/8	0/12	0/12	0/11	0/12	0/12	0/12	0/3
32 105	Lake-Cook Road, Skokie River Frontage Road, Skokie River	0/8 0/11	0/10 0/12	0/10 0/12	0/10 0/11	0/12 0/12	0/11 0/12	0/10 0/12	0/9 0/12
34	Dempster Street, North Branch Chicago River	0/7	0/12	0/11	0/11	0/12 0/12	0/11	0/12	0/11
96 35	Albany Avenue, North Branch Chicago River Central Street, North Shore Channel	0/10 0/7	0/12 0/9	0/12 0/9	0/11 0/9	0/12 0/9	0/11 0/8	0/11 0/9	0/10 0/9
102	Oakton Street, North Shore Channel	0/10	0/11	0/11	0/12	0/12	0/12	0/12	0/10
36	Touhy Avenue, North Shore Channel	NA	NA	NA NA	NA	NA	NA NA	NA NA	NA NA
101 37	Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
73	Diversey Parkway, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NΑ	NA
46 74	Grand Avenue, North Branch Chicago River Lake Shore Drive, Chicago River	NA 0/10	NA 0/9	NA 0/10	NA 0/11	NA 0/11	NA 0/10	NA 0/9	NA 0/10
100	Wells Street, Chicago River	0/11	0/11	0/12	0/11	0/12	0/12	0/12	0/12
39	Madison Street, South Branch Chicago River	ŅA	NA	NA	NA	NA	NA NA	NA NA	NA NA
108 99	Loomis Street, South Branch Chicago River Archer Avenue, South Fork South Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA NA	NA
40	Damen Avenue, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
107 75	Western Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
41	Harlem Avenue, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
42	Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal	NA	NA	NA.	NA NA	NA	NA NA	NA NA	NA NA
48 82	Lockport Trebler, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA
92	Lockport Forebay, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
Calı	umet River System								
49	Ewing Avenue, Calumet River	0/5	0/7	0/9	0/10	0/11	0/11	0/10	0/12 0/12
50 55	Burnham Avenue, Wolf Lake 130th Street, Calumet River	0/10 0/9	0/10 0/9	0/12 0/9	0/11 0/10	0/11 0/11	0/12 0/11	0/12 1/11	0/10
51	IHB Railroad Bridge, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
86	Burnham Avenue, Grand Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
76	Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River	NA	NA	ŇÄ	ŇĀ	NA	NA	NA	NA
56 76 52 54	Wentworth Avenue, Little Calumet River	0/10	0/10	0/10	0/11	0/11	0/11	0/9	0/10 0/3
97	Joe Orr Road, Thorn Creek 170th Street, Thorn Creek	0/9 0/10	0/9 0/9	0/9 0/11	0/10 0/11	0/9 0/11	0/8 0/11	0/7 0/11	0/10
57	Ashland Avenue, Little Calumet River	0/9	0/9	0/10	0/11	0/11	0/11	0/10	0/10
58 59	Ashland Avenue, Calumet-Sag Channel Cicero Avenue, Calumet-Sag Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
43	Route 83, Calumet-Sag Channel	NA	NA	NA	NA	ŇA	NA	NA	NA
Des	Plaines River System								
90	Route 19, Poplar Creek	0/10	0/11	0/11	0/11	0/12	0/11	0/11	0/10
63 89	Longmeadow Lane, West Branch DuPage River Walnut Lane, West Branch DuPage River	ND 0/12	ND 0/12	ND 0/12	ND 0/12	ND 0/12	ND 0/12	ND 0/11	0/1 0/11
64	Lake Street, West Branch DuPage River	0/6	0/12	0/12	0/12	0/12	0/12	0/12	0/12
79	Higgins Road, Salt Creek	0/8	0/8	0/9	0/10	0/9	0/9 0/12	0/11	0/9
80 18	Arlington Heights Road, Salt Creek Devon Avenue, Salt Creek	0/12 0/10	0/1 2 0/1 1	0/12 0/12	0/12 0/12	0/12 0/12	0/12	0/12 0/12	0/12 0/12
24	Wolf Road, Salt Creek	0/10	0/12	0/12	0/11	0/12	0/12	0/11	0/12
109 21	Brookfield Avenue, Salt Creek First Avenue, Salt Creek	0/11 ND	0/11 ND	0/11 ND	0/11 ND	0/12 ND	0/12 ND	0/11 ND	0/10 ND
21 77	Elmhurst Road, Higgins Creek	0/1	0/4	0/5	0/5	0/7	0/4	0/6	0/5
78 12	Wille Road, Higgins Creek Lake-Cook Road, Buffalo Creek	1/9 0/7	0/12 0/9	0/12 0/11	0/12 0/9	0/12 0/9	0/12	0/10 0/7	0/12 0/8
13	Lake-Cook Road, Des Plaines River	0// 0/11	0/12	0/12	0/12	0/9	0/7 0/12	0/1 0/11	0/12
17	Oakton Street, Des Plaines River	0/11	0/11	0/11	0/11	0/12	0/12	0/11	0/10
19 20	Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River	0/11 0/11	0/12 0/11	0/12 0/12	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/12 0/7
20 22	Ogden Avenue, Des Plaines River	0/12	11/0	0/11	0/11	0/12	0/12	0/11	0/5
23	Willow Springs Road, Des Plaines River	0/12 0/12	0/11	0/11	0/11	0/12	0/12	0/11	0/10
29 91	Stephen Street, Des Plaines River Material Service Road, Des Plaines River	0/12 0/12	0/11 0/12	0/12 0/12	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/11 0/12
71	Springinsguth Road, West Branch DuPage River								ND

NA = Not Applicable. ND = No Data.

TABLE AII-40: SOLUBLE CHROMIUM VIOLATION HISTORY 2003 THROUGH 2010

	Rai	io of V	iolation	ıs/Samı	pling F	requenc	y per Y	'ear
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System								
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	0/ 9 0/9	0/11 0/11	0/11 0/10	0/4 0/11	0/5 0/12	0/4 0/10	0/8 0/10	0/3 0/8
31 Lake-Cook Road, Middle Fork North Branch	0/8	0/10	0/10	0/10	0/11	0/10	0/10	0/9
104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River	0/8 0/8	0/12 0/10	0/12 0/10	0/11 0/10	0/12 0/12	0/12 0/11	0/12 0/10	0/3 0/9
105 Frontage Road, Skokie River	0/11	0/12	0/12	0/11	0/12	0/12	0/12	0/12
34 Dempster Street, North Branch Chicago River 96 Albany Avenue, North Branch Chicago River	0/7 0/10	0/12 0/12	0/11 0/12	0/11 0/11	0/12 0/12	0/11 0/11	0/12 0/11	0/11 0/10
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	0/7	0/9	0/9	0/9	0/9	0/8	0/9	0/9
102 Oakton Street, North Shore Channel	0/10	0/11	0/11	0/12	0/12	0/12	0/12 NA	0/10 NA
36 Touhy Avenue, North Shore Channel 101 Foster Avenue, North Shore Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA
37 Wilson Avenue, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
74 Lake Shore Drive, Chicago River	0/10	0/9	0/10	0/11	0/11	0/10	0/9	0/10
100 Wells Street, Chicago River	0/11 NA	0/11 NA	0/12 NA	0/11 NA	0/12 NA	0/12 NA	0/12 NA	0/12 NA
39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River	NA NA	NA NA	NA	NA	NA	NA	NA	NA
99 Archer Avenue, South Fork South Branch Chicago River	ŅA	NA	NA	ŅA	NA	ŅĄ	NA NA	NA
40 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
75 Cicero Avenue, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
41 Harlem Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
48 Stephen Street, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
82 Lockport Trebler, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
92 Lockport Forebay, Chicago Sanitary & Ship Canal	INA	NA	NA	11/7	INA	IVA	IVA	11/1
Calumet River System	0.15	0.67	0.10	0/10	0/11	0/11	0/10	0/12
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	0/5 0/10	0/7 0/10	0/9 0/12	0/10 0/11	0/11 0/11	0/11 0/12	0/10 0/12	0/12 0/12
55 130th Street, Calumet River	0/9	0/9	0/9	0/10	0/11	0/11	0/11	0/10
51 IHB Railroad Bridge, Grand Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River	NA	ŇÄ	NA	ŇÄ	NA	NA	NA	NA
76 Halsted Street, Little Calumet River	NA	NA	NA	NA	NA	NA 0/11	NA 0/9	NA 0/10
52 Wentworth Avenue, Little Calumet River 54 Joe Orr Road, Thorn Creek	0/10 0/9	0/10 0/9	0/10 0/9	0/11 0/10	0/11 0/9	0/11 0/8	0/7	0/3
97 170th Street, Thorn Creek	0/10	0/9	0/11	0/11	0/11	0/11	0/11	0/10
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	0/9 NA	0/9 NA	0/10 NA	0/11 NA	0/11 NA	0/11 NA	0/10 NA	0/10 NA
59 Cicero Avenue, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/10	0/11	0/11 ND	0/11	0/12 ND	0/11 ND	0/11	0/10 0/1
63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River	ND 0/12	ND 0/12	ND 0/12	ND 0/12	ND 0/12	ND 0/12	ND 0/11	0/1
64 Lake Street, West Branch DuPage River	0/6	0/12	0/12	0/12	0/12	0/12	0/12	0/12
79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek	0/8 0/12	0/8 0/12	0/9 0/12	0/10 0/12	0/9 0/12	0/9 0/12	0/11 0/12	0/9 0/12
18 Devon Avenue, Salt Creek	0/10	0/11	0/12	0/12	0/12	0/12	0/12	0/12
24 Wolf Road, Salt Creek 109 Brookfield Avenue, Salt Creek	0/10 0/11	0/12 0/11	0/12 0/11	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/12 0/10
21 First Avenue, Salt Čreek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/1	0/4	0/5	0/5	0/7	0/4	0/6	0/5
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	0/9 0/7	0/12 0/9	0/12 0/11	0/12 0/9	0/12 0/9	0/12 0/7	0/10 0/7	0/12 0/8
13 Lake-Cook Road, Des Plaines River	0/11	0/12	0/12	0/12	0/12	0/12	0/11	0/12
17 Oakton Street, Des Plaines River 19 Belmont Avenue, Des Plaines River	0/11 0/11	0/11 0/12	0/11 0/12	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/10 0/12
20 Roosevelt Road, Des Plaines River	0/11	0/11	0/12	0/11	0/12	0/12	0/11	0/7
22 Ogden Avenue, Des Plaines River	0/12	0/11	0/11	0/11	0/12	0/12	0/11	0/5
23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River	0/12 0/12	0/11 0/11	0/11 0/12	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/10 0/11
91 Material Service Road, Des Plaines River	0/12	0/12	0/12 0/11	0/11	0/12 0/11	0/12	0/11	0/12
110 Springinsguth Road, West Branch DuPage River	0/8	0/9	0/11	0/10	0/11	0/11	0/10	ND

NA = Not Applicable. ND = No Data.

TABLE AII-41: SOLUBLE IRON VIOLATION HISTORY 2003 THROUGH 2010

		Rat	io of V	iolation	ns/Samp	oling Fr	equenc	y per Y	'ear
Samplin	g Station (No. Name)	10	09	08	07	06	05	04	03
Chicago	River System								
30 Lak	e-Cook Road, West Fork North Branch	ND							
106 Dur 103 Gol	dee Road, West Fork North Branch Chicago River f Road, West Fork North Branch Chicago River	0/9 0/9	0/11 0/11	0/11 0/10	0/4 0/11	0/5 0/12	0/4 0/10	0/8 0/10	0/3 0/8
31 Lak	e-Cook Road, Middle Fork North Branch	0/8	0/10	0/10	0/10	0/11	0/10	0/10	0/9
104 Glei 32 Lak	nview Road, North Branch Chicago River	0/8 0/8	0/12	0/12 0/10	0/11 0/10	0/12 0/12	0/12 0/11	0/12 0/10	0/3 0/9
	e-Cook Road, Skokie River ntage Road, Skokie River	0/11	0/10 0/12	0/10	0/10	0/12	0/12	0/12	0/12
34 Den	npster Street, North Branch Chicago River	0/7	0/12	0/11	0/11	0/12	0/11	0/12	0/11
96 Alb 35 Cen	any Avenue, North Branch Chicago River tral Street, North Shore Channel	0/10 0/7	0/12 0/9	0/12 0/9	0/11 0/9	0/12 0/9	0/11 0/8	0/11 0/9	0/10 0/9
102 Oak	ton Street, North Shore Channel	0/10	0/11	0/11	0/12	0/12	0/12	0/12	0/10
	hy Avenue, North Shore Channel er Avenue, North Shore Channel	0/10 0/11	0/10 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/13	0/12 0/12	0/12 0/12
37 Wil:	son Avenue, North Branch Chicago River	0/11	0/12	0/12	0/12	0/12	0/12	0/12	0/12
73 Div	ersey Parkway, North Branch Chicago River	0/11 0/11	0/12 0/12	0/12 0/12	0/12 0/11	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12
	nd Avenue, North Branch Chicago River e Shore Drive, Chicago River	0/10	0/12	0/10	0/11	0/11	0/10	0/9	0/10
100 Wel	ls Street, Chicago River	0/11	0/11	0/12	0/11	0/12	0/12	0/12	0/12
39 Mac 108 Loo	lison Street, South Branch Chicago River mis Street, South Branch Chicago River	0/11 0/10	0/11 0/12	0/12 0/11	0/11 0/12	0/12 0/12	0/12 0/10	0/12 0/12	0/11 0/12
99 Arc	her Avenue, South Fork South Branch Chicago River	0/9	0/11	0/12	0/11	0/7	0/11	0/12	0/12
	nen Avenue, Chicago Sanitary & Ship Canal tern Avenue, Chicago Sanitary & Ship Canal	0/11 ND	0/11 ND	0/12 ND	0/12 ND	0/12 ND	0/12 ND	0/12 ND	0/12 ND
75 Cice	ro Avenue, Chicago Sanitary & Ship Canal	0/11	0/12	0/12	0/12	0/13	0/12	0/12	0/12
41 Har	lem Avenue, Chicago Sanitary & Ship Canal	0/8 0/11	0/11	0/11 0/12	0/12 0/11	0/13 0/13	0/12 0/11	0/12 0/12	0/12 0/12
42 Rou 48 Ster	te 83, Chicago Sanitary & Ship Canal then Street, Chicago Sanitary & Ship Canal	0/11	0/10 0/10	0/12	0/11	0/13	0/11	0/12	0/12
82 Loc	kport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND 0/52	ND 0/52	ND 0/52
	kport Forebay, Chicago Sanitary & Ship Canal	0/47	0/51	0/51	0/51	0/53	0/32	0/52	0/32
	River System	0.05	0.47	0.00	0410	0/11	0/11	0/10	0/12
	ng Avenue, Calumet River nham Avenue, Wolf Lake	0/5 0/10	0/7 0/10	0/9 0/12	0/10 0/11	0/11 0/11	0/11 0/12	0/10 0/12	0/12 0/12
55 130	th Street, Calumet River	0/9	0/9	0/9	0/10	0/11	0/11	0/11	0/10
51 IHB	Railroad Bridge, Grand Calumet River	ND 0/6	ND 0/5	ND 0/10	ND 1/10	ND 0/11	ND 0/10	ND 0/9	ND 0/10
86 Bur 56 Indi	nham Avenue, Grand Calumet River ana Avenue, Little Calumet River	0/9	0/8	0/9	0/9	0/1 i	0/9	0/9	0/11
76 Hals	sted Street, Little Calumet River	0/9	0/11	0/12	0/11	0/11	0/12 0/11	0/12 0/9	0/11 0/10
	tworth Avenue, Little Calumet River Orr Road, Thorn Creek	0/10 0/9	0/10 0/9	0/10 0/9	0/11 0/10	0/11 0/9	0/11	0/9	0/10
97 170	h Street, Thorn Creek	0/10	0/9	0/11	0/11	0/11	0/11	0/11	0/10
	land Avenue, Little Calumet River land Avenue, Calumet-Sag Channel	0/9 0/9	0/9 0/11	0/10 0/12	0/11 0/11	0/11 0/11	0/11 0/12	0/10 0/12	0/10 0/12
59 Cice	ro Avenue, Calumet-Sag Channel	0/9	0/10	0/11	0/11	0/11	0/12	0/12	0/11
43 Rou	te 83, Calumet-Sag Channel	0/10	0/10	0/10	1/11	0/11	0/11	0/10	0/11
	nes River System						044		04.0
90 Rou 63 Lon	te 19, Poplar Creek	0/10 ND	0/11 ND	0/11 ND	0/11 ND	0/12 ND	0/11 ND	0/11 ND	0/10 0/1
	gmeadow Lane, West Branch DuPage River nut Lane, West Branch DuPage River	0/12	0/12	0/12	0/12	0/12	0/12	0/11	0/11
	e Street, West Branch DuPage River gins Road, Salt Creek	0/6	0/12	0/12	0/12	0/12	0/12	0/12	0/12
79 Hig 80 Arli	gins Road, Salt Creek ngton Heights Road, Salt Creek	0/8 0/12	0/8 0/12	0/9 0/12	0/10 0/12	0/9 0/12	0/9 0/12	0/11 0/12	0/9 0/12
18 Dev	on Avenue, Salt Creek	0/10	0/11	0/12	0/12	0/12	0/12	0/12	0/12
	f Road, Salt Creek okfield Avenue, Salt Creek	0/10 0/11	0/12 0/11	0/12 0/11	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/12 0/10
21 First	Avenue, Salt Creek	ND							
77 Elm 78 Will	hurst Road, Higgins Creek e Road, Higgins Creek	0/1 0/9	0/4 0/12	0/5 0/12	0/5 0/12	0/7 0/12	0/4 0/12	0/6 0/10	0/5 0/12
12 Lak	e-Cook Road, Buffalo Creek	0/9	0/9	0/11	0/9	0/9	0/7	0/7	0/8
13 Lake	e-Cook Road, Des Plaines River	0/11	0/12	0/12	0/12	0/12	0/12	0/11	0/12
	ton Street, Des Plaines River nont Avenue, Des Plaines River	0/11 0/11	0/11 0/12	0/11 0/12	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/10 0/12
20 Roo	sevelt Road, Des Plaines River	0/11	0/11	0/12	0/11	0/12	0/12	0/11	0/7
22 Ogd 23 Will	en Avenue, Des Plaines River ow Springs Road, Des Plaines River	0/12 0/12	0/11 0/11	0/11 0/11	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/5 0/10
29 Step	hen Street, Des Plaines River	0/12	0/11	0/12	0/11	0/12	0/12	0/11	0/11
91 Mat	erial Service Road, Des Plaines River	0/12	0/12 0/9	0/12 0/11	0/11 0/10	0/12 0/11	0/12 0/11	0/11 0/10	0/12 ND
ND No	nginsguth Road, West Branch DuPage River	0/8	U/ 7	U/11	0/10	0/11	0/11	0/10	אט

ND = No Data.

TABLE AII-42: SOLUBLE LEAD VIOLATION HISTORY 2003 THROUGH 2010

	Rat	io of V	iolation	ns/Sam	pling F	equenc	y per Y	ear ear
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System								
30 Lake-Cook Road, West Fork North Branch	ND 0/9	ND	ND 0/11	ND 0/4	ND 0/5	ND 0/4	ND 0/8	ND 0/3
103 Golf Road, West Fork North Branch Chicago River	0/9	0/11 0/11	0/10	0/11	0/12	0/10	0/10	0/8
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	0/8 0/8	0/10 0/12	0/10 0/12	0/10 0/11	0/11 0/12	0/10 0/12	0/10 0/12	0/9 0/3
32 Lake-Cook Road, Skokie River	0/8	0/10	0/10	0/10	0/12	0/11	0/10	0/9
105 Frontage Road, Skokie River 34 Dempster Street, North Branch Chicago River	0/11 0/7	0/12 0/12	0/12 0/11	0/11 0/11	0/12 0/12	0/12 0/11	0/12 0/12	0/12 0/11
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	0/10 0/7	0/12 0/9	0/12 0/9	0/11 0/9	0/12 0/9	0/11 0/8	0/11 0/9	0/10 0/9
102 Oakton Street, North Shore Channel	0/10	0/11	0/11	0/12	0/12	0/12	0/12	0/10
36 Touhy Avenue, North Shore Channel 101 Foster Avenue, North Shore Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
37 Wilson Avenue, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
74 Lake Shore Drive, Chicago River 100 Wells Street, Chicago River	0/10 0/11	0/9 0/11	0/10 0/12	0/11 0/11	0/11 0/12	0/10 0/12	0/9 0/12	0/10 0/12
39 Madison Street, South Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
108 Loomis Street, South Branch Chicago River 99 Archer Avenue, South Fork South Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
40 Damen Avenue, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
107 Western Avenue, Chicago Sanitary & Ship Canal 75 Cicero Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
41 Harlem Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
48 Stephen Street, Chicago Sanitary & Ship Canal	NA NA	NA	NA	NA	NA	NA	NA	NA
82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
Calumet River System								
49 Ewing Avenue, Calumet River	0/5	0/7	0/9	0/10	0/11	0/11	0/10 0/12	0/12 0/12
50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River	0/10 0/9	0/10 0/9	0/12 0/9	0/11 0/10	0/11 0/11	0/12 0/11	0/11	0/10
51 IHB Railroad Bridge, Grand Calumet River 86 Burnham Avenue, Grand Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
56 Indiana Avenue, Little Calumet River	NA	NΑ	NA	NA	NA	NA	NA	NA
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River	NA 0/10	NA 0/10	NA 0/10	NA 0/11	NA 0/11	NA 0/11	NA 0/9	NA 0/10
54 Joe Orr Road, Thorn Creek	0/9	0/9	0/9	0/10	0/9	0/8	0/7	0/3
97 170th Street, Thorn Creek 57 Ashland Avenue, Little Calumet River	0/10 0/9	0/8 0/9	0/11 0/10	0/11 0/11	0/11 0/11	0/11 0/11	0/11 0/10	0/10 0/10
58 Ashland Avenue, Calumet-Sag Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
59 Cicero Avenue, Calumet-Sag Channel 43 Route 83, Calumet-Sag Channel	ŇÄ	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System					04.4	0.44	0.44	044.0
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	0/10 ND	0/11 ND	0/1 1 ND	0/11 ND	0/12 ND	0/11 ND	0/11 ND	0/10 0/1
89 Walnut Lane, West Branch DuPage River	0/12	0/12	0/12	0/12	0/12	0/12	0/11	0/11
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	0/6 0/8	0/12 0/8	0/12 0/9	0/12 0/10	0/12 0/9	0/12 0/9	0/12 0/11	0/12 0/9
80 Arlington Heights Road, Salt Creek	0/12 0/10	0/12 0/11	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12	0/12 0/12
24 Wolf Road, Salt Creek	0/10	0/12	0/12	0/11	0/12	0/12	0/11	0/12
109 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek	0/11 ND	0/11 ND	0/11 ND	0/11 ND	0/12 ND	0/12 ND	0/11 ND	0/10 ND
77 Elmhurst Road, Higgins Creek	0/1	0/4	0/5	0/5	0/7	0/4	0/6	0/5
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	0/9 0/7	0/12 0/9	0/12 0/11	0/12 0/9	0/12 0/9	0/12 0/7	0/10 0/7	0/12 0/8
13 Lake-Cook Road, Des Plaines River 17 Oakton Street, Des Plaines River	0/11 0/11	0/12	0/12 0/11	0/12 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/12 0/10
19 Belmont Avenue, Des Plaines River	0/11	0/11 0/12	0/12	0/11	0/12	0/12	0/11	0/12
20 Roosevelt Road, Des Plaines River 22 Ogden Avenue, Des Plaines River	0/11 0/12	0/11 0/11	0/12 0/11	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/7 0/5
23 Willow Springs Road, Des Plaines River	0/12	0/11	0/11	0/11	0/12	0/12	0/11	0/10
29 Stephen Street, Des Plaines River 91 Material Service Road, Des Plaines River	0/12 0/12	0/11 0/12	0/12 0/12	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/11 0/12
110 Springinsguth Road, West Branch DuPage River	0/8	0/9	0/11	0/10	0/11	0/11	0/10	ND

NA = Not Applicable. ND = No Data.

TABLE AII-43: SOLUBLE NICKEL VIOLATION HISTORY 2003 THROUGH 2010

	Rat	io of V	iolation	ns/Sam	pling F	equenc	y per Y	ear
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System								
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River	ND 0/9	ND 0/11	ND 0/11	ND 0/4	ND 0/5	ND 0/4	ND 0/8	ND 0/3
103 Golf Road, West Fork North Branch Chicago River	0/9	0/11	0/10	0/11	0/12	0/10	0/10	0/8
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	0/8 0/8	0/10 0/12	0/10 0/12	0/10 0/11	0/11 0/12	0/10 0/12	0/10 0/12	0/9 0/3
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River	0/8 0/11	0/10 0/12	0/10 0/12	0/10 0/11	0/12 0/12 0/12	0/11 0/12	0/10 0/12	0/9 0/12
34 Dempster Street, North Branch Chicago River	0/7	0/12	0/11	0/11	0/12	0/11	0/12	0/11
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	0/10 0/7	0/12 0/9	0/12 0/9	0/11 0/9	0/12 0/9	0/11 0/8	0/11 0/9	0/10 0/9
102 Oakton Street, North Shore Channel 36 Touhy Avenue, North Shore Channel	0/10 NA	0/11 NA	0/11 NA	0/12 NA	0/12 NA	0/11 NA	0/12 NA	0/10 NA
101 Foster Avenue, North Shore Channel	NA	NA	NA	NA	NA	NA	NA	NA
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
46 Grand Avenue, North Branch Chicago River 74 Lake Shore Drive, Chicago River	NA 0/10	NA 0/9	NA 0/10	NA 0/11	NA 0/11	NA 0/10	NA 0/9	NA 0/10
100 Wells Street, Chicago River	0/11	0/11	0/12	0/11	0/12	0/12	0/12	0/12
39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
99 Archer Avenue, South Fork South Branch Chicago River 40 Damen Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
107 Western Avenue, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
75 Cicero Avenue, Chicago Sanitary & Ship Canal 41 Harlem Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
82 Lockport Trebler, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
92 Lockport Forebay, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
Calumet River System 49 Ewing Avenue, Calumet River	0/5	0/7	0/9	0/10	0/11	0/11	0/10	0/12
50 Burnham Avenue, Wolf Lake	0/10	0/10	0/12	0/11	0/11	0/12	0/12	0/12
55 130th Street, Calumet River 51 IHB Railroad Bridge, Grand Calumet River	0/9 NA	0/9 NA	0/9 NA	0/10 NA	0/11 NA	0/11 NA	0/11 NA	0/10 NA
86 Burnham Avenue, Grand Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
56 Indiana Avenue, Little Calumet River 76 Halsted Street, Little Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
52 Wentworth Avenue, Little Calumet River 54 Joe Orr Road, Thorn Creek	0/10 0/9	0/10 0/9	0/10 0/9	0/11 0/10	0/11 0/9	0/11 0/8	0/9 0/7	0/10 0/3
97 170th Street, Thorn Creek	0/10 0/9	0/9 0/9	0/11 0/10	0/11 0/11	0/11 0/11	0/11 0/11	0/11 0/10	0/10 0/10
58 Ashland Avenue, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
59 Cicero Avenue, Calumet-Sag Channel 43 Route 83, Calumet-Sag Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/10	0/11	0/11	0/11	0/12	0/11	0/11	0/10
63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River	ND 0/12	ND 0/12	ND 0/12	ND 0/12	ND 0/12	ND 0/11	ND 0/11	0/1 0/11
64 Lake Street, West Branch DuPage River	0/6	0/12	0/12 0/9	0/12	0/12	0/12	0/12	0/12
79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek	0/8 0/12	0/8 0/12	0/12	0/10 0/12	0/9 0/12	0/9 0/12	0/11 0/12	0/9 0/12
18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek	0/10 0/10	0/11 0/12	0/12 0/12	0/12 0/11	0/12 0/12	0/12 0/12	0/12 0/11	0/12 0/12
109 Brookfield Avenue, Salt Creek	0/11	0/11	0/11 ND	0/11	0/12	0/12	0/11	0/10 ND
21 First Avenue, Salt Čreek 77 Elmhurst Road, Higgins Creek	ND 0/1	ND 0/4	0/5	ND 0/5	ND 0/7	ND 0/4	ND 0/6	0/5
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	0/9 0/7	0/12 0/9	0/12 0/11	0/12 0/9	0/12 0/9	0/12 0/7	0/10 0/7	0/12 0/8
13 Lake-Cook Road, Des Plaines River	0/11	0/12	0/12	0/12	0/12	0/12	0/11	0/12
17 Oakton Street, Des Plaines River 19 Belmont Avenue, Des Plaines River	0/11 0/11	0/11 0/12	0/11 0/12	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/10 0/12
 Roosevelt Road, Des Plaines River Ogden Avenue, Des Plaines River 	0/11 0/12	0/11 0/11	0/12 0/11	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/7 0/5
23 Willow Springs Road, Des Plaines River	0/12	0/11	0/11	0/11	0/12	0/12	0/11	0/10
29 Stephen Street, Des Plaines River 91 Material Service Road, Des Plaines River	0/12 0/12	0/11 0/12	0/12 0/12	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/11 0/12
110 Springinsguth Road, West Branch DuPage River	0/8	0/9	0/11	0/10	Ŏ/1 Ī	Ŏ/i ī	0/10	ND

NA = Not Applicable. ND = No Data.

TABLE AII-44: SOLUBLE MERCURY VIOLATION HISTORY 2003 THROUGH 2010

	Rat	io of V	iolation	ns/Sam	pling F	requenc	cy per \	⁄ear
Sampling Station (No. Name)	10	09	08	07	06	05	04	03
Chicago River System								
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River	ND	ND	ND	ND	ND	ND ND	ND 0/3	ND ND
103 Golf Road, West Fork North Branch Chicago River	ND ND	ND ND	ND ND	ND ND	ND ND	0/1	0/3	0/2
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	0/3 0/5	0/2 ND
32 Lake-Cook Road, Skokie River	ND	ND	ND	ND	ND	0/2	0/4	0/2
105 Frontage Road, Skokie River 34 Dempster Street, North Branch Chicago River	ND ND	ND ND	ND ND	ND ND	ND ND	0/2 0/1	0/5 0/4	0/4 0/2
96 Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	0/1	0/2	0/2
35 Central Street, North Shore Channel 102 Oakton Street, North Shore Channel	ND ND	ND ND	ND ND	ND ND	ND ND	0/1 0/1	ND 0/5	0/1 ND
36 Touhy Avenue, North Shore Channel	NA	NA	NA	NA	NA	NA	NA	NA
101 Foster Avenue, North Shore Channel 37 Wilson Avenue, North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
73 Diversey Parkway, North Branch Chicago River	ŊΑ	NA	NA	NA	NA	NA	NA	NA
46 Grand Avenue, North Branch Chicago River 74 Lake Shore Drive, Chicago River	NA ND	NA ND	NA ND	NA ND	NA ND	NA ND	NA 0/3	NA 0/4
100 Wells Street, Chicago River	ND	ND	ND	ND	ND	0/1	0/3	0/3
39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
99 Archer Avenue, South Fork South Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
40 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
75 Cicero Avenue, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA.	NA	NA
41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
48 Stephen Street, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
Calumet River System								
49 Ewing Avenue, Calumet River	ND	ND	ND	ND	ND	ND	0/1	0/1
50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River	ND ND	ND ND	ND ND	ND ND	ND 0/1	ND ND	0/2 0/2	0/5 ND
51 IHB Railroad Bridge, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
76 Halsted Street, Little Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
52 Wentworth Avenue, Little Calumet River 54 Joe Orr Road, Thorn Creek	ND ND	ND ND	ND ND	ND ND	0/1 ND	0/1 ND	ND ND	0/2 0/1
97 170th Street, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	0/3
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	ND NA	ND NA	ND NA	ND NA	0/I NA	0/3 NA	0/2 NA	0/3 NA
59 Cicero Avenue, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System 90 Route 19, Poplar Creek	MD	ND	ND	0/1	ND	0/2	0/4	0/1
63 Longmeadow Lane, West Branch DuPage River	ND ND	ND	ND	ND	ND	ND	ND	ND
89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River	ND	ND ND	ND ND	ND	ND ND	ND ND	0/3 0/3	0/1 0/4
79 Higgins Road, Salt Creek	ND ND	ND	ND	ND ND	ND	ND	0/1	0/3
80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	ND ND	ND ND	ND ND	ND ND	ND ND	0/2 0/2	0/2 0/3	0/2 0/1
24 Wolf Road, Salt Creek	ND	ND	ND	ND	ND	ND	0/2	0/3
109 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	0/5 ND	0/1 ND
77 Elmhurst Road, Higgins Creek	ND	ND	ND	ND	ND	ND	0/2	0/1
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	ND ND	ND ND	ND ND	ND ND	0/1 ND	0/1 0/1	0/2 0/1	0/3 0/2
13 Lake-Cook Road, Des Plaines River	ND	ND	ND	ND	ND	0/1	0/3	0/2
17 Oakton Street, Des Plaines River 19 Belmont Avenue, Des Plaines River	ND	ND ND	ND ND	ND ND	0/1 ND	0/1 ND	0/1 0/3	0/4 0/4
20 Roosevelt Road, Des Plaines River	ND ND	ND	ND	ND	ND	ND	0/3	0/2
 Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River 	ND	ND	ND	ND	ND	ND	0/2 0/1	0/1 0/2
29 Stephen Street, Des Plaines River	ND ND	ND ND	ND ND	ND ND	ND 0/1	0/1 ND	0/2	0/2
91 Material Service Road, Des Plaines River 110 Springinsguth Road, West Branch DuPage River	ND ND	ND ND	ND ND	ND ND	ND ND	0/1 0/1	0/1 0/3	0/2 ND
5pmgnisguu Noad, west Dranen Durage Kiver	עא	שא	מא	מא	מא	0/1	0/3	שא

NA = Not Applicable. ND = No Data.

TABLE AII-45: SOLUBLE ZINC VIOLATION HISTORY 2003 THROUGH 2010

		Rat	io of V	iolation	ıs/Sam _l	oling Fr	equenc	y per Y	ear
Sam	pling Station (No. Name)	10	09	08	07	06	05	04	03
Chie	cago River System								
30	Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND
106	Dundee Road, West Fork North Branch Chicago River	0/9 0/ 9	0/11 0/11	0/11 0/10	0/4 0/11	0/5 0/12	0/4 0/10	0/8 0/10	0/3 0/8
103 31	Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch	0/8	0/10	0/10	0/10	0/11	0/10	0/10	0/9
104	Glenview Road, North Branch Chicago River	0/8	0/12	0/12	0/11	0/12	0/12	0/12	0/3
32	Lake-Cook Road, Skokie River	0/8 0/11	0/10 0/12	0/10 0/12	0/10 0/11	0/12	0/11 0/12	0/10 0/12	0/9 0/12
105 34	Frontage Road, Skokie River Dempster Street, North Branch Chicago River	0/7	0/12	0/11	0/11	0/12 0/12	0/11	0/12	0/11
96	Albany Avenue, North Branch Chicago River	0/10	0/12	0/12	0/11	0/12	0/11	0/11	0/10
35 102	Central Street, North Shore Channel Oakton Street, North Shore Channel	0/7 0/10	0/9 0/11	0/9 0/11	0/9 0/12	0/9 0/12	0/8 0/12	0/9 0/12	0/9 0/10
36	Touhy Avenue, North Shore Channel	NA	NA	NA	NA	NA	NA	NA	NA
101	Foster Avenue, North Shore Channel	NA NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
37 73	Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA	NA NA	NA	NA
46	Grand Avenue, North Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
74	Lake Shore Drive, Chicago River	0/10	0/9 0/11	0/10 0/12	0/11 0/11	0/11 0/12	0/10 0/12	0/9 0/12	0/10 0/12
100 39	Wells Street, Chicago River Madison Street, South Branch Chicago River	0/11 NA	NA	NA.	NA	NA	NA	NA	NA
108	Loomis Street, South Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	ŅA
99	Archer Avenue, South Fork South Branch Chicago River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
40 107	Damen Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal	NA NA	NA	NA	ŇÄ	NA	NA	NA	NA
75	Cicero Avenue, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA NA
41	Harlem Avenue, Chicago Sanitary & Ship Canal	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
42 48	Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal	NA NA	NA	NA	NA	NA	NA	ŇA	NA
82	Lockport Trebler, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	ŅĄ	NA
92	Lockport Forebay, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
	ımet River System	0.15	0.77	0/0	0/10	0/11	0/11	0/10	0/12
49 50	Ewing Avenue, Calumet River Burnham Avenue, Wolf Lake	0/ 5 0/10	0/7 0/10	0/9 0/12	0/10 0/11	0/11 0/11	0/11 0/12	0/12	0/12
55	130th Street, Calumet River	0/9	0/9	0/9	0/10	0/11	0/11	0/11	0/10
51	IHB Railroad Bridge, Grand Calumet River	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
86 56	Burnham Avenue, Grand Calumet River Indiana Avenue, Little Calumet River	NA NA	NA NA	NA	NA	NA	NA	NA	NA
76	Halsted Street, Little Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
52	Wentworth Avenue, Little Calumet River	0/10 0/9	0/10 0/9	0/10 0/9	0/11 0/10	0/11 0/9	0/11 0/8	0/9 0/7	0/10 0/3
54 97	Joe Orr Road, Thorn Creek 170th Street, Thorn Creek	0/10	0/9	0/11	0/11	0/11	0/11	0/11	0/10
57	Ashland Avenue, Little Calumet River	0/9	0/9	0/10	0/11	0/11	0/11	0/10	0/10
58 59	Ashland Avenue, Calumet-Sag Channel	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
43	Cicero Avenue, Calumet-Sag Channel Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des	Plaines River System								
90	Route 19, Poplar Creek	0/10	0/11	0/11	0/11	0/12	0/11	0/11	0/10
63	Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND	ND 0/12	ND	ND 0/11	0/1 0/11
89 64	Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River	0/12 0/6	0/12 0/12	0/12 0/12	0/12 0/12	0/12	0/12 0/12	0/12	0/12
79	Higgins Road, Salt Creek	0/8	0/8	0/9	0/10	0/9	0/9	0/11	0/9
80	Arlington Heights Road, Salt Creek	0/12	0/12 0/11	0/12 0/12	0/12 0/12	0/12	0/12 0/12	0/12 0/12	0/12 0/12
18 24	Devon Avenue, Salt Creek Wolf Road, Salt Creek	0/10 0/10	0/12	0/12	0/11	0/12 0/12	0/12	0/11	0/12
109	Brookfield Avenue, Salt Creek	0/11	0/11	0/11	0/11	0/12	0/12	0/11	0/10
21	First Avenue, Salt Creek	ND 0/1	ND 0/4	ND 0/5	ND 0/5	ND 0/7	ND 0/4	ND 0/6	ND 0/5
77 78	Elmhurst Road, Higgins Creek Wille Road, Higgins Creek	0/1	0/12	0/12	0/12	0/12	0/12	0/10	0/12
12	Lake-Cook Road, Buffalo Creek	0 <i>/</i> 7	0/9	0/11	0/9	0/9	0/7	0/7	0/8
13 17	Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River	0/11 0/11	0/12 0/11	0/12 0/11	0/12 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/12 0/10
19	Belmont Avenue, Des Plaines River	0/11	0/12	0/12	0/11	0/12	0/12	0/11	0/12
20	Roosevelt Road, Des Plaines River	0/11	0/11	0/12	0/11	0/12	0/12	0/11	0/7
22 23	Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River	0/12 0/12	0/11 0/11	0/11 0/11	0/11 0/11	0/12 0/12	0/12 0/12	0/11 0/11	0/5 0/10
29	Stephen Street, Des Plaines River	0/12	0/11	0/12	0/11	0/12	0/12	0/11	0/11
91	Material Service Road, Des Plaines River	0/12	0/12	0/12	0/11	0/12	0/12	0/11	0/12 ND
110	Springinsguth Road, West Branch DuPage River	0/8	0/9	0/11	0/10	0/11	0/11	0/10	ND

NA = Not Applicable. ND = No Data.

TABLE AII-46: BIOCHEMICAL OXYGEN DEMAND MEAN HISTORY 2000 THROUGH 2010

		·		An	nual N	Means	(mg/L	ر.)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
31 Lake-Cook Road, Middle Fork North Branch	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
104 Glenview Road, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
34 Dempster Street, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	ND ND	ND ND	ND ND	ND ND	ND ND	4.00 ND	2.00 1.00	2.89 2.00	3.50 2.56	3.30 1.56	ND ND
102 Oakton Street, North Shore Channel	ND	ND	ND	ND	ND	8.00	3.33	3.30	3.45	2.30	ND
36 Touhy Avenue, North Shore Channel 101 Foster Avenue, North Shore Channel	ND ND	ND ND	ND ND	ND ND	ND ND	11.00 8.00	6.42 5.92	7.58 5.42	6.58 6.58	6.90 4.90	ND ND
37 Wilson Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	10.00	5.67	5.25	4.92	4.10	ND
	ND ND	ND	ND	ND	ND ND	6.00 2.00	3.25 3.17	3.2 5 2.67	3.00	3.80 4.00	ND
74 Lake Shore Drive, Chicago River	ND	ND ND	ND ND	ND ND	ND	ND	1.33	2.70	1.83 2.08	0.80	ND ND
100 Wells Street, Chicago River	ND	ND	ND	ND	ND	3.00	2 17	3.25	2.33	1.57	ND
39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River	ND ND	ND ND	ND ND	ND ND	ND ND	4.00 3.00	2.92 2.92	3.91 4.25	2.58 2.92	2.50 1.89	ND ND
99 Archer Avenue, South Fork South Branch Chicago River	ND	ND	ND	ND	ND	ND	6.08	3.73	4.83	4.80	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal	ND ND	ND ND	ND ND	ND ND	ND ND	4.00 ND	2.42 ND	ND ND	ND 3,75	ND 4.60	ND ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	4.00	3.75	4.67	2.58	2.20	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal	ND ND	ND ND	ND ND	ND ND	ND ND	5.00 0.00	3.17 2.83	3.33 2.75	2.25 2.58	2.90 2.90	ND ND
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	3.00	1.83	2.50	1.25	1.67	ND
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.60
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	3.14	1.50	1.65	1.74	2.82	ND
Calumet River System											
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	1.10 ND	0.92 ND	0.92 ND	0.60	ND ND
55 130th Street, Calumet River	ND	ND	ND	ND	ND	ND	0.27	1.90	1.67	0.60	ND
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River	ND ND	ND	ND	ND ND	ND ND	ND ND	ND 1.78	ND	ND 2.42	4.50 2.75	ND
56 Indiana Avenue, Little Calumet River 76 Halsted Street, Little Calumet River	ND	ND ND	ND ND	ND	ND	4.00	1.75	2.36 2.64	1.58	2.90	ND ND
52 Wentworth Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.00	ND
54 Joe Orr Road, Thorn Creek 97 170th Street, Thorn Creek	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	2.00 3.50	ND ND
57 Ashland Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	2.40	4.50	2.17	3.33	ND
58 Ashland Avenue, Calumet-Sag Channel 59 Cicero Avenue, Calumet-Sag Channel	ND ND	ND ND	ND ND	ND ND	ND ND	3.00 3.00	0.83 1.55	3.00 2.00	1.25 2.50	2.50 2.30	ND ND
43 Route 83, Calumet-Sag Channel	ND	ND	ND	ND	ND	ND	1.89	2.00	1.58	2.30	ND
Des Plaines River System											
90 Route 19, Poplar Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
64 Lake Street, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
18 Devon Avenue, Salt Creek	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
24 Wolf Road, Salt Creek 109 Brookfield Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
21 First Avenue, Salt Creek	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
77 Elmhurst Road, Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
13 Lake-Cook Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
17 Oakton Street, Des Plaines River 19 Belmont Avenue, Des Plaines River	ND ND	ND ND	ND ND	ND ND	ND ND	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 ND
22 Ogden Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
29 Stephen Street, Des Plaines River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
91 Material Service Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
110 Springinsguth Road, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ND = No Data.							·				

TABLE AII-47: CARBONACEOUS BIOCHEMICAL OXYGEN DEMAND MEAN HISTORY 2000 THROUGH 2010

				Anı	nual N	1eans	(mg/L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND ND
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND
31 Lake-Cook Road, Middle Fork North Branch	ND	ND	ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River	ND ND	ND ND	ND ND	ND ND	ND	ND	ND	ND	ND	ND	ND
105 Frontage Road, Skokie River	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
34 Dempster Street, North Branch Chicago River 96 Albany Avenue, North Branch Chicago River	ND ND	ND	ND	ND	ND	3.00	1.86	1.78	2.36	2.30	ND
35 Central Street, North Shore Channel	ND ND	ND ND	ND ND	ND ND	ND ND	ND 0.00	1.00 2.08	1.67 1.44	1.11 1.91	0.22 2.00	ND ND
102 Oakton Street, North Shore Channel 36 Touhy Avenue, North Shore Channel	ND	ND	ND	ND	ND	4.00	2.50	2.25	2.00	2.20	ND
101 Foster Avenue, North Shore Channel	ND ND	ND ND	ND ND	ND ND	ND ND	2.00 4.00	1.92 1.67	1.75 2.50	2.33 2.08	1.30 1.40	ND ND
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 	ND	ND	ND	ND	ND	2.00	1.33	1.17	1.33	1.20	ND
46 Grand Avenue, North Branch Chicago River	ND ND	ND ND	ND ND	ND ND	ND ND	1.50 ND	1.50 1.11	0.92 2.80	0.50 1.50	0.50 0.50	ND ND
100 Wells Street, Chicago River	ND	ND	ND	ND	ND	3.00	1.58	1.67	1.64	0.00	ND
39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River	ND ND	ND ND	ND ND	ND ND	ND ND	2.00 0.00	1.42 1.25	2.00 2.58	1.42 1.50	1.10 0.89	ND ND
99 Archer Avenue, South Fork South Branch Chicago River	ND	ND	ND	ND	ND	ND	3.08	1.58	2.25	3.50	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal	ND ND	ND ND	ND ND	ND ND	ND ND	2.00 ND	1.42 ND	ND ND	ND 1.75	ND 1.40	ND ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	3.00	1.67	0.83	0.75	1.30	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal	ND ND	ND ND	ND ND	ND ND	ND ND	3.00 2.00	1.50 0.50	1.33 1.25	0.50 0.58	1.30 1.10	ND ND
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	0.00	0.58	1.25 1.17	0.50	1.00	ND
82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND ND	ND ND	ND ND	ND ND	ND ND	ND 0.71	ND 0.61	ND 0.52	ND 0.40	ND 0.00	ND ND
Calumet River System											
49 Ewing Avenue, Calumet River	ND	ND	ND	ND	ND	ND	0.50	1.33	0.83	0.60	ND
50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND 0.27	ND 1.40	ND 1.25	0.00 0.50	ND ND
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.50	ND
56 Indiana Avenue, Little Calumet River 76 Halsted Street, Little Calumet River	ND ND	ND ND	ND ND	ND ND	ND ND	ND 4.00	0.00 1.08	1.36 1.00	1.92 0.67	1.38 1.40	ND ND
52 Wentworth Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.00	ND
54 Joe Orr Road, Thorn Creek 97 170th Street, Thorn Creek	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	2.00 2.00	ND ND
57 Ashland Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	1.40	2.10	1.58	1.78	ND
58 Ashland Avenue, Calumet-Sag Channel 59 Cicero Avenue, Calumet-Sag Channel	ND ND	ND ND	ND ND	ND ND	ND ND	3.00 4.00	1.08 0.83	1.50 1.27	0.67 0.92	1.10 1.50	ND ND
43 Route 83, Calumet-Sag Channel	ND	ND	ND	ND	ND	ND	0.60	1.18	0.83	0.70	ND
Des Plaines River System) The		NID	M	NTD	M
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
89 Walnut Lane, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
80 Arlington Heights Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
109 Brookfield Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
78 Wille Road, Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
17 Oakton Street, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND ND
19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND
22 Ogden Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
 Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River 	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
91 Material Service Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
110 Springinsguth Road, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No Data.

TABLE AII-48: DISSOLVED OXYGEN MEAN HISTORY 2000 THROUGH 2010

				An	nual N	A eans	(mg/L	.)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	0
Chicago River System											
30 Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River	ND 8.03	ND 7.78	ND 6.93	ND 8.75	ND 8.10	ND 10.30	ND 8.02	ND 7.00	ND 9.12	10.75 9.54	10.5 NI
103 Golf Road, West Fork North Branch Chicago River	7.70	7.27	7.21	7.31	8.58	7.38	7.64	6.86	7.10 6.55	6.98	N1 6.9
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	6.18 8.20	7.88 7.53	6.55 7.39	6.16 6.90	7.15 7.98	5.42 8.12	6.46 8.03	6.22 7.47	8.08	6.91 7.36	N
32 Lake-Cook Road, Skokie River	7.23	7.75	7.35	7.21	7.75	7.75 8.79	7.73 8.33	6.67 7.95	7.14 8.15	7.65 7.49	7.2 NI
105 Frontage Road, Skokie River 34 Dempster Street, North Branch Chicago River	7.63 8.25	7.77 7.88	7.61 7.01	7.76 6.52	9.27 8.23	7.16	8.21	7.45	7.75	7.29	7.5
96 Albany Avenue, North Branch Chicago River	8.47	8.64 9.23	8.22 7.30	8.19	9.18 8.63	8.63 7.50	9.12 7.53	7.77 8.08	7.71 7.34	7.42 8.03	6.8 7.4
35 Central Street, North Shore Channel O2 Oakton Street, North Shore Channel	8.39 7.02	8.19	7.57	8.23 7.76	8.73	7.95	7.26	6.32	6.58	5.80	N
36 Touhy Avenue, North Shore Channel	7.15 7.18	8.29 7.67	7.83 7.21	7.65 7.13	7.93 7.20	7.98 7.30	8.10 7.58	7.54 7.42	6.90 6.53	7.39 6.87	7.2 N
101 Foster Avenue, North Shore Channel 37 Wilson Avenue, North Branch Chicago River	7.51	8.43	7.43	7.58	7.83	7.03	7.55	7.14	6.74	7.13	6.6
73 Diversey Parkway, North Branch Chicago River	6.91 6.57	7.91 7.25	6.94 6.73	6.75 6.67	7.25 6.85	6.44 6.30	6.71 6.47	6.25 6.12	5.74 5.86	6.18	5.8 6.3
 46 Grand Avenue, North Branch Chicago River 74 Lake Shore Drive, Chicago River 	9.05	9.27	8.76	9.00	9.19	9.08	8.50	7.62	9.03	7.99	8.6
00 Wells Street, Chicago River	8.11 7.36	8.57 7.27	8.03 7.53	8.39 7.45	8.68 7.79	8.96 7.85	8.56 6.86	7.54 5.73	7.83 6.38	7.27 6.32	6.6
08 Loomis Street, South Branch Chicago River	7.51	6.84	6.89	7.21	7.81	7.78	7.23	5.97	5.86	5.79	N
99 Archer Avenue, South Fork South Branch Chicago River 40 Damen Avenue, Chicago Sanitary & Ship Canal	5.60 7.02	4.76 6.97	5.33 6.49	6.19 7.25	6.00 7.44	6.65 7.59	5.63 6.71	5.29 5.68	3.91 ND	2.62 ND	5.4
07 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	5.60	5.34	N
75 Cicero Avenue, Chicago Sanitary & Ship Canal 41 Harlem Avenue, Chicago Sanitary & Ship Canal	6.02 7.56	6.43 6.68	5.32 7.13	6.22 6.59	6.04 7.30	6.11 7.29	5.77 6.92	5.18 6.81	5.18 6.95	5.28 6.60	4.9 6.
42 Route 83, Chicago Sanitary & Ship Canal	5.93	6.31	6.23	6.00	5.46	5.90	6.06	5.85	6.09	5.46	5.
48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal	6.48 ND	7.00 ND	6.78 ND	5.98 ND	5.43 ND	6.25 ND	6.25 ND	5.78 ND	5.73 ND	5.38 ND	5. N
92 Lockport Forebay, Chicago Sanitary & Ship Canal	5.69	6.28	6.19	6.07	5.68	5.86	5.67	5.57	5.32	5.34	5.0
Calumet River System					0.50	0.00	0.04	0.72	0.65	0.00	0.
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	8.90 8.12	9.07 8.45	8.84 8.58	9.66 8.79	9.50 9.63	9.99 9.25	9.24 9.79	9.73 8.91	9.65 9.77	8.99 8.70	9.4 9.3
55 130th Street, Calumet River	9.16	8.43	8.22	8.91	8.45	9.26	9.13	8.27	9.17	8.41	8.4 4.4
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River	4.89 8.71	4.66 8.45	6.51 7.89	4.21 7.49	6.20 9.61	4.80 8.83	4.93 7.71	3.94 8.40	6.22 8.69	4.19 8.59	8.
76 Halsted Street, Little Calumet River	6.89	7.14	6.30	6.35	6.27	6.98	7.13	7.00	6.92	6.69	6.
52 Wentworth Avenue, Little Calumet River 54 Joe Orr Road, Thorn Creek	7.08 7.72	7.10 8.04	6.22 8.21	6.43 8.19	7.49 7.72	6.45 7.65	6.40 8.57	6.53 8.40	6.47 8.54	6.20 8.27	6.: 8.:
97 170th Street, Thorn Creek	7.87	7.24	7.01	7.34	7.15	7.85	8.37	7.80	8.37	7.29 5.75	N
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	7.46 7.44	6.79 7.52	6.54 6.63	6.50 6.54	7.27 7.15	6.35 7.23	6.99 7.25	5.42 6.98	7.29 6.48	6.41	6.: 6.:
59 Cicero Avenue, Calumet-Sag Channel	6.20	7.02	6.92	6.79	6.24	6.56	6.80 6.39	7.23 7.88	6.85 6.93	5.93 6.04	6.: 6.
43 Route 83, Calumet-Sag Channel	6.49	6.72	7.22	6.51	6.70	7.38	0.39	7.00	0.93	0.04	0.
Des Plaines River System	8 80	8.58	8.61	9.64	9.78	8.47	10.16	9.16	8.94	9.52	7.9
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	8.80 ND	ND	ND	ND	ND	ND	ND	8.90	ND	8.18	7.
89 Walnut Lane, West Branch DuPage River	8.53 8.42	8.7 5 9.03	8.35 8.65	8.68 8.91	8.28 8.68	7.78 8.61	8.03 7.41	7.48 8.05	7,64 8.38	6.82 8.25	7.9 7.
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	6.88	7.41	7.18	7.80	8.78	6.24	8.97	7.37	7.59	8.88	7.0
80 Arlington Heights Road, Salt Creek	8.43 8.25	8.11 8.09	7.83 8.48	8.78 8.94	8.77 8.89	8.48 9.04	8.01 8.33	7.79 7.59	8.07 7.96	8.29 8.24	7. 7.
Devon Avenue, Salt CreekWolf Road, Salt Creek	7.41	8.82	8.27	8.23	8.51	8.61	8.19	8.64	7.79	8.50	7.
09 Brookfield Avenue, Salt Creek	7.37 ND	8.39 ND	7.35 ND	7.59 ND	7.58 ND	7.81 ND	8.02 ND	8.13 ND	5.98 10.90	ND 7.98	6.
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	8.70	8.55	8.82	8.66	8.43	9.15	8.80	7.48	8.22	8.42	7.
78 Wille Road, Higgins Creek	8.98 7.31	8.81 9.26	8.46 8.84	8.76 8.83	9.04 8.69	8.88 ND	9.15 ND	8.16 ND	8.55 ND	8.93 ND	8. N
12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River	8.11	8.43	8.00	8.55	8.76	8.59	8.83	8.30	9.35	9.02	8.6
17 Oakton Street, Des Plaines River	8.58 8.41	9.38 8.34	8.34 7.50	8.39 7.67	8.3 5 8.43	8.39 7.55	8.83 7.91	7.57 7.64	8.17 7.74	9.00 8.59	7.0 6.4
20 Roosevelt Road, Des Plaines River	7.91	8.60	7.55	7.62	8.16	7.57	8.13	7.16	7.96	8.31	6.4
22 Ogden Avenue, Des Plaines River	7.89 8.07	9.14 8.80	8.24 8.00	8.94 8.65	9.00 8.24	9.13 9.08	9.27 9.19	12.06 8.66	9.34 8.99	9.20 9.44	7.° 7.°
23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River	8.37	9.97	8.94	8.56	8.90	9.91	9.62	9.95	9.53	9.98	7.8
91 Material Service Road, Des Plaines River	9.04	9.33 6.23	8.78 6.16	9.38 6.17	9.68 6.23	10.31 6.80	10.65 6.31	9.65 ND	10.31 ND	8.71 ND	8.4 N
110 Springinsguth Road, West Branch DuPage River	5.34	0.23	0.10	0.17	0.23	0.00	0.31	1417	141	.40	

TABLE AII-49: TEMPERATURE MEAN HISTORY 2000 THROUGH 2010

		<u>-</u>		A	nnual	Means	s (°C)				
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch	ND 13.1	ND 11.3	ND 13.6	ND 9.8	ND 13.2	ND 12.4	ND 12.1	ND 19.4	ND 10.8	4.1 16.9	1.1 ND
103 Golf Road, West Fork North Branch Chicago River	15.7	13.4	13.8	15.4	13.4	15.2	16.7	15.2	12.5 11.7	15.8	ND
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	14.8 12.7	12.4 12.5	12.7 11.5	15.7 14.8	12.6 12.9	16.1 15.1	15.3 13.9	16.7 16.5	10.4	14.2 15.9	15.5 ND
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River	15.2 13.5	13.4 12.3	12.3 12.3	16.2 14.9	12.9 13.1	17.1 14.4	15.2 13.9	16.1 15.1	11.9 12.7	14.4 16.7	15.5 ND
34 Dempster Street, North Branch Chicago River	12.7	11.9	13.5	14.7 15.1	12.8 13.0	16.7 15.5	15.3 14.3	14.3 15.2	12.3 12.9	14.2 15.3	15.3 16.0
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	14.5 16.9	12.1 14.9	12.6 15.9	15.5	18.6	17.9	17.4	17.9	14.3	15.3	18.0
102 Oakton Street, North Shore Channel 36 Touhy Avenue, North Shore Channel	15.4 16.2	13.2 13.9	14.7 14.8	14.3 17.0	15.0 15.6	16.1 16.4	12.8 14.7	16.2 17.0	14.9 16.5	16.8 16.9	ND 15.8
101 Foster Avenue, North Shore Channel	15.3 15.7	14.8 13.7	14.7 14.2	16.7 15.7	15.8 15.2	16.8 17.5	15.8 17.3	17.9 17.1	15.3 15.1	17.8 15.1	ND 14.9
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 	15.0	13.8	13.5	15.5	15.0	17.4	16.9	16.0	15.2	15.3	15.4
46 Grand Avenue, North Branch Chicago River 74 Lake Shore Drive, Chicago River	14.6 13.5	13.4 13.7	13.6 14.6	16.5 14.5	14.9 14.0	17.5 15.2	16.7 17.5	14.5 15.5	15.3 12.8	15.6 14.0	14.4 13.8
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River	13.9 13.9	13.7 13.7	12.8 12.4	14.5 14.1	13.9 14.0	13.4 13.3	14.4 14.3	14.1 12.7	14.0 14.1	16.4 15.0	ND 14.7
108 Loomis Street, South Branch Chicago River	15.7	16.4	15.3	16.3	16.7	15.5	18.4	17.1 16.1	17.8 17.2	20.0 18.5	ND ND
 Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal 	12.8 16.1	15.4 15.4	14.6 14.4	16.6 16.3	18.9 16.6	15.8 15.5	16.5 16.9	16.8	ND	ND	18.3
107 Western Avenue, Chicago Sanitary & Ship Canal 75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND 19.3	ND 17.3	ND 17.9	ND 20.2	ND 17.7	ND 20.0	ND 18.1	ND 20.8	17.1 18.8	17.8 18.1	ND 18.7
41 Harlem Avenue, Chicago Sanitary & Ship Canal	17.2 16.1	16.4 16.5	16.8 17.7	16.3 18.7	16.4 18.4	17.3 17.7	17.6 15.3	17.5 17.5	16.9 16.6	17.1 16.9	17.0 19.1
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal	16.5	15.8	16.8	17.4	16.3	16.1	15.8	15.6	16.4	16.9	18.3
82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND 18.0	ND 17.4	ND 17.9	ND 19.8	ND 19.4	ND 19.3	ND 18.1	ND 17.9	ND 18.7	ND 18.3	ND 19.1
Calumet River System											
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	17.3 15.6	14.0 17.0	15.0 11.5	16.3 16.3	14.0 13.9	16.2 14.5	14.2 13.0	12.4 14.2	12.7 12.1	13.0 14.1	13.4 13.5
55 130th Street, Calumet River	16.0	16.6	14.6	17.6	13.5	15.8	15.6 15.4	14.4 15.6	12.3 12.9	15.1 15.5	14.8 15.1
 86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River 	18.0 17.6	17.8 17.1	11.9 16.2	16.8 18.6	13.7 14.6	16.2 16.0	16.7	16.2	13.6	17.8	15.2
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River	16.6 15.2	14.4 15.9	14.1 13.2	17.2 14.9	15.3 14.1	16.4 14.5	13.5 14.3	15.7 16.2	14.8 13.1	15.0 13.9	16.2 14.6
54 Joe Orr Road, Thorn Creek	15.0 15.0	16.7 16.4	13.9 12.1	16.3 15.4	15.1 14.7	15.0 13.4	15.3 14.7	14.9 15.3	15.0 14.4	15.9 15.5	17.3 ND
57 Ashland Avenue, Little Calumet River	14.4	16.5	15.4	15.3	15.7	15.7	16.2	17.1	12.9	15.7	15.6
58 Ashland Avenue, Calumet-Sag Channel 59 Cicero Avenue, Calumet-Sag Channel	15.5 16.0	14.3 15.9	13.8 14.2	16.3 16.5	14.3 16.6	15.8 15.0	14.2 16.6	15.1 16.9	14.5 16.3	14.7 14.5	15.7 15.5
43 Route 83, Calumet-Sag Channel	15.8	16.2	15.4	17.3	15.1	16.7	20.0	16.8	14.9	14.2	15.5
Des Plaines River System 90 Route 19, Poplar Creek	15.4	13.6	14.5	14.3	13.2	15.1	15.0	13.8	16.3	14.0	17.7
63 Longmeadow Lane, West Branch DuPage River	ND	20.4	ND	11.3	16.2						
89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River	16.3 12.1	15.7 13.5	16.3 15.3	15.7 14.8	13.8 14.5	16.9 16.5	16.1 15.9	16.6 14.4	15.5 14.2	15.8 16.0	15.2 15.5
79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek	18.9 15.0	16.7 13.6	18.2 15.0	15.8 15.0	18.6 14.6	19.2 16.4	15.0 15.9	15.1 14.9	18.9 14.2	16.8 14.5	15.9 14.2
18 Devon Avenue, Salt Creek	13.4	14.0	14.6	14.3	14.0	15.3	15.4	16.0	14.6	14.5	14.5
24 Wolf Road, Salt Creek 109 Brookfield Avenue, Salt Creek	11.3 13.8	12.1 12.3	14.6 15.2	14.6 14.5	13.5 12.8	14.8 14.9	16.2 15.1	12.9 14.1	12.3 15.9	13.8 ND	16.3 ND
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	ND 14.8	ND 12.2	ND 10.5	ND 14.0	ND 13.3	ND 12.3	ND 12.7	ND 15.4	3.4 15.0	13.5 14.5	15.3 15.2
78 Wille Road, Higgins Creek	17.7	13.8	17.6	16.2 14.2	16.1	17.1	15.6	15.4 ND	16.0 ND	15.6 ND	16.3 ND
13 Lake-Cook Road, Des Plaines River	14.9 14.1	10.5 11.1	13.9 14.7	13.1	11.1 12.9	ND 15.8	ND 14.1	12.4	12.2	13.3	13.3
17 Oakton Street, Des Plaines River 19 Belmont Avenue, Des Plaines River	15.1 15.0	12.8 11.8	15.8 15.3	14.4 14.8	13.6 14.2	15.9 15.3	15.2 16.2	15.5 13.6	14.4 12.1	13.5 13.5	15.1 15.1
20 Roosevelt Road, Des Plaines River	15.3 13.0	13.4 11.8	15.7 14.9	15.2 14.4	13.8 13.0	15.4 15.1	15.7 16.5	15.3 6.0	12.2 11.3	13.8 13.9	15.0 15.5
23 Willow Springs Road, Des Plaines River	14.1	12.1	15.2	15.7	12.7	14.7	16.1	15.0	14.4	13.6	16.1
29 Stephen Street, Des Plaines River 91 Material Service Road, Des Plaines River	13.5 14.0	12.6 11.7	14.3 14.7	15.5 15.8	13.4 13.8	15.1 15.0	17.2 17.1	13.8 13.2	12.3 12.5	14.2 16.2	16.6 15.1
110 Springinsguth Road, West Branch DuPage River	17.9	13.7	13.5	14.9	13.2	15.1	15.3	ND	ND	ND	ND
ND = No Data.	17.7	13.1		17.7	1.5.4		15.5		.,,,,		141

TABLE AII-50: pH MEAN HISTORY 2000 THROUGH 2010

	Annual Means											
Samj	pling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chic	ago River System											
30	Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND 7.33	ND 7.57	ND 7.54	7.50 7.38	8.0 NJ
06	Dundee Road, West Fork North Branch Chicago River	7.25 7.63	7.18 7.49	7.52 7.44	7.64 7.50	7.22 7.47	7.53 7.42	7.33 7.72	7.65	7.77	7.75	N
.03 31	Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch	7.61	7.60	7.64	7.67	7.47	7.26	7.32	7.59	7.44	7.60	7.7
04	Glenview Road, North Branch Chicago River	7.71	7.76	7.86	7.85	7.71	7.22 7.19	7.45 7.34	7.97 7.59	7.73 7.43	7.63 7.61	7.9
32	Lake-Cook Road, Skokie River	7.70 7.56	7.66 7.64	7.74 7.77	7.85 7.88	7.66 7.68	7.19	7.47	7.65	7.69	7.70	Ń
05 34	Frontage Road, Skokie River Dempster Street, North Branch Chicago River	7.70	7.78	7.61	7.67	7.74	7.45	7.72	7.72	7.59	7.62	7.
96	Albany Avenue, North Branch Chicago River	7.94	7.88	7.80	7.77	7.59 7.70	7.30 7.65	7.53 7.89	7.69 7.31	7.81 7.90	7.40 7.77	7. 8.
35 02	Central Street, North Shore Channel Oakton Street, North Shore Channel	7.62 7.57	7.83 7.67	7.80 7.69	7.78 7.58	7.56	7.35	7.73	7.13	7.36	7.37	N
36	Touhy Avenue, North Shore Channel	7.30	7.33	7.40	7.40	7.23	7.14	7.41	7.25	7.38	7.19	7. N
01	Foster Avenue, North Shore Channel	7.11	7.33	7.31 7.40	7.25 7.44	7.13 7.39	7.18 7.32	7.27 7.59	7.13 7.50	7.28 7.44	7.14 7.29	7.
37 73	Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River	7.35 7.31	7.54 7.30	7.42	7.21	7.36	7.23	7.37	7.26	7.45	7.12	7.:
46	Grand Avenue, North Branch Chicago River	7.39	7.49	7.43	7.45	7.37	7.21	7.47	7.41	7.36	7.09 7.95	7.0 7.1
74	Lake Shore Drive, Chicago River	7.39 7.38	7.49 7.68	7.64 7.62	7.60 7.68	7.75 7.72	7.52 7.44	7.73 7.49	7.33 7.30	7.43 7.23	7.66	Ń
100 39	Wells Street, Chicago River Madison Street, South Branch Chicago River	7.23	7.45	7.42	7.65	7.49	7.41	7.31	7.25	7.23	7.39	7.
108	Loomis Street, South Branch Chicago River	7.33	7.42	7.59	7.50	7.46	7.44	7.30	7.36	7.25 7.13	7.02 7.03	N
99	Archer Avenue, South Fork South Branch Chicago River	7.34 7.40	7.25 7.46	7.42 7.54	7.45 7.49	7.38 7.46	7.27 7.39	7.27 7.40	7.35 7.38	ND	ND	7.
40 107	Darnen Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal	ND	7.10	7.06	N							
75	Cicero Avenue, Chicago Sanitary & Ship Canai	7.04	7.14	7.19	7.29	7.22	7.23	7.47	7.27 7.23	7.16 7.17	7.23 7.19	7.2 7.4
41	Harlem Avenue, Chicago Sanitary & Ship Canai	7.23 7.02	7.24 6.96	7.41 7.10	7.27 7.13	7.20 6.92	7.11 7.08	7.47 7.40	7.12	7.22	7.13	7.
42 48	Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal	7.24	7.28	7.57	7.32	7.08	7.03	7.34	7.25	7.26	7.23	7.
82	Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND 7.38	ND 7.33	ND 7.27	ND 7.11	7. 7.
92	Lockport Forebay, Chicago Sanitary & Ship Canal	7.33	7.39	7.40	7.31	7.29	7.20	1.36	1.33	1.21	7.11	,
	imet River System	757	7.15	7.45	7.77	7.72	7.48	8.01	7.65	7.55	7.47	7.9
49 50	Ewing Avenue, Calumet River Burnham Avenue, Wolf Lake	7.57 7.74	7.45 7.81	8.04	8.29	8.26	7.65	7.82	8.18	7.91	7.76	8.0
55	130th Street, Calumet River	7.86	7.84	7.92	7.85	7.94	7.64	7.78	7.86	7.87	7.41 7.39	7. 7.
86	Burnham Avenue, Grand Calumet River	7.27 7.57	7.35 7.49	7.69 7.49	7.64 7.65	7.43 7.81	7.30 7.06	7.51 7.67	7.58 7.73	7.73 7.63	7.79	7.
56	Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River	7.30	7.31	7.34	7.40	7.51	7.11	7.40	7.36	7.35	7.21	7.
76 52	Wentworth Avenue, Little Calumet River	7.63	7.77	7.86	7.77	7.75	7.16	7.43	7.63	7.56	7.31 7.12	7.: 7.:
54	Joe Orr Road, Thorn Creek	7.27 7.66	7.03 7.76	7.32 7.83	7.17 7.71	7.32 7.70	7.10 6.96	7.38 7.44	7.37 7.61	7.37 7.58	7.14	'n
97 57	170th Street, Thorn Creek Ashland Avenue, Little Calumet River	7.60	7.78	7.79	7.71	7.74	7.07	7.42	7.39	7.55	7.20	7.
58	Ashland Avenue, Calumet-Sag Channel	7.38	7.48	7.44	7.42	7.40	6.91	7.33	7.47	7.37	7.26 7.19	7.: 7.
59	Cicero Avenue, Calumet-Sag Channel	7.48	7.42 7.55	7.46 7.70	7.39 7.51	7.38 7.55	7.04 7.25	7.40 7.46	7.54 7.66	7.07 6.99	7.16	ή.
43	Route 83, Calumet-Sag Channel	7.47	1.33	7.70	7.51	1,55	1.23	7.40	7.00	0.77	,,,,	
	Plaines River System Route 19, Poplar Creek	7.83	7.91	7.88	7.95	7.80	7.70	7.65	7.58	7.64	7.54	8.0
63	Longmeadow Lane, West Branch DuPage River	ND	7.40	ND	7.43	7.9						
89	Walnut Lane, West Branch DuPage River	7.51	7.48	7.58	7.59 7.81	7.43 7.64	7.40 7.57	7.44 7.48	7.37 7.48	7.46 7.66	7.42 7.50	8. 8.
64 79	Lake Street, West Branch DuPage River	7.71 7.51	7.77 7.77	7.74 7.57	7.80	7.94	7.39	7.54	7.54	7.74	7.50	8.
80	Higgins Road, Salt Creek Arlington Heights Road, Salt Creek	7.52	7.46	7.39	7.59	7.50	7.45	7.42	7.34	7.56	7.44	8.
18	Devon Avenue, Salt Creek	7.60	7.55	7.51	7.63	7.55	7.44 7.30	7.35 7.67	7.39 7.31	7.26 7.45	7.58 7.63	8. 7.
24	Wolf Road, Salt Creek	7.48 7.58	7.30 7.69	7.41 7.54	7.52 7.72	7.31 7.40	7.32	7.56	7.44	7.13	ND	N
109 21	Brookfield Avenue, Salt Creek First Avenue, Salt Creek	ND	7.40	7.43	7.							
77	Elmhurst Road, Higgins Creek	7.68	7.76	7.88	7.80	7.40	7.39	7.80	7.54 7.58	7.35 7.14	7.65 7.72	7. 7.
78	Wille Road, Higgins Creek Lake-Cook Road, Buffalo Creek	7.61 7.47	7.58 7.37	7.63 7.80	7.67 7.70	7.54 7.73	7.37 ND	7.66 ND	ND	ND	ND	N
12 13	Lake-Cook Road, Des Plaines River	7.58	7.72	7.89	7.69	7.68	7.44	7.77	7.62	7.52	7.68	7.
17	Oakton Street, Des Plaines River	7.74	7.78	8.01	7.79	7.57 7.67	7.44 7.45	7.63 7.62	7.67 7.68	7.34 7.40	7.69 7.65	7. 7.
19	Belmont Avenue, Des Plaines River	7.82 7.85	7.82 7.91	7.98 8.02	7.83 7.84	7.89	7.49	7.67	7.71	7.32	7.59	7.
20 22	Roosevelt Road, Des Plaines River Ogden Avenue, Des Plaines River	7.83	7.72	7.62	7.96	7.50	7.49	7.63	7.46	7.49	7.55	7.
23	Willow Springs Road, Des Plaines River	7.86	7.91	7.86	7.79	7.62	7.62	7.63	7.59	7.60	7.66	7.
29	Stephen Street, Des Plaines River	7.86	7.90	7.92	7.72 7.98	7.64 7.87	7.55 7.74	7.51 7.65	7.67 7.80	7.82 7.85	7.71 7.40	7.8 7.0
91	Material Service Road, Des Plaines River Springinsguth Road, West Branch DuPage River	7.97 7.41	8.13 7.53	8.04 7.40	7.76	7.54	7.43	7.49	ND	ND	ND	N

TABLE AII-51: ALKALINITY (TOTAL) MEAN HISTORY 2000 THROUGH 2010

					An	nual N	1eans	(mg/L	.)			
Sam	apling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chie	cago River System											
30 106	Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River	ND 158	ND 173 180	ND 171 165	ND 163 186	ND 147 178	ND 152 172	ND 178 179	ND 138 168	ND 187 185	196 180 177	170 ND ND
103	Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch	181 192	196	177	205	185	199	196	194	213	201	189
104 32	Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River	171 196	184 203	168 188	173 215	165 184	156 183	182 209	170 191	183 210	189 210	ND 200
105	Frontage Road, Skokie River	170	187	170	168	164	154	178	160	178	182	ND
34 96	Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River	183 172	180 186	165 164	175 174	170 173	164 167	175 169	159 170	180 176	179 186	163 161
35 102	Central Street, North Shore Channel Oakton Street, North Shore Channel	118 131	119 136	113 120	121 133	117 134	115 126	116 137	117 128	119 130	111 119	126 ND
36	Touhy Avenue, North Shore Channel	136	156	145	142	144	136	151	140	149	151	137
101 37	Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River	139 139	149 149	145 146	142 145	145 146	135 138	144 159	137 139	149 148	142 156	ND 141
73	Diversey Parkway, North Branch Chicago River	149	152	147	147	146	135	156	139	144	155	138
46 74	Grand Avenue, North Branch Chicago River Lake Shore Drive, Chicago River	145 110	150 118	141 111	147 124	147 120	144 120	156 119	145 116	147 120	157 125	143 123
100 39	Wells Street, Chicago River	119 134	130 150	125 134	125 135	127 142	123 137	125 137	130 140	130 141	132 147	ND 137
108	Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River	135	149	134	136	143	142	136	138	154	137	ND
99 40	Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal	146 136	149 152	143 136	135 136	147 142	138 138	142 138	133 136	148 ND	157 ND	ND 136
107	Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	150	139	ND
75 41	Cicero Avenue, Chicago Sanitary & Ship Canal Harlem Avenue, Chicago Sanitary & Ship Canal	140 138	145 144	141 134	137 131	158 130	140 126	142 132	132 117	153 137	141 139	135 121
42	Route 83, Chicago Sanitary & Ship Canal	143 145	149 146	132 137	138 142	139 146	138 142	137 143	126 138	140 158	137 144	126 158
48 82 92	Stephen Street, Chicago Sanitary & Ship Canal Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal	ND 146	ND 149	ND 137	ND 146	ND 143	ND 138	ND 140	ND 133	ND 141	ND 148	143 137
	umet River System									•••		
49 50	Ewing Avenue, Calumet River Burnham Avenue, Wolf Lake	107 103	113 102	104 98	113 104	113 100	109 109	111 111	110 104	110 96	112 96	115 101
55	130th Street, Calumet River	108	117	105	114 262	112 248	112 170	116 203	111 196	117 176	116 165	116 168
86 56	Burnham Avenue, Grand Calumet River Indiana Avenue, Little Calumet River	250 120	225 136	243 125	137	127	125	129	127	138	126	127
76 52	Halsted Street, Little Calumet River Wentworth Avenue, Little Calumet River	147 184	162 204	155 216	162 208	162 222	153 175	159 206	146 208	156 225	159 190	154 195
54	Joe Orr Road, Thorn Creek	178	190	185	177	189	152	183	158	183	195	172
97 57	170th Street, Thorn Creek Ashland Avenue, Little Calumet River	163 166	204 193	195 192	176 174	205 208	172 168	186 180	172 182	190 194	182 174	ND 190
58	Ashland Avenue, Calumet-Sag Channel	159	163	158	156	167	154 150	158	155	167 157	163	159
59 43	Cicero Avenue, Calumet-Sag Channel Route 83, Calumet-Sag Channel	153 158	165 160	154 154	154 151	171 168	151	150 153	151 150	152	161 161	161 162
Des 90	Plaines River System Route 19, Poplar Creek	222	227	211	210	190	188	216	185	209	207	196
63	Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	118	ND	195	156
89 64	Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River	154 180	179 170	147 145	152 150	160 184	150 133	148 147	135 129	158 157	165 162	155 146
79	Higgins Road, Salt Creek	135	183	176	159	155	142	197	127	166	182 147	161
80 18	Arlington Heights Road, Salt Creek Devon Avenue, Salt Creek	148 154	152 149	126 125	133 132	142 142	136 135	149 149	133 132	151 147	145	136 132
24 109	Wolf Road, Salt Creek Brookfield Avenue, Salt Creek	154 150	172 169	141 142	140 139	145 144	134 133	156 160	126 125	154 128	159 ND	144 ND
21 77	First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	185 139	161	150
77 78	Elmhurst Road, Higgins Creek Wille Road, Higgins Creek	114 176	149 204	128 165	118 175	121 179	120 150	158 192	102 159	139 181	168 195	140 171
12	Lake-Cook Road, Buffalo Creek	204	211	197	188	181	ND	ND	ND	ND	ND	ND
13 17	Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River	192 180	201 194	199 192	201 187	189 179	179 171	196 192	168 167	214 206	210 201	191 175
19	Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River	171 170	196	180 185	179 182	177 172	167 166	189 190	155	192 199	203 202	172 171
20 22	Ogden Avenue, Des Plaines River	169	189 182	170	164	163	151	176	153 155	181	190	160
23 29	Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River	165 170	184 180	171 173	168 172	162 169	154 159	180 180	141 149	177 181	189 188	157 165
91	Material Service Road, Des Plaines River	175	184	170	175	173	163	184	146	185	183	172
110	Springinsguth Road, West Branch DuPage River	209	226	203	191	191	179	183	ND	ND	ND.	ND

TABLE AII-52: CHLORIDE MEAN HISTORY 2000 THROUGH 2010

					Anı	nual M	leans (mg/L)			
Samı	pling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chic	ago River System											
30	Lake-Cook Road, West Fork North Branch	ND 470	ND 403	ND 388	ND 297	ND 339	ND 456	ND 552	ND 181	ND 293	856 371	847 ND
	Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River	400	321	330	329	344	501	298	270	244	227	ND
	Lake-Cook Road, Middle Fork North Branch	304 257	219 222	293 287	286 258	258 222	318 258	205 265	217 215	185 171	203 177	217 ND
	Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River	251	196	265	290	214	310	239	220	190	218	242
	Frontage Road, Skokie River Dempster Street, North Branch Chicago River	217 316	208 246	275 265	228 277	207 254	236 337	203 322	177 205	162 205	167 249	ND 269
34 96	Albany Avenue, North Branch Chicago River	319	274	345	283	256	346	236	230	223	228	163
35 102	Central Street, North Shore Channel Oakton Street, North Shore Channel	30 106	44 107	90 138	51 133	37 90	35 135	31 104	47 80	64 99	16 36	60 ND
36	Touhy Avenue, North Shore Channel	155	210	168	212	116	150	172	143	105	152	150
101 37	Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River	170 222	199 218	175 216	231 249	134 145	165 209	143 183	123 159	111 133	121 192	ND 202
	Diversey Parkway, North Branch Chicago River	199	248	235	190	140	196	193	168	136	199	190
46	Grand Avenue, North Branch Chicago River	175 78	195 48	248 60	204 106	154 64	186 62	219 62	174 73	133 69	191 98	148 81
74 100	Lake Shore Drive, Chicago River Wells Street, Chicago River	122	84	148	127	89	109	103	108	88	98	ND
39	Madison Street, South Branch Chicago River	168 188	152 152	191 193	174 207	125 143	156 158	129 141	136 137	102 122	179 96	126 ND
108 99	Loomis Street, South Branch Chicago River Archer Avenue, South Fork South Branch Chicago River	171	146	194	190	110	150	148	134	127	117	ND
40	Damen Avenue, Chicago Sanitary & Ship Canal	185 ND	154 ND	190 ND	218 ND	137 ND	153 ND	142 ND	137 ND	ND 122	ND 138	134 ND
107 75	Western Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal	161	155	211	228	136	156	161	150	130	148	124
41	Harlem Avenue, Chicago Sanitary & Ship Canal	188 196	187 174	195 214	267 187	146 151	162 170	167 221	149 156	124 144	170 203	166 139
42 48	Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal	202	163	199	165	152	164	179	160	156	202	126
82 92	Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal	ND 181	ND 170	ND 230	ND 194	ND 158	ND 181	ND 195	ND 166	ND 151	ND 187	225 179
	met River System	101	1,0	-50	•••							
49	Ewing Avenue, Calumet River	35	38	33	46	44	38	31	35	40	59	51
50 55	Burnfiam Avenue, Wolf Lake 130th Street, Calumet River	86 83	79 98	66 104	68 88	47 83	59 75	55 69	42 64	43 68	45 93	32 74
86	Burnham Avenue, Grand Calumet River	80	148	134	144	155	137	138	176	200	180	177
56 76	Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River	104 159	100 150	116 202	109 181	98 153	82 174	82 154	88 133	109 127	95 162	103 150
52	Wentworth Avenue, Little Calumet River	122	110	150	132	122	140	160	179	189	137	155
54	Joe Orr Road, Thorn Creek 170th Street, Thorn Creek	210 192	145 163	171 183	176 158	183 182	212 228	235 222	94 217	191 194	187 163	162 ND
97 57	Ashland Avenue, Little Calumet River	182	135	176	171	174	205	200	193	173	168	190
58 59	Ashland Avenue, Calumet-Sag Channel	159 160	147 136	207 170	161 167	161 155	180 171	167 167	155 150	147 145	167 167	164 168
43	Cicero Avenue, Calumet-Sag Channel Route 83, Calumet-Sag Channel	178	139	164	164	150	144	156	142	144	179	168
	Plaines River System					450	250	241	201	220	220	143
90 63	Route 19, Poplar Creek Longmeadow Lane, West Branch DuPage River	273 ND	215 ND	282 ND	277 ND	279 ND	278 ND	241 ND	201 154	220 ND	229 283	143 189
89	Walnut Lane, West Branch DuPage River	171	170	196	187	193	181	207	205	169	171	153
64 79	Lake Street, West Branch DuPage River Higgins Road, Salt Creek	340 266	188 258	232 385	235 353	201 287	211 409	198 363	186 235	190 260	198 327	160 278
80	Arlington Heights Road, Salt Creek	289	248	389	268	280	323	225	241	213	234	219
18 24	Devon Avenue, Salt Creek Wolf Road, Salt Creek	327 313	231 244	384 346	287 275	283 241	320 261	236 250	250 241	204 254	247 268	223 220
109	Brookfield Avenue, Salt Creek	293	231	321	271	257	258	264	208	135	ND	ND
21 77	First Avenue, Salt Creek Elmhurst Road, Higgins Creek	ND 583	ND 305	ND 548	ND 259	ND 571	ND 478	ND 514	ND 424	654 460	260 479	213 336
78	Wille Road, Higgins Creek	220	233	274	247	217	220	190	213	259	221	191
12	Wille Road, Higgins Creek Lake-Cook Road, Buffalo Creek	310 185	218 148	357 220	272 184	259 210	ND 221	ND 176	ND 202	ND 188	ND 158	ND 152
12	Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River	221	154	238	195	245	251	197	202	224	182	141
13 17	Oakton Succe, Des Flames River	231	173	279	208	250 249	230 260	225 211	255 173	236 265	188 190	153 157
17 19	Belmont Avenue, Des Plaines River	222	164									
17 19 20	Roosevelt Road, Des Plaines River	232	164 173	285 270	214 228	244	255	218	261	269	205	170
17 19 20 22 23	Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River	232 250 239	173 177	270 275	228 238	244 234	255 268	218 222	261 197	269 226	205 204	170 177
17 19 20 22	Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River Ogden Avenue, Des Plaines River	232 250	173	270	228	244	255	218	261	269	205	170 177 175 202

ND = No Data.

TABLE AII-53: TURBIDITY MEAN HISTORY 2000 THROUGH 2010

	Annual Means (NTU)										
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch	ND 18.0	ND 26.9	ND 31.4	ND 29.0	ND 66.6	ND 30.1	ND 49.5	ND 32.2	ND 19.2	25.5 24.6	81.0 ND
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	12.4	24.1	18.4	14.1	32.2	25.6	20.1	16.9	20.7	18.5	ND
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	10.6 7.6	18.3 15.0	18.3 16.9	14.9 13.7	46.2 32.9	16.7 15.2	22.8 18.2	13.1 14.7	16.6 15.3	22.3 14.1	16.8 ND
32 Lake-Cook Road, Skokie River	9.2	16.2	18.5	14.6	37.0 16.5	16.8 13.4	19.8 16.7	12.6 12.0	13.4 12.5	15.6 12.9	13.0 ND
105 Frontage Road, Skokie River 34 Dempster Street, North Branch Chicago River	9.5 9.4	14.8 17.0	13.1 17.8	15.6 15.3	28.9	18.9	19.1	14.5	18.0	18.1	18.5
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	13.1 5.5	17.4 8.1	20.2 9.7	14.6 5.1	23.5 9.3	16.0 5.9	18.3 7.3	14.1 8.2	14.5 10.6	13.3 10.3	11.0 11.8
102 Oakton Street, North Shore Channel	14.3	7.9	15.0	10.3	13.2	12.2	11.3	11.6	14.1	14.4	ND
36 Touhy Avenue, North Shore Channel 101 Foster Avenue, North Shore Channel	4.0 4.6	5.1 4.4	4.8 5.4	4.2 5.1	5.8 5.9	6.5 7.0	7.6 7.5	7.1 8.0	8.1 9.5	6.7 8.7	8.1 ND
37 Wilson Avenue, North Branch Chicago River	6.6	11.4 10.6	8.2 10.3	8.2 8.8	9.3 10.4	9.5 10.0	10.5 11.4	9.2 9.5	11.3 12.4	11.4 11.8	9.7 10.1
73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River	6.5 8.0	12.6	10.0	13.2	13.4	11.3	14.9	10.2	13.2	12.0	12.6
74 Lake Shore Drive, Chicago River 100 Wells Street, Chicago River	2.2 3.8	3.8 4.1	4.6 7.4	3.5 4.0	2.8 3.5	3.3 4.7	3.4 4.7	5.5 7.0	6.0 6.8	5.9 7.9	8.3 ND
39 Madison Street, South Branch Chicago River	8.4	9.7	10.8	10.7	8.0	9.1	11.1	9.8	11.6	12.5	10.5
108 Loomis Street, South Branch Chicago River 99 Archer Avenue, South Fork South Branch Chicago River	8. 5 7.6	9.7 8.4	11.6 10.8	10.1 7.4	11.3 8.8	9.6 8.7	10.7 9.9	9.1 9.3	10.0 10.4	12.6 12.5	ND ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	8.9 ND	ii.i ND	10.3 ND	11.8 ND	11.4 ND	10.4 ND	11.5 ND	10.3 ND	ND 11.0	ND 12.9	12.7 ND
107 Western Avenue, Chicago Sanitary & Ship Canal 75 Cicero Avenue, Chicago Sanitary & Ship Canal	8.9	11.5	10.7	8.6	13.1	11.6	13.7	10.5	10.6	13.6	12.8
41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal	5.0 4.2	6.1 5.5	6.0 8.3	6.0 6.9	6.9 5.4	6.4 5.8	6.9 6.6	7.2 8.0	8.3 8.6	8.5 8.0	9.3 8.2
48 Stephen Street, Chicago Sanitary & Ship Canal	6.9	11.0	13.9	10.2	11.6	11.5	11.4 ND	9.9 ND	9.9 ND	10.4 ND	11.1 ND
82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND 6.0	ND 11.1	ND 14.4	ND 9.0	ND 11.2	ND 10.6	10.6	9.5	10.0	11.4	11.5
Calumet River System											
49 Ewing Avenue, Calumet River	2.9 3.5	3.6 3.5	4.2 4.2	4.0 3.8	7.2 2.9	5.6 5.3	7.7 3.8	6.9 5.3	7.5 5.2	9.8 6.6	10.6 6.4
50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River	2.7	4.3	6.0	6.3	6.3	5.9	6.4	7.8	9.4	10.8	13.5
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River	13.0 8.9	6.0 18.2	11.9 25.2	10.3 20.3	12.8 19.6	25.3 24.8	11.5 19.6	9.4 16.8	9.3 18.9	10.0 17.9	12.5 15.8
76 Halsted Street, Little Calumet River	4.9	8.9	11.5	8.4	9.3	10.2	11.1	8.4	10.3 22.6	11.1 24.7	10.3 33.0
52 Wentworth Avenue, Little Calumet River 54 Joe Orr Road, Thorn Creek	61.2 24.1	38.2 15.8	17.7 5.8	31.2 9.8	33.6 5.8	32.2 63.6	30.9 17.8	16.1 29.4	8.0	10.3	22.0
97 170th Street, Thorn Creek	51.5 42.1	21.5 25.9	16.3 16.0	25.4 28.2	26.5 24.3	46.2 42.5	29.2 27.5	19.8 20.1	14.9 16.6	27.6 26.2	ND 21.3
58 Ashland Avenue, Calumet-Sag Channel	19.7	12.9	13.6	16.6	11.5	13.4	14.7	14.5	12.0	14.8	13.3
59 Cicero Avenue, Calumet-Sag Channel 43 Route 83, Calumet-Sag Channel	14.1 9.2	12.9 13.6	14.9 12.8	18.8 14.5	14.3 18.6	14.2 14.2	17.8 15.7	14.3 20.7	14.6 16.2	15.2 22.0	13.3 18.5
Des Plaines River System											
90 Route 19, Poplar Creek	12.0 ND	10.4 ND	14.1 ND	7.9 ND	20.3 ND	14.7 ND	10.0 ND	17.1 22.6	11.9 ND	13.2 20.3	18.6 21.8
63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River	7.0	5.5	13.5	7.5	7.4	7.6	8.3	10.2	7.5	9.0	13.5
64 Lake Street, West Branch DuPage River	18.5 25.4	17.7 21.1	22.9 23.8	19.2 25.1	25.4 30.4	26.3 42.9	22.5 23.2	19.0 30.3	18.6 24.6	21.3 22.5	27.6 29.4
80 Arlington Heights Road, Salt Creek	6.0	12.5	5.8	9.1	9.8	42.9 6.5	23.2	8.1	6.9	9.8	10.8
18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek	6.9 14.2	12.4 17.0	7.5 19.4	10.1 24.0	11.1 28.7	10.1 20.1	11.6 16.2	9.6 22.6	9.2 13.8	11.8 17.2	15.6 22.6
109 Brookfield Avenue, Salt Creek	19.4	18.9	18.9	21.1	32.5 ND	23.3 ND	17.0 ND	27.8 ND	13.0	ND 18.1	ND 23.0
21 First Avenue, Salt Čreek 77 Elmhurst Road, Higgins Creek	ND 19.3	ND 18.9	ND 44.3	ND 23.9	32.5	29.3	29.5	23.0	12.9 22.2	18.8	27.7
78 Wille Road, Higgins Creek	3.1 23.9	4.0 21.4	7.1 20.4	4.5 26.7	4.8 25.6	3.9 ND	5.1 ND	7.1 ND	6.9 ND	7.3 ND	7.2 ND
 12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River 	12.9	20.9	17.0	16.5	20.7	19.4	18.5	18.7 21.7	15.8	16.9	23.9
17 Oakton Street, Des Plaines River 19 Belmont Avenue, Des Plaines River	13.5 12.7	21.5 21.6	20.0 25.6	16.9 18.6	19.5 20.7	15.1 17.6	18.4 17.1	21.7 20.8	15.6 17.1	18.4 16.7	27.5 20.4
20 Roosevelt Road, Des Plaines River	16.6	22.7	22.0	19.0	21.3	17.5	16.8	21.3	16.1	16.9	22.3
 Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River 	15.3 13.1	23.8 23.7	20.6 21.5	21.7 21.2	28.3 26.3	23.8 20.9	16.3 19.1	24.2 19.6	15.0 15.8	17.3 22.9	23.6 26.0
29 Stephen Street, Des Plaines River	16.6	24.8	18.5	18.0	26.2	23.0	20.2	20.9	15.9	26.0	26.6
91 Material Service Road, Des Plaines River 110 Springinsguth Road, West Branch DuPage River	15.0 10.1	22.0 25.1	17.6 22.2	21.7 16.2	22.1 19.1	25.8 25.2	20.5 32.9	22.4 ND	16.9 ND	24.7 ND	24.5 ND
ND = No Data.									-		

TABLE AII-54: ELECTRICAL CONDUCTIVITY MEAN HISTORY 2000 THROUGH 2010

				Ann	ual M	eans (μ mho	s)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND						
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	ND ND	ND ND	ND ND	ND ND	ND ND						
31 Lake-Cook Road, Middle Fork North Branch	ND	ND	ND	ND	ND						
104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River	ND ND	ND ND	ND ND	ND ND	ND ND						
105 Frontage Road, Skokie River	ND	ND	ND	ND	ND						
34 Dempster Street, North Branch Chicago River 96 Albany Avenue, North Branch Chicago River	ND ND	ND ND	ND ND	ND ND	ND ND						
35 Central Street, North Shore Channel	ND ND	ND	ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
102 Oakton Street, North Shore Channel 36 Touhy Avenue, North Shore Channel	ND	ND ND	ND ND	ND ND	ND	ND	ND	ND	ND	ND	ND
101 Foster Avenue, North Shore Channel 37 Wilson Avenue, North Branch Chicago River	ND ND	ND ND	ND ND	ND ND	ND ND						
73 Diversey Parkway, North Branch Chicago River	ND	ND	ND	ND	ND						
46 Grand Avenue, North Branch Chicago River 74 Lake Shore Drive, Chicago River	ND ND	ND ND	ND ND	ND ND	ND ND						
100 Wells Street, Chicago River	ND	ND	ND	ND	ND						
39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River	ND ND	ND ND	ND ND	ND ND	ND ND						
99 Archer Avenue, South Fork South Branch Chicago River	ND	ND	ND	ND	ND						
40 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal	ND ND	ND ND	ND ND	ND ND	ND ND						
75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal	ND ND	ND ND	ND ND	ND ND	ND	ND	ND	ND	ND	ND	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	ND ND	ND ND	ND ND	ND ND	ND 1235						
82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND						
Calumet River System											
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	ND ND	ND ND	ND ND	ND ND	ND ND						
55 130th Street, Calumet River	ND	ND	ND	ND	ND						
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River	ND ND	ND ND	ND ND	ND ND	ND ND						
76 Halsted Street, Little Calumet River	ND	ND	ND	ND	ND						
52 Wentworth Avenue, Little Calumet River 54 Joe Orr Road, Thorn Creek	ND ND	ND ND	ND ND	ND ND	ND ND						
97 170th Street, Thorn Creek	ND	ND	ND	ND	ND						
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	ND ND	ND ND	ND ND	ND ND	ND ND						
59 Cicero Avenue, Calumet-Sag Channel	ND	ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
	ND	ND	ND	ND	ND	ND	שא	, ND	עאו	ND	ND
Des Plaines River System 90 Route 19, Poplar Creek	ND	ND	ND	ND	ND						
63 Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND	ND						
89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River	ND ND	ND ND	ND ND	ND ND	ND ND						
79 Higgins Road, Salt Creek	ND	ND	ND	ND	ND						
80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	ND ND	ND ND	ND ND	ND ND	ND ND						
24 Wolf Road, Salt Creek	ND	ND	ND	ND	ND						
109 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek	ND ND	ND ND	ND ND	ND ND	ND ND						
77 Elmhurst Road, Higgins Creek	ND	ND	ND	ND	ND						
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	ND ND	ND ND	ND ND	ND ND	ND ND						
13 Lake-Cook Road, Des Plaines River 17 Oakton Street, Des Plaines River	ND ND	ND ND	ND ND	ND ND	ND ND						
19 Belmont Avenue, Des Plaines River	ND	ND	ND	ND	ND						
20 Roosevelt Road, Des Plaines River 22 Ogden Avenue, Des Plaines River	ND ND	ND ND	ND ND	ND ND	ND ND						
23 Willow Springs Road, Des Plaines River	ND	ND	ND	ND	ND						
29 Stephen Street, Des Plaines River 91 Material Service Road, Des Plaines River	ND ND	ND ND	ND ND	ND ND	ND ND						

TABLE AII-55: TOTAL KJELDAHL NITROGEN MEAN HISTORY 2000 THROUGH 2010

				Anr	nual M	leans (mg/L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System									NTO	1.20	2 10
30 Lake-Cook Road, West Fork North Branch	ND 1.24	ND 1.40	ND 1.59	ND 1.30	ND 1.90	ND 1.31	ND 1.58	ND 1.88	ND 1.52	1.32 2.16	2.18 ND
103 Golf Road West Fork North Branch Chicago River	1.15	1.10	1.05 1.16	1.34 1.20	1.36 1.09	1.41 1.36	1.04 1.05	1.25 1.24	2.01 1.26	1.50 1.34	ND 1.67
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	0.95 0.88	0.94 0.99	1.14	1.27	1.54	1.22	0.99	1.33	1.21	1.43	ND 1.09
32 Lake-Cook Road, Skokie River	0.81	0.88 1.01	0.86 1.06	1.08 1.31	1.29 1.32	1.67 1.25	1.08 0. 96	0.97 1.16	1.18 1.26	1.17 1.36	ND
105 Frontage Road, Skokie River 34 Dempster Street, North Branch Chicago River	1.01 1.53	1.08	1.14	1.23	1.43	1.22	1.04	1.12	1.58	1.71 1.96	1.45 1.60
96 Albany Avenue, North Branch Chicago River	$0.94 \\ 0.32$	0.86 0.45	1.03 0.43	1.16 0.58	1.27 0.57	1.31 0.39	0.94 0.54	1.17 0.84	1.40 1.02	0.63	1.05
35 Central Street, North Shore Channel 102 Oakton Street, North Shore Channel	1.46	0.45	1.08	1.27	1.41	1.54	1.45	1.91	1.81	1.10	ND
36 Touhy Avenue, North Shore Channel	2.06	1.38 1.37	1.59 1.82	2.07 2.39	1.99 2.07	3.08 3.53	2.35 3.31	2.75 3.02	2.60 2.98	2.66 2.70	2.65 ND
101 Foster Avenue, North Shore Channel	2.10 1.84	1.32	1.60	1.92	1.97	3.19	3.07	2.63	2.60	2.66 2.43	3.10 2.52
73 Diversey Parkway, North Branch Unicago River	1.77	1.19 1.49	1.36 1.56	1.79 1.94	1.71 1.85	2.25 2.82	2.20 2.26	2.39 2.16	2.33 2.51	2.34	2.40
46 Grand Avenue, North Branch Chicago River	1.96 0.29	0.26	0.43	0.55	0.48	0.73	0.66	0.73	0.67	1.01	1.10 ND
100 Wells Street Chicago River	0.65	0.54	0.88 1.33	0.85 1.44	0.87 1.46	1.15 2.32	1.25 1.93	1.59 2.35	1.10 2.46	1.08 1.94	2.36
39 Madison Street, South Branch Chicago River	1.29 1.29	1.12 1.11	1.36	1.47	1.71	2.33	2.00	1.69	2.03	1.60	ND
OO Archer Avenue South Fork South Branch Chicago River	1.98	1.66	1.97	1.57 1.45	1.49 1.64	2.46 2.31	2.07 1.99	2.07 1.97	2.62 ND	3.35 ND	ND 2.31
40 Damen Avenue, Chicago Sanitary & Ship Canal	1.57 ND	1.27 ND	1.41 ND	ND	ND	ND	ND	ND	2.20	2.02	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	1.40	1.12	1.55 1.49	1.47 1.75	1.70 1.55	2.10 1.93	1.80 1.20	1.96 1.51	2.15 1.68	1.92 1.91	1.99 1.72
41 Harlem Avenue, Chicago Sanitary & Ship Canai	1.51 1.83	1.41 1.33	1.48	1.79	1.61	1.81	1.45	1.62	1.97	1.94	1.65 1.93
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal	1.54	1.27	1.33	1.56 ND	1.74 ND	1.76 ND	1.32 ND	1.57 ND	1.91 ND	1.87 ND	1.96
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND 1.49	ND 1.29	ND 1.40	1.55	1.61	1.67	1.38	1.58	1.66	1.86	1.83
Calumet River System										0.41	0.51
49 Ewing Avenue, Calumet River	0.07	0.18	0.19	0.34	0.38	0.25 0.73	0.18 0.57	0.23 0.52	0.35 0.49	0.41 0.62	0.51 0.73
50 Burnham Avenue, Wolf Lake	0.52 0.25	0.77 0.53	0.71 0.63	$0.85 \\ 0.77$	0.74 0.76	0.70	0.45	0.58	0.71	0.85	0.66
55 130th Street, Calumet River 86 Burnham Avenue, Grand Calumet River	4.57	2.31	5.15	4.57	3.19	4.31	2.65 0.88	3.85 1.02	2.89 1.02	2.58 1.05	4.32 1.01
56 Indiana Avenue, Little Calumet River	0.64 1.30	0.99 1.22	1.00 1.42	1.13 1.34	1.09 1.35	0.84 1.26	1.00	1.16	1.39	1.58	1.50
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River	1.39	1.34	1.28	1.51	1.64	1.61	1.45 1.27	1.58 1.19	1.58 1.47	1.73 1.53	2.03 1.92
54 Joe Orr Road, Thorn Creek	1.24 1.21	1.39 1.18	1.39 1.11	1.50 1.43	1.42 1.28	1.55 1.34	1.11	1.28	1.46	1.58	ND
97 170th Street, Thorn Creek 57 Ashland Avenue, Little Calumet River	1.11	1.03	1.10	1.39	1.43	1.58	1.15	1.23	1.42 1.35	1.60 1.55	1.46
58 Ashland Avenue, Calumet-Sag Channel	1.28 1.33	1.09 1.17	1.32	1.40 1.28	1.47 1.50	1.30 1.41	1.03 1.19	1.22 1.26	1.49	1.67	2.22
59 Cicero Avenue, Calumet-Sag Channel 43 Route 83, Calumet-Sag Channel	1.29	1.20	1.24	1.41	1.37	1.25	1.15	1.32	1.50	1.94	1.45
Des Plaines River System						0.04	0.60	1.02	0.07	1.03	1.31
00 Poute 10 Poplar Creek	0.86 ND	0.81 ND	0.86 ND	0.99 ND	1.13 ND	0.94 ND	0.68 ND	1.03 1.93	0.87 ND	1.88	1.66
63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River	1.68	1.53	1.60	1.85	1.72	1.93	1.56	2.28	1.83	2.30 2.53	2.37
64 Lake Street, West Branch DuPage River	1.97 1.30	1.55 1.22	1.68	2.01 1.51	1.84 1.45	2.09 1.41	1.93 1.07	2.37 1.47	2.05 1.60	1.49	1.82
79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek	1.30	1.19	1.04	1.24	1.37	1.16	1.27	1.84	1.83	1.64	1.74
18 Devon Avenue, Salt Creek	1.46	1.11	0.96	1.12	1.38 1.38	1.42 1.25	1.35 0.91	1.86 1.48	1.87 1.44	1.74 1.52	1.73 1.61
24 Wolf Road, Salt Creek	2.00 1.02	1.09 1.11	1.07 1.08	1.19 1.18	1.53	1.23	0.88	1.48	1.41	ND	NE
109 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek	ND	ND	ND	ND	ND 1 38	ND 1.29	ND 0.74	ND 1,40	1.56 1.31	1.39 1.34	1.62 1.41
77 Elmhurst Road, Higgins Creek	0.72 1.28	0.93 1.22	0.96 1.59	0.96 1.60	1.38 1.84	1.51	1.45	1.49	1.65	1.85	2.35
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	1.11	1.12	1.10	1.37	1.21	ND 1.34	ND 0.98	ND 1.51	ND 1.78	ND 1.48	NE 1.82
13 Lake-Cook Road, Des Plaines River	1.07 1.04	1.10 1.16	1.09 1.19	1.38 1.27	1.40 1.39	1.31	1.02	1.54	1.52	1.55	1.82
17 Oakton Street, Des Plaines River 19 Belmont Avenue, Des Plaines River	1.09	1.07	1.27	1.45	1.46	1.28	0.96	1.66 1.65	1.42 1.35	1.66 1.56	2.27 1.57
20 Roosevelt Road, Des Plaines River	1.05 1.04	$\frac{1.11}{1.11}$	1.17 1.23	1.28 1.27	1.37 1.45	1.20 1.25	1.03 0.92	2.00	1.36	1.60	1.49
 Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River 	0.92	1.19	1.10	1.22	1.50	1.23	0.99	1.26	1.57	1.69 1.87	1.6° 1.3°
20 Stenhen Street, Des Plaines River	1.15 0.99	1.01 1.08	1.06 1.11	1.26 1.20	1.42 1.49	1.29 1.29	1.02 1.02	1.52 1.62	1.50 1.49	1.63	1.63
91 Material Service Road, Des Plaines River 110 Springinsguth Road, West Branch DuPage River	1.64		2.10	2.04	2.35	2.49	2.35	ND	ND	ND	NI
110 Optinginggen 110au,or 2.a. 2.											

ND = No Data.

TABLE AII-56: AMMONIUM NITROGEN MEAN HISTORY 2000 THROUGH 2010

					Ar	nnual l	Means	(mg/I	ـ)			
Sampling Station (No.	. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System												
30 Lake-Cook Road, West 106 Dundee Road, West For	Fork North Branch rk North Branch Chicago River	ND 0.346	ND 0.475	ND 0.487	ND 0.323	ND 0.714	ND 0.228	ND 0.565	ND 0.327	0.145	0.300 0.445	ND
	North Branch Chicago River	0.181	0.251 0.094	0.200 0.181	0.221 0.145	0.251 0.119	0.265 0.190	0.232	0.215 0.178	0.797 0.124	0.277	ND 0.169
104 Glenview Road, North I	Branch Chicago River	0.048	0.126	0.171	0.175	0.198	0.144	0.223	0.113	0.086	0.103 0.190	ND
 32 Lake-Cook Road, Skok 105 Frontage Road, Skokie 			0.109 0.108		0.198 0.121	0.114	0.320 0.152	0.166	0.103	0.058	0.100	ND
34 Dempster Street, North 96 Albany Avenue, North	Branch Chicago River	0.190	0.170	0.185 0.149	0.164	0.201	0.154 0.153	0.191	0.167 0.153		0.336 0.477	0.158 0.413
35 Central Street, North Sh	nore Channel	0.125	0.164	0.114	0.166	0.139	0.071	0.310	0.331	0.313	0.183	0.301
102 Oakton Street, North Sh 36 Touhy Avenue, North S			0.303	0.347	0.521 0.837	0.553 0.685	0.773 1.718	0.885		0.696 0.987		ND 1.273
101 Foster Avenue, North S	hore Channel	1.061	0.485 0.433	0.758	1.210	0.876 0.770	2.104 1.881	2.176 2.005	1.828 1.365	1.428 1.153	1.185 1.083	ND 1.653
	th Branch Chicago River	0.900	0.312	0.427	0.698	0.643	1.091	1.276	1.197	0.959	0.863	1.227
46 Grand Avenue, North B 74 Lake Shore Drive, Chic	ranch Chicago River		0.519	0.613 0.088	0.710 0.185	0.638 0.105	1.617 0.400	1.415 0.339	1.216 0.348	1.171 0.238	0.968 0.413	1.201 0.372
100 Wells Street, Chicago R	liver	0.338	0.175	0.297	0.297	0.229	0.583 1.361	0.68 6 1.197	0.798 1.270		0.462 0.879	ND 0.906
39 Madison Street, South I 108 Loomis Street, South B	ranch Chicago River	0.579	0.413	0.491 0.522	0.513	0.730	1.360	1.251	0.819	0.988	0.587	ND
99 Archer Avenue, South F	Fork South Branch Chicago River to Sanitary & Ship Canal	0.937	0.715 0.484	0.771 0.580	0.637 0.563	0.620 0.618	1.320 1.277	1.136 1.185	1.062 0.969	1.123 ND	1.715 ND	ND 1.116
107 Western Avenue, Chica	go Sanitary & Ship Canal	ND	ND 0.941	0.968		ND						
41 Harlem Avenue, Chicag	o Sanitary & Ship Canal go Sanitary & Ship Canal	0.521	0.436	0.660 0.505	0.556	0.364	0.941	1.107 0.508	0.499	0.534	0.754	0.438
42 Route 83, Chicago Sani 48 Stephen Street, Chicago	tary & Ship Canal Sanitary & Ship Canal		0.497 0.441	0.573 0.465	0.687 0.478	0.482 0.544	0.816 0.797	0.649 0.564	0.643 0.598			0.630 0.692
82 Lockport Trebler, Chica	igo Sanitary & Ship Canal	ND	ND	ND	ND	0.619						
92 Lockport Forebay, Chic	ago Sanitary & Ship Canal	0.573	0.418	0.471	0.516	0.479	0.054	0.635	0.566	0.302	0.034	0.373
Calumet River System	A Division	0.020	0.016	0.022	0.007	0.057	0.109	0.114	0.124	0.063	0.108	0.113
49 Ewing Avenue, Calume50 Burnham Avenue, Wolf			0.016		0.132	0.098	0.183	0.203	0.118	0.018	0.087	0.092
55 130th Street, Calumet R 86 Burnham Avenue, Gran	liver		0.106 1.014	0.162 2.198	0.161 2.218	0.180 1.434	0.235 1.659	0.240 1.399	0.249		0.214 0.934	
56 Indiana Avenue, Little (Calumet River	0.202	0.324	0.261	0.306	0.193 0.259		0.256 0.298			0.127 0.355	
76 Halsted Street, Little Ca 52 Wentworth Avenue, Litt		0.264	0.323 0.364	0.343 0.262	0.295 0.290	0.178	0.365	0.360	0.319	0.230	0.274	0.278
54 Joe Orr Road, Thorn Cr 97 170th Street, Thorn Cre	reek		0.252 0.134	0.227 0.182	0.295 0.191	0.153 0.135	0.240 0.315	0.324	0.127 0.248	0.116	0.110	0.380 ND
57 Ashland Avenue, Little	Calumet River	0.196	0.191	0.203	0.232	0.154	0.355	0.379	0.330	0.182	0.248	
58 Ashland Avenue, Calum 59 Cicero Avenue, Calume		0.334	0.301 0.258	0.354 0.389	0.301 0.263	0.302 0.278	0.320 0.360	0.298 0.356		0.252	0.448	0.490
43 Route 83, Calumet-Sag		0.407	0.314	0.335	0.310	0.261	0.321	0.438	0.260	0.317	0.513	0,336
Des Plaines River Syste				0.040	0.004	0.112	0.100	0.107	0.140	0.024	0.105	0.106
90 Route 19, Poplar Creek 63 Longmeadow Lane, We	est Branch DuPage River	0.094 ND	0.052 ND	0.062 ND	0.094 ND	0.113 ND	0.108 ND	0.107 ND	0.240	ND	0.105	0.106 0.154
89 Walnut Lane, West Bran	nch DuPage River		0.081	0.152 0.249				0.332 0.552			0.294	
64 Lake Street, West Brand 79 Higgins Road, Salt Cree	ek _	0.098	0.063	0.039	0.129	0.111	0.100	0.140	0.214	0.090	0.106	0.172
80 Arlington Heights Road 18 Devon Avenue, Salt Cre				0.055 0.046	0.112	0.124	0.157	0.382 0.313	0.501	0.360	0.228	0.143
24 Wolf Road, Salt Creek		0.180	0.117	0.160	0.162 0.174	0.153	0.163	0.195	0.241 0.211	0.218	0.171 ND	0.196 ND
109 Brookfield Avenue, Salt 21 First Avenue, Salt Creel	k	ND	0.116 ND	ND	ND	0.154 ND	ND	ND	ND	0.347	0.160	0.192
77 Elmhurst Road, Higgins78 Wille Road, Higgins Cr	s Creek	0.000 0.221	0.135 0.268	0.214 0.373	0.172 0.353	0.199 0.405	0.123	0.180 0.437	0.240	0.107	0.187 0.250	0.134
12 Lake-Cook Road, Buffa	ilo Creek	0.084	0.060	0.083	0.110	0.117	ND	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des F17 Oakton Street, Des Plais	nes River	0.065	0.097 0.071	0.061	0.103 0.099	0.115	0.145	0.179 0.192	0.150	0.071	0.093	0.107
19 Belmont Avenue, Des P 20 Roosevelt Road, Des Pl	laines River	0.086	0.086 0.057	0.107	0.117	0.124	0.143	0.273 0.188	0.198	0.118	0.157	0.177
22 Ogden Avenue, Des Pla	ines River	0.107	0.079	0.073	0.130	0.122	0.161	0.134	0.144	0.107	0.127	0.150
23 Willow Springs Road, I29 Stephen Street, Des Plai		0.069	0.054	0.059 0.064	0.105	0.133	0.111	0.155 0.109	0.166	0.100	0.134 0.121	0.146
91 Material Service Road,	Des Plaines River	0.028	0.080	0.047 0.616	0.085	0.137	0.122	0.119	0.161 ND	0.057 ND	0.115 ND	0.140 ND
	est Branch DuPage River	0.313	0.503	0.010	0.344	0.333	0.434	0.541	עויו	עט	שא	
ND = No Data.												

TABLE AII-57: UN-IONIZED AMMONIA MEAN HISTORY 2000 THROUGH 2010

				Aı	nnual]	Means	(mg/	L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
Albany Avenue, North Shore Channel Touhy Avenue, North Shore Channel Touhy Avenue, North Branch Chicago River Cand Avenue, North Branch Chicago River Cand Avenue, North Branch Chicago River Cand Avenue, North Branch Chicago River Albany Avenue, North Branch Chicago River Central Street, North Shore Channel Touhy Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River Albany Avenue, North Shore Channel Central Street, North Shore Channel Coakton Street, North Shore Channel County Avenue, North Shore Channel Wilson Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River Lake Shore Drive, Chicago River Wells Street, Chicago River Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River Loomis Street, South Branch Chicago River Archer Avenue, South Fork South Branch Chicago River Archer Avenue, South Fork South Branch Chicago River Domen Avenue, Chicago Sanitary & Ship Canal	0.002 0.001 0.005 0.005 0.007 0.006 0.006 0.000 0.003 0.004 0.005	0.001 0.001 0.002 0.002 0.001 0.003 0.002 0.004 0.004 0.002 0.005 0.001 0.002 0.003	0.002 0.004 0.004 0.004	0.005 0.002 0.002 0.002 0.005 0.007 0.009 0.004 0.007 0.002 0.004	0.002	0.011 0.001 0.002 0.002 0.002 0.005 0.012 0.019 0.021	0.011 0.010 0.011 0.035	0.003 0.003 0.003 0.001 0.002 0.002 0.003 0.007 0.009 0.007 0.008 0.010 0.002	0.001 0.001 0.003 0.004 0.008 0.006 0.013 0.011 0.010 0.007 0.011 0.002 0.003	0.007 0.007 0.002 0.003 0.004 0.003 0.007 0.004 0.003 0.007 0.006 0.011 0.003 0.004 0.003	NE N
Western Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal Harlem Avenue, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal	ND 0.003 0.003 0.003 0.004 ND	ND 0.002 0.004 0.002 0.003 ND	ND 0.004 0.005 0.004 0.011 ND	ND 0.006 0.004 0.004 0.004 ND	ND 0.005 0.002 0.002 0.003 ND	ND 0.023 0.007 0.006 0.003 ND	ND 0.011 0.006 0.006 0.004 ND		0.009 0.019 0.003 0.004 0.005 ND	0.006 0.005 0.005 0.004 0.004 ND	NI 0.00 0.00 0.00 0.00 NI
Calumet River System 49 Ewing Avenue, Calumet River	0.001	0.000	0.000	0.002	0.001	0.001	0.004	0.002	0.002	0.002	0.00
50 Burnham Avenue, Wolf Lake 51 130th Street, Calumet River 52 Burnham Avenue, Grand Calumet River 53 Halsted Street, Little Calumet River 54 Wentworth Avenue, Little Calumet River 55 Wentworth Avenue, Little Calumet River 56 Joe Orr Road, Thorn Creek 57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Little Calumet River 59 Ashland Avenue, Calumet-Sag Channel 59 Cicero Avenue, Calumet-Sag Channel 60 Route 83, Calumet-Sag Channel	0.004 0.001 0.034 0.002 0.002 0.004 0.001 0.003 0.003 0.002 0.004	0.002 0.003 0.007 0.005 0.002 0.011 0.001 0.003 0.004 0.003	0.012 0.003 0.020 0.002 0.002 0.005	0.022 0.004 0.044 0.005 0.003 0.006 0.003 0.003 0.004 0.003	0.012 0.005 0.012 0.008 0.003 0.004 0.003 0.004 0.002 0.003 0.004	0.003 0.004 0.015 0.001 0.003 0.002 0.001 0.002 0.001 0.002	0.004 0.005 0.016 0.003 0.002 0.004 0.002 0.003 0.009 0.002 0.003	0.008 0.006 0.048 0.004 0.002 0.005 0.001	0.001 0.004 0.024 0.002 0.002 0.003 0.001 0.004 0.002	0.003 0.002	0.005 0.004 0.048 0.024 0.005 0.011 0.006 ND 0.003 0.004 0.003
Des Plaines River System 90 Route 19, Poplar Creek	0.002	0.002	0.001	0.003				0.002	0.001	0.001	0.007
63 Longmeadow Lane, West Branch DuPage River Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River Higgins Road, Salt Creek Arlington Heights Road, Salt Creek Devon Avenue, Salt Creek Wolf Road, Salt Creek Frost Avenue, Salt Creek Elmhurst Road, Higgins Creek Wille Road, Higgins Creek Lake-Cook Road, Buffalo Creek Lake-Cook Road, Des Plaines River Belmont Avenue, Des Plaines River Cogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River Stephen Street, Des Plaines River	0.002 0.001 0.002 0.001 0.002 ND 0.000 0.004 0.001 0.001 0.001 0.001 0.001	0.000 0.000 0.001 0.001 ND 0.003 0.004 0.000 0.002 0.002 0.001	0.000 0.000 0.000 0.002 0.002 ND 0.005 0.006 0.002 0.003 0.001 0.001 0.001	0.003 0.002 0.002 0.003 ND 0.004 0.006 0.002 0.002 0.002 0.002 0.003 0.004 0.003	0.004 0.001 0.002 0.002 ND 0.002 0.003 0.001 0.002 0.002 0.003 0.002	0.005 0.002 0.006 0.006 0.002 0.002 ND 0.003 0.003 0.003 0.002 0.002 0.002 0.002	0.001 0.003 0.002 0.003 0.002 ND 0.003 0.007 ND 0.004 0.004 0.004 0.004 0.004 0.002	0.005 0.002 0.004 0.005 0.002 ND 0.003 0.005 ND 0.002 0.002 0.003 0.004 0.004	0.001 0.006 0.004 0.002 0.003 0.000 0.001 0.001 ND 0.001 0.001 0.001 0.001 0.001 0.001	0.006 0.001 0.002 0.011 0.003 ND 0.002 0.004 0.005 ND 0.002 0.002 0.003 0.002 0.003	0.024 0.024 0.029 0.004 ND 0.002 0.004 0.006 0.014 0.002 0.002 0.004 0.001 0.004 0.005

TABLE AII-58: ORGANIC NITROGEN MEAN HISTORY 2000 THROUGH 2010

	Annual Means (mg/L)										
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
Chicago River System 30 Lake-Cook Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River 106 Dempster Street, North Branch Chicago River 34 Dempster Street, North Branch Chicago River 35 Central Street, North Branch Chicago River 36 Courtal Street, North Shore Channel 102 Oakton Street, North Shore Channel 103 Touhy Avenue, North Shore Channel 104 Foster Avenue, North Branch Chicago River 105 Diversey Parkway, North Branch Chicago River 106 Grand Avenue, North Branch Chicago River 107 Lake Shore Drive, Chicago River 108 Wells Street, Chicago River 109 Madison Street, South Branch Chicago River 109 Archer Avenue, South Branch Chicago River 109 Archer Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal 108 Louis 31, Chicago Sanitary & Ship Canal 109 Route 33, Chicago Sanitary & Ship Canal 100 Route 33, Chicago Sanitary & Ship Canal 107 Route 33, Chicago Sanitary & Ship Canal 108 Route 33, Chicago Sanitary & Ship Canal 109 Route 33, Chicago Sanitary & Ship Canal 109 Route 33, Chicago Sanitary & Ship Canal 100 Route 33, Chicago Sanitary & Ship Canal 100 Route 33, Chicago Sanitary & Ship Canal	ND 0.89 0.97 0.88 0.73 0.95 1.34 0.21 0.86 0.21 0.84 1.04 1.04 0.94 0.15 0.71 1.05 0.71 1.05 0.71 1.05 0.84 0.90	ND 0.92 0.85 0.84 0.77 0.90 0.76 0.28 0.56 0.89 0.89 0.89 0.37 0.70 0.95 0.70 0.95 0.70	ND 1.11 0.85 0.98 0.97 0.73 0.94 0.88 0.34 1.06 1.03 0.95 0.35 0.84 1.20 0.84 1.20 0.83 ND 0.89 0.90	ND 0.98 1.12 1.06 0.88 1.19 1.07 1.05 0.41 0.75 1.24 1.18 1.04 1.23 0.37 0.55 0.96 0.96 0.98 ND 0.88 1.19	ND 1.19 1.11 0.97 1.34 1.08 1.23 1.16 0.44 0.86 1.32 1.20 1.20 1.20 1.20 1.07 1.07 1.07 1.09 0.92 0.98 0.87 ND 1.08	ND 1.08 1.15 1.07 1.35 1.10 1.06 1.16 0.32 0.77 1.43 1.31 1.16 1.20 0.34 0.57 0.95 0.97 1.103 ND 0.92 0.99	ND 1.01 0.81 0.87 0.91 0.80 0.77 0.91 0.85 0.24 0.57 1.00 1.14 1.06 0.92 0.84 0.31 0.75 0.91 ND 0.73	ND 1.56 1.04 1.06 1.22 0.75 1.05 1.01 0.51 1.21 1.19 1.27 0.94 0.38 0.79 1.08 0.87 1.00 ND 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	ND 1.38 1.21 1.14 1.12 1.07 1.20 1.22 1.15 0.71 1.11 1.61 1.55 1.45 1.37 1.34 0.43 0.43 0.43 0.50 1.23 1.24 1.50 1.23 1.23 1.23 1.23	1.02 1.71 1.22 1.33 0.98 1.38 1.48 0.44 0.73 1.60 1.52 1.57 1.37 0.59 0.61 1.06 1.06 1.04 ND	1.71 ND ND 1.50 ND 1.29 1.19 0.75 ND 1.37 ND 1.20 0.73 ND 1.46 ND ND 1.20 1.20 1.20
48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal	1.01 ND 0.91	0.83 ND 0.87	0.86 ND 0.93	1.08 ND 1.04	1.20 ND 1.13	0.96 ND 1.02	0.76 ND 0.75	0.98 ND 0.99	1.19 ND 1.16	1.15 ND 1.21	1.24 1.35 1.24
Calumet River System						0.15	0.00	0.13	0.20	0.30	0.40
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake 51 130th Street, Calumet River 63 Burnham Avenue, Grand Calumet River 64 Indiana Avenue, Little Calumet River 65 Halsted Street, Little Calumet River 65 Wentworth Avenue, Little Calumet River 65 Joe Orr Road, Thorn Creek 67 170th Street, Thorn Creek 67 Ashland Avenue, Little Calumet River 68 Ashland Avenue, Little Calumet River 69 Cicero Avenue, Calumet-Sag Channel 69 Cicero Avenue, Calumet-Sag Channel 69 Route 83, Calumet-Sag Channel	0.07 0.46 0.18 1.45 0.45 0.93 1.13 1.07 1.08 0.92 0.97 0.90 0.88	0.16 0.67 0.43 1.29 0.67 0.90 0.98 1.13 1.05 0.84 0.79 0.92 0.88	0.16 0.61 0.47 2.95 0.74 1.07 1.16 0.93 0.90 0.96 0.92	0.25 0.71 0.61 2.35 0.83 1.04 1.22 1.21 1.16 1.09 1.02	0.32 0.64 0.58 1.76 0.90 1.10 1.46 1.27 1.14 1.28 1.17 1.22 1.11	0.15 0.55 0.47 2.65 0.64 0.98 1.25 1.31 1.02 1.23 0.98 1.05 0.93	0.09 0.37 0.20 1.25 0.69 0.70 1.09 0.94 0.77 0.73 0.83 0.72	0.12 0.40 0.33 2.12 0.69 1.26 1.06 1.03 0.90 0.93 1.01	0.29 0.47 0.61 1.94 0.90 1.35 1.36 1.21 1.24 1.16 1.24 1.19	0.30 0.53 0.64 1.64 0.92 1.23 1.46 1.30 1.35 1.13 1.22 1.43	0.40 0.64 0.46 2.73 0.70 1.17 1.75 1.54 ND 1.16 1.12
Plaines River System Route 19, Poplar Creek Longmeadow Lane, West Branch DuPage River Lake Street, West Branch DuPage River Higgins Road, Salt Creek Arlington Heights Road, Salt Creek Wolf Road, Salt Creek Brookfield Avenue, Salt Creek First Avenue, Salt Creek Wille Road, Higgins Creek Lake-Cook Road, Buffalo Creek Lake-Cook Road, Buffalo Creek Ake-Cook Road, Des Plaines River Ake-Cook Road, Des Plaines River Roosevelt Road, Des Plaines River Goden Avenue, Des Plaines River Willow Springs Road, Des Plaines River Willow Springs Road, Des Plaines River Material Service Road, Des Plaines River Material Service Road, Des Plaines River	0.76 ND 1.56 1.22 1.20 1.10 1.24 1.82 0.81 ND 0.72 1.06 1.03 1.03 1.03 0.98 1.00 0.99 0.93 0.84 1.08	0.76 ND 1.45 1.40 1.16 1.16 1.07 0.98 1.00 ND 0.79 0.95 1.06 1.09 0.99 1.05 1.08 0.96 1.00	0.80 ND 1.45 1.43 1.15 0.91 0.91 0.89 ND 0.75 1.22 1.02 1.02 1.13 1.16 1.08 1.15	0.90 ND 1.61 1.67 1.38 1.01 1.03 1.00 ND 0.79 1.25 1.26 1.27 1.17 1.33 1.19 1.14 1.09	1.02 ND 1.59 1.33 1.26 1.22 1.38 ND 1.18 1.43 1.09 1.32 1.27 1.33 1.26 1.33 1.26 1.38	0.83 ND 1.66 1.61 1.31 1.01 1.22 1.09 1.07 ND 1.17 1.24 ND 1.13 1.06 1.13 1.16 1.13 2.04	0.57 ND 1.23 1.37 0.93 0.88 1.04 0.71 0.56 1.01 ND 0.83 0.68 0.84 0.79 0.83 0.91 0.90	0.88 1.69 1.77 1.25 1.37 1.36 1.23 1.27 ND 1.16 1.16 NJ 1.35 1.47 1.48 1.48 1.10 1.35 1.45 ND	0.83 ND 1.71 1.77 1.51 1.53 1.23 1.23 1.22 1.20 1.44 ND 1.69 1.45 1.30 1.25 1.26 1.50 1.40	0.92 1.58 2.00 2.07 1.38 1.45 1.52 1.35 ND 1.23 1.16 1.60 ND 1.38 1.45 1.51 1.47 1.51 1.47	1.20 1.50 2.03 2.06 1.65 1.60 1.57 1.41 ND 1.43 1.28 1.95 ND 1.48 2.09 1.43 1.51 1.20 1.34 ND

TABLE AII-59: NITRITE PLUS NITRATE NITROGEN MEAN HISTORY 2000 THROUGH 2010

				An	nual N	/leans	(mg/L	.)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River	ND 8.56	ND 6.78	ND 5.90	ND 4.63	ND 3.68	ND 7.14	ND 9.95	ND 5.27	ND 4.00	2.60 5.14	7.57 ND
103 Golf Road, West Fork North Branch Chicago River	3.72 0.17	3.04 0.23	2.12 0.78	3.49 0.24	3.11 0.42	3.88 0.24	2.86 0.33	2.97 0.35	4.03 0.38	3.11 0.37	ND 0.35
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	5.88	3.95	3.31	4.52	3.92	5.93	4.79	3.81	4.67	3.22	ND
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River	0.35 7.07	0.35 5.15	0.62 4.03	0.46 5.58	3.15 5.33	3.41 7.00	0.77 5.74	1.07 6.42	0.46 5.83	0.46 3.87	0.52 ND
34 Dempster Street, North Branch Chicago River	4.02	3.43	3.00 2.84	3.97 4.07	3.74 3.83	5.06 4.64	4.24 4.75	5.10 4.24	4.57 4.24	2.65 3.05	4.51 5.37
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	4.50 0.31	3.60 0.33	0.28	0.31	0.34	0.23	0.35	1.00	0.34	0.28	0.29
102 Oakton Street, North Shore Channel 36 Touhy Avenue, North Shore Channel	3.29 6.53	2.73 6.47	2.72 6.76	3.33 6.53	3.81 6.01	2.44 5.24	2.13 5.37	2.25 5.90	3.66 5.58	1.27 5.57	ND 5.59
101 Foster Avenue, North Shore Channel	7.75	7.44	7.23	7.58	7.19	5.97	5.93	6.72	6.11	6.69	ND
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 	7.12 7.18	6.93 6.69	6.26 6.47	7.29 6.47	6.94 6.41	6.29 6.04	6.26 6.50	6.50 6.02	5.84 5.29	5.94 5.48	6.17 5.49
46 Grand Avenue, North Branch Chicago River	6.66	5.79 0.57	5.70 0.93	6.43 1.31	6.22 1.04	5.77 1.07	5.36 1.50	5.86 1.38	5.47 1.38	4.86 1.93	5.63 1.84
74 Lake Shore Drive, Chicago River 100 Wells Street, Chicago River	1.28 2.83	1.94	2.60	2.29	2.15	2.22	2.52	3.41	2.31	2.33	ND
39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River	5.05 5.12	4.58 4.71	4.31 4.40	4.41 4.39	4.03 4.30	4.37 4.35	4.68 4.76	5.19 4.40	4.37 4.27	3.61 3.45	4.28 ND
99 Archer Avenue, South Fork South Branch Chicago River	4.80	3.32	3.63	3.91	3.67	4.05	4.17	4.52	3.55 ND	2.55 ND	ND 4.42
40 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal	5.11 ND	4.56 ND	4.22 ND	4.15 ND	4.25 ND	4.22 ND	4.64 ND	4.73 ND	4.24	3.27	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	5.15 8.12	3.95 6.35	4.49 7.25	4.50 7.11	3.84 7.41	4.0 6 7.67	4.63 7.64	4.49 7.84	4.30 6.81	3.54 6.26	4.30 7.00
41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal	6.10	5.29	6.33	6.08	6.00	5.97	6.93	7.17	6.24 5.77	5.61	5.84
48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal	5.83 ND	4.92 ND	5.64 ND	5.59 ND	5.59 ND	5.51 ND	6.27 ND	6.36 ND	ND	5.27 ND	5.15 6.13
92 Lockport Forebay, Chicago Sanitary & Ship Canal	5.91	5.34	5.52	5.45	5.90	6.01	5.74	6.24	5.94	5.31	5.52
Calumet River System	0.10	0.22	0.20	0.27	0.38	0.37	0.36	0.35	0.50	0.46	0.38
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	0.30 0.07	0.33 0.06	0.39 0.09	0.37 0.16	0.09	0.13	0.11	0.09	0.10	0.16	0.09
55 130th Street, Calumet River 86 Burnham Avenue, Grand Calumet River	0.42 0.29	0.55 4.45	0.65 1.96	0.68 1.81	0.71 4.68	0.60 5.19	0.52 5.00	0.48 5.91	0.57 8.56	0.67 9.06	0.56 8.48
56 Indiana Avenue, Little Calumet River	1.12	0.86	1.25	1.40	1.86	1.37	1.36	1.78	2.39	1.95	1.86
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River	5.38 4.34	4.56 3.83	5.16 4.85	5.17 4.18	5.91 4.25	5.33 4.27	4.79 3.57	4.57 4.16	5.36 5.39	4.80 3.32	4.32 4.18
54 Joe Orr Road, Thorn Creek	7.39 4.53	9.28 5.30	10.15 6.26	9.18 5.49	9.88 5.32	6.39 5.97	7.33 5.67	7.67 6.76	9.86 7.13	6.81 4.04	7.92 ND
57 Ashland Avenue, Little Calumet River	3.41	3.22	4.22	3.25	4.08	3.67	3.06	4.01	4.35	3.07	4.31
58 Ashland Avenue, Calumet-Sag Channel 59 Cicero Avenue, Calumet-Sag Channel	4.38 4.55	4.02 3.54	4.84 5.02	4.26 3.92	5.66 5.32	5.17 5.22	4.51 4.58	4.57 4.48	5.39 5.39	4.57 4.26	4.22 4.26
43 Route 83, Calumet-Sag Channel	4.90	3.76	4.48	4.69	4.78	5.35	4.38	4.11	4.67	4.25	4.20
Des Plaines River System	0.00	0.20	0.21	0.20	0.52	0.20	0.24	0.61	0.20	0.49	0.39
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	0.28 ND	0.28 ND	0.31 ND	0,29 ND	0.53 ND	0.39 ND	0.34 ND	0.61 1.74	0.28 ND	1.32	0.63
89 Walnut Lane, West Branch DuPage River	11.83 6.82	10.32 8.91	9.38 9.11	7.98 7.34	8.57 8.38	8.85 8.64	9.43 8.83	7.58 7.32	7.13 6.70	7.24 6.79	6.98 5.78
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	0.12	1.28	0.23	0.23	0.26	0.27	0.25	0.45	0.23	0.28	0.47
80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	7.81 8.31	7.72 7.60	8.84 8.69	7.10 7.01	6.77 6.92	7.98 8.19	6.01 6.40	6.22 6.46	7.69 7.32	6.92 7.22	6.27 6.40
24 Wolf Road, Salt Creek	6.98	6.08	7.06	6.47	6.22	8.12	6.54	6.71 5.42	7.66 8.16	5.87 ND	5.27 ND
109 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek	6.17 ND	5.18 ND	6.20 ND	5.56 ND	5.67 ND	6.98 ND	5.78 ND	ND	5.10	5.34	4.80
77 Elmhurst Road, Higgins Creek	0.35 7.90	0.41 8.26	0.54 7.98	0.40 5.83	0.57 5.46	0.44 9.44	0.47 5.42	0.55 4.85	0.41 5.67	0.58 5.44	0.46 4.25
12 Lake-Cook Road, Buffalo Creek	0.36	0.40	0.33	0.31	0.56	ND	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River 17 Oakton Street, Des Plaines River	6.45 6.08	4.68 3.90	5.70 4.52	5.26 4.09	6.56 5.24	7.69 6.43	6.53 5.46	6.79 4.97	6.05 4.84	4.94 4.18	5.24 3.80
19 Belmont Avenue, Des Plaines River	5.71	4.27	4.59	3. 95	4.86	5.93	4.69	4.56	4.62 4.50	3.87 3.69	3.54 3.42
20 Roosevelt Road, Des Plaines River 22 Ogden Avenue, Des Plaines River	5.65 5.52	3.84 4.04	4.47 4.80	3.81 3.95	4.54 4.89	5.49 5.79	4.38 4.70	4.40 5.91	5.21	3.98	3.78
23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River	5.25 5.01	3.74 3.66	4.88 5.05	4.13 4.40	4.82 5.08	5.69 6.04	4.67 4.69	4.30 5.03	4.93 5.18	3.85 3.70	3.89 3.91
91 Material Service Road, Des Plaines River	4.78	3.78	4.65	4.28	4.86	6.26	4.39	4.83	4.98	3.68	4.52
110 Springinsguth Road, West Branch DuPage River	0.36	0.64	0.59	0.62	0.96	0.69	1.22	ND	ND	ND	ND
ND = No Data.											

TABLE AII-60: TOTAL SOLIDS MEAN HISTORY 2000 THROUGH 2010

	Annual Means (mg/L)											
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00	
Chicago River System												
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND	1941	1948	
106 Dundee Road, West Fork North Branch Chicago River	1160	988	1027	1603	900	1050	1300	645	926	941	ND	
103 Golf Road, West Fork North Branch Chicago River	1052	861	863	1146	919	1232	776	790	749	741	ND	
	845	659	809	797	794	888	646	687	693	708	770	
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	781	695	799	761	704	756	711	733	631	631	ND	
32 Lake-Cook Road, Skokie River	780	637	726	823	709	858	712	682	661	737	828	
105 Frontage Road, Skokie River	713	664	775	696	654	696	622	637	606	611	ND	
34 Dempster Street, North Branch Chicago River	897	720	763	850	752	885	808	880	688	754	863	
96 Albany Avenue, North Branch Chicago River	883	773	913	854	802	934	684	651	724	674	616	
35 Central Street, North Shore Channel	255	269	328	260	229	244	250	292	321	230	363	
	423	407	441	443	381	423	344	359	416	270	ND	
102 Oakton Street, North Shore Channel 36 Touhy Avenue, North Shore Channel	534	628	556	646	475	511	511	491	461	542	574	
101 Foster Avenue, North Shore Channel 37 Wilson Avenue, North Branch Chicago River	567	600	584	704	491	546	493	469	478	473	ND	
	686	630	661	750	527	613	565	561	520	616	654	
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River Grand Avenue, North Branch Chicago River 	638	691	703	613	522	570	543	565	514	642	654	
	595	592	706	674	555	597	591	610	503	602	587	
74 Lake Shore Drive, Chicago River	310	244 330	273 437	365 409	256 337	274 369	300 382	312 409	314 366	403 378	402 ND	
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River	411 532	496	561	548	456	483	464	500	469	565	517	
108 Loomis Street, South Branch Chicago River	591	505	549	592	497	476	459	495	476	419	ND	
99 Archer Avenue, South Fork South Branch Chicago River	565	491	591	560	425	474	471	484	476	451	ND	
40 Damen Avenue, Chicago Sanitary & Ship Canal	572	501	556	616	481	477	487	485	ND	ND	552	
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	482	488	ND	
75 Cicero Avenue, Chicago Sanitary & Ship Canal	546	502 579	604 619	647 764	481 529	495 530	514 550	502 531	498 506	522 584	517 619	
41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal	621 635	568	628	616	548	578	597	568	557	636	566	
48 Stephen Street, Chicago Sanitary & Ship Canal	665	545	640	606	584	591	607	602	580	630	633	
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	812	
92 Lockport Forebay, Chicago Sanitary & Ship Canal	669	604	729	647	584	618	622	610	576	643	680	
Calumet River System	220	224	227	242	245	223	234	241	268	302	282	
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	229 327	234 304	227 301	242 295	245 241	279	275	245	247	265	255	
 55 130th Street, Calumet River 86 Burnham Avenue, Grand Calumet River 	363	396	405	395	354	300	340	334	341	395	364	
	570	782	794	747	865	665	787	911	874	799	934	
56 Indiana Avenue, Little Calumet River	420	440	488	478	428	370	410	405	475	414	489	
76 Halsted Street, Little Calumet River	586	579	714	648	590	559	57 9	547	547	622	697	
52 Wentworth Avenue, Little Calumet River	646	611 1267	761 1600	679 1417	700 1490	612 1293	745 1530	828 979	838 1602	706 1230	835 1140	
54 Joe Orr Road, Thorn Creek 97 170th Street, Thorn Creek	1383 1073	983	1187	1009	1099	1252	1165	1308	1285	861	ND	
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	829	743	853	830	877	925	885	951	913	779	965	
	682	574	730	605	638	632	626	609	700	668	753	
59 Cicero Avenue, Calumet-Sag Channel 43 Route 83, Calumet-Sag Channel	617	577	695	622	683	625	666	633	618	656	775	
	679	583	668	628	642	626	630	625	621	674	760	
Des Plaines River System												
90 Route 19, Poplar Creek	817	666	829	784	804	766	756	662	711	733	657	
63 Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	646	ND	888	698	
89 Walnut Lane, West Branch DuPage River	653	606	649	647	656	619	650	608	591	645	651	
64 Lake Street, West Branch DuPage River	939	664	757	670	683	701	697	632	661	710	658	
79 Higgins Road, Salt Creek	757	72 5	1012	974	804	1075	960	701	746	896	895	
80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	828	721	965	789	788	733	679	668	666	743	749	
	891	674	983	782	806	866	751	714	648	754	771	
24 Wolf Road, Salt Creek	877	752	926	814	737	823	762	739	774	783	821	
109 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek	845	715	887	786	765	809	812	707	565	ND	ND	
	ND	ND	ND	ND	ND	ND	ND	ND	1387	810	806	
77 Elmhurst Road, Higgins Creek	1183	721	1212	650	1163	1110	1213	908	958	1120	879	
78 Wille Road, Higgins Creek	760	788	833	786	712	716	707	672	764	785	733	
12 Lake-Cook Road, Buffalo Creek	919	717	952 746	816 664	819 736	ND 742	ND 699	ND 713	ND 707	ND 676	ND 709	
13 Lake-Cook Road, Des Plaines River 17 Oakton Street, Des Plaines River	687 738	569 571	763	657	777	779	689	663	733	711	679	
19 Belmont Avenue, Des Plaines River	744	617	844	688	779	783	749	749	758	702	675	
20 Roosevelt Road, Des Plaines River	747	608	834	704	771	775	732	648	774	703	681	
 Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River 	771	617	813	720	759	778	732	712	813	743	713	
	757	621	828	743	744	773	724	670	732	724	732	
29 Stephen Street, Des Plaines River	750	623	851	728	758	772	702	667	754	733	734 798	
91 Material Service Road, Des Plaines River	762	636	827	720	771	805	731	708	788	712	ND	
110 Springinsguth Road, West Branch DuPage River	763	786	961	902	1173	1077	986	ND	ND	ND		
ND = No Data.									·-··			

TABLE AII-61: TOTAL VOLATILE SOLIDS MEAN HISTORY 2000 THROUGH 2010

				An	nual N	1 eans	(mg/L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
 Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River 	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND ND	ND ND ND	NE NE NE
 Frontage Road, Skokie River Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River 	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	NE NE NE
35 Central Street, North Shore Channel Oakton Street, North Shore Channel	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	NE NE
 Touhy Avenue, North Shore Channel Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River 	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	NE NE NE
 73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River 74 Lake Shore Drive, Chicago River 	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	NI NI NI
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	NE NE NE
 Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal 	ND ND ND	ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND
107 Western Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal Harlem Avenue, Chicago Sanitary & Ship Canal	ND ND	222	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal 48 Lockport Trebler, Chicago Sanitary & Ship Canal 49 Lockport Forebay, Chicago Sanitary & Ship Canal	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND	N N N N N N N	ND ND ND ND	ND ND ND ND	ND NO ND NO NO NO NO NO NO NO NO NO NO NO NO NO N	NE NE 138.9 NE
92 Lockport Forebay, Chicago Sanitary & Ship Canal Calumet River System	ND	ND	ND	ND	ND	NU	ND	ND			
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND
 86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River 	ND ND ND	ND ND	ND ND	ND ND ND	D D D D	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	NE NE NE
52 Wentworth Avenue, Little Calumet River 54 Joe Orr Road, Thorn Creek	ND ND	ND ND ND	ND ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	NE NE
97 170th Street, Thorn Creek 57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	20 20 20 20 20 20 20 20 20 20 20 20 20 2	ND ND ND	ND ND ND	ND ND ND	ND N	ND ND ND	ND ND ND	ND ND ND	ND N	ND N	NE NE NE
59 Cicero Avenue, Calumet-Sag Channel 43 Route 83, Calumet-Sag Channel	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
Des Plaines River System 90 Route 19, Poplar Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND	ND ND ND
 79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek 	ND ND ND	ND ND ND	ND ND ND	22 22 20 20 20 20 20 20 20 20 20 20 20 2	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	88 88 80 80 80 80	ND ND ND
24 Wolf Road, Salt Creek 109 Brookfield Avenue, Salt Creek	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND
77 Elmhurst Road, Higgins Creek 78 Wille Road, Higgins Creek	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
 Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River 	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND N	ND ND ND	ND ND ND
 Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River Ogden Avenue, Des Plaines River 	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND DD	ND ND ND	ND ND ND
 Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River Material Service Road, Des Plaines River 	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND
110 Springinsguth Road, West Branch DuPage River ND = No Data.	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE AII-62: TOTAL SUSPENDED SOLIDS MEAN HISTORY 2000 THROUGH 2010

	Annual Means (mg/L)											
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00	
Chicago River System												
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River	ND 25.1	ND 33.3	ND 61.5	ND 25.5	ND 93.4	ND 31.5	ND 56.1	ND 50.7	ND 39.8	71.0 46.8	120.0 ND	
103 Golf Road, West Fork North Branch Chicago River	16.6 11.4	28.1 21.9	23.3 33.0	12.2 16.4	34.0 69.3	29.7 24.2	23.6 22.0	25.6 21.2	28.5 30.6	32.1 38.8	ND 22.6	
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	11.3	19.4	28.2	14.2	50.1	18.8	22.8	30.3	25.9	22.8	ND	
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River	12.7 13.8	21.4 20.9	26.7 24.3	16.4 18.5	47.9 23.8	21.6 18.4	21.0 25.2	18.7 19.4	18.1 21.6	21.8 22.4	14.3 ND	
34 Dempster Street, North Branch Chicago River	13.4	21.4	27.5	17.2	39.8	25.3	21.8 22.5	20.9 20.3	30.2 24.4	25.8 21.6	28.6 15.0	
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	14.3 7.1	22.3 10.3	29.7 12.6	16.8 5.3	28.3 9.4	16.8 8.5	11.3	9.9	12.8	9.8	13.6	
102 Oakton Street, North Shore Channel	20.8 7.0	13.8 8.4	16.5 10.4	11.8 5.0	16.5 11.7	11.6 10.9	15.2 15.4	19.7 9.4	20.5 15.3	16.6 8.5	ND 10.8	
36 Touhy Avenue, North Shore Channel 101 Foster Avenue, North Shore Channel	7.7	9.3	14.8	5.7	12.3	12.2	12.7	9.6	15.4	10.4	ND	
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 	9.9 9.5	15.9 14.4	19.0 15.7	8.3 10.6	14.3 15.3	15.0 13.2	13.9 15.1	12.3 14.1	18.5 19.3	16.8 17.9	15.0 15.3	
46 Grand Avenue, North Branch Chicago River	10.8 1.2	16.9 4.7	16.0 5.8	16.3 5.6	17.3 7.1	14.5 5.3	21.3 4.9	13.5 2.5	18.3 4.0	17.6 4.8	15.2 12.8	
74 Lake Shore Drive, Chicago River 100 Wells Street, Chicago River	4.1	5.7	9.0	4.7	9.0	4.5	6.3	6.4	6.3	10.0	ND	
39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River	9.5 11.4	12.6 13.1	13.8 17.7	18.3 18.5	14.5 16.2	8.7 12.6	14.0 11.8	11.6 12.5	18.4 12.2	16.8 17.9	15.2 ND	
99 Archer Avenue, South Fork South Branch Chicago River	11.7	12.0	14.8	10.1	12.4 17.8	12.5 12.7	13.2 14.6	11.8 13.7	14.4 ND	19.8 ND	ND 19.1	
40 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal	12.0 ND	15.4 ND	15.6 ND	17.9 ND	ND	ND	ND	ND	19.3	19.6	ND	
75 Cicero Avenue, Chicago Sanitary & Ship Canal	12.8 7.7	16.8 9.7	16.8 10.3	16.6 15.3	19.2 12.3	13.0 9.6	17.8 8.5	13.9 8.1	15.1 11.6	20.8 10.8	16.5 11.5	
42 Route 83. Chicago Sanitary & Ship Canal	6.8	10.7	13.3	21.8	11.7	7.5	9.0	10.6 16.2	11.5 13.4	12.1 15.2	8.8 16.8	
48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal	9.3 ND	14.0 ND	19.7 ND	23.8 ND	18.2 ND	15.0 ND	15.8 ND	ND	ND	ND	19.2	
92 Lockport Forebay, Chicago Sanitary & Ship Canal	10.4	15.8	22.6	12.9	15.8	14.5	14.6	14.7	15.1	15.5	15.6	
Calumet River System	4.0	5 0	<i>e</i> 7	£ 0	72	67	0.7	8.7	7.1	11.3	12.6	
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	4.8 4.3	5.0 6.6	5.7 5.3	5.8 5.2	7.3 6.1	6.7 5.3	9.7 5.4	5.8	3.6	7.4	4.7	
55 130th Street, Calumet River	5.1 14.4	8.4 13.8	7.7 23.9	6.8 18.5	8.5 21.0	6.5 49.9	7.7 18.9	9.3 17.0	12.5 16.2	20.7 16.9	14.0 23.5	
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River	12.9	19.3	33.7	21.6	24.4	25.0	22.0	29.9	27.8	29.6	22.2 11.6	
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River	7.6 74.3	12.5 51.0	18.8 30.5	10.6 44.7	12.9 44.1	11.3 37.9	14.8 32.4	10.5 28.7	15.2 30.5	15.4 53.5	55.4	
54 Joe Orr Road, Thorn Creek	27.4 53.4	20.1 40.3	8.0 23.8	7.1 35.5	9.9 32.4	115.4 55.4	17.6 40.5	42.0 30.2	7.4 24.1	11.6 38.3	24.1 ND	
97 170th Street, Thorn Creek 57 Ashland Avenue, Little Calumet River	55.1	35.3	19.9	34.6	26.5	45.7	30.5	33.0	23.0	39.4	28.5	
58 Ashland Avenue, Calumet-Sag Channel 59 Cicero Avenue, Calumet-Sag Channel	25.3 18.5	17.4 22.0	17.7 22.8	17.5 20.3	16.6 24.9	15.0 14.3	18.8 20.3	24.4 24.0	17.3 21.1	27.7 20.7	17.9 19.8	
43 Route 83, Calumet-Sag Channel	14.0	23.5	17.4	16.6	20.1	15.5	20.1	35.9	25.9	35.8	28.2	
Des Plaines River System				12.0	25.2	150	15.2	20.4	100	102	36.4	
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	17.6 ND	14.1 ND	21.9 ND	13.9 ND	25.2 ND	15.9 ND	15.3 ND	30.4 36.0	18.9 ND	18.2 30.3	40.0	
89 Walnut Lane, West Branch DuPage River	20.1 26.7	11.8 26.3	21.6 34.5	15.3 27.5	10.8 34.0	12.3 38.5	15.4 32.5	18.3 40.3	16.1 33.2	18.8 42.0	23.5 45.9	
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	31.4	24.4	32.1	33.0	31.2	41.4	25.5	44.6	38.0	33.9	41.2	
80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	8.5 11.1	13.8 16.7	8.4 12.4	10.2 16.3	10.2 14.1	9.8 14.2	9.0 19.0	8.8 19.9	8.3 15.7	11.3 23.1	11.7 27.4	
24 Wolf Road, Salt Creek	23.5	24.1	31.6	30.6	39.4 42.7	28.9 25.1	23.1 19.9	43.3 56.1	23.4 18.7	31.0 ND	37.6 ND	
109 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek	18.3 ND	25.5 ND	30.1 ND	25.1 ND	ND	ND	ND	ND	20.7	29.3	40.6	
77 Elmhurst Road, Higgins Creek 78 Wille Road, Higgins Creek	21.0 2.4	18.8 7.0	50.8 8.8	26.4 6.5	45.3 5.4	29.3 3.4	29.2 7.6	34.8 5.9	36.0 7.0	28.2 5.5	39.3 12.4	
12 Lake-Cook Road, Buffalo Creek	27.7	27.1	29.3	41.1	29.4	ND	ND	ND	ND	ND	ND 33.8	
13 Lake-Cook Road, Des Plaines River 17 Oakton Street, Des Plaines River	17.4 16.8	20.1 22.3	23.3 26.1	21.8 22.9	27.3 26.1	24.0 17.9	23.2 23.0	36.8 42.1	28.7 28.8	29.8 29.8	45.9	
19 Belmont Avenue, Des Plaines River	18.5 22.0	23.0 24.3	31.6 27.6	26.5 26.5	29.4 26.9	23.2 23.8	22.3 21.7	41.8 43.4	28.5 31.0	26.3 26.6	32.2 31.0	
20 Roosevelt Road, Des Plaines River 22 Ogden Avenue, Des Plaines River	20.5	27.6	29.5	29.7	36.3	30.6	21.3	52.6	23.2	27.3	34.3	
 Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River 	17.4 23.6	26.2 29.5	27.5 28.6	23.9 22.8	27.8 29.3	22.3 29.8	24.0 26.5	33.4 41.6	24.0 28.3	33.2 44.1	43.9 42.5	
91 Material Service Road, Des Plaines River	23.1	26.3	26.4 29.1	25.9 22.3	27.7	35.0 30.5	28.2 49.2	46.1 ND	30.1 ND	45.1 ND	38.7 ND	
110 Springinsguth Road, West Branch DuPage River	11.0	22.8	29.1	22.3	17.9	20.3	77.2	שה	מא	140	.,,,,	
ND = No Data.		-										

TABLE AII-63: VOLATILE SUSPENDED SOLIDS MEAN HISTORY 2000 THROUGH 2010

	Annual Means (mg/L)											
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00	
Chicago River System												
30 Lake-Cook Road, West Fork North Branch	ND 3.60	ND 7.55	ND 11.36	ND 2.25	ND 13.60	ND 6.75	ND 9.38	ND 13.33	ND 6.50	12.00 7.60	19.00 ND	
103 Golf Road, West Fork North Branch Chicago River	2.40	7.82	5.80	2.91	7.42	7.40	7.30	5.63	5.64	6.20	ND	
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	1.56 1.22	4.50 5.58	6.40 6.17	3.90 3.55	11.91 11.67	5.10 5.50	4.30 5.42	4.78 7.33	6.00 5.22	6.36 5.30	4.60 ND	
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River	1.33	4.80 6.75	6.00 5.67	3.20 4.64	9.08 8.50	6.00 5.75	5.20 5.50	4.56 5.33	4.70 4.58	4.45 5.60	3.50 ND	
34 Dempster Street, North Branch Chicago River	1.88	5.92	5.91	2.55	11.75	6.55	5.25	4.91	6.08	5.67	6.45 4.50	
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	1.82 1.13	4.83 2.89	5.50 2.56	3.73 2.00	6.25 3.11	5.55 3.38	5.27 1.67	5.10 2.56	5.33 3.78	6.33 2.22	3.56	
102 Oakton Street, North Shore Channel 36 Touhy Avenue, North Shore Channel	3.18 1.45	4.09 4.44	4.27 4.58	3.75 2.58	5.33 5.08	3.58 4.92	3.75 4.92	4.10 4.33	5.27 5.08	3.00 3.83	ND 4.50	
101 Foster Avenue, North Shore Channel	0.83	4.50	6.00	1.83	5.33	4.23 4.75	4.75	3.33 3.83	5.50 4.75	3.60 4.92	ND 4.83	
 37 Wilson Avenue, North Branch Chicago River 73 Diversey Parkway, North Branch Chicago River 	0.67 0.00	4.83 3.33	5.08 3.92	3.08 3.25	5.58 4.83	3.50	3.92 3.67	3.83	5.08	5.08	3.75	
46 Grand Ávenue, North Branch Chicago River 74 Lake Shore Drive, Chicago River	$0.92 \\ 0.00$	3.67 0.67	4.33 1.70	4.27 1.55	5.83 4.82	3.92 1.40	4.58 0.33	3.42 0.90	4.50 1.25	4.25 1.42	3.75 4.67	
100 Wells Street, Chicago River	0.00	1.55	2.83	1.45	6.83 6.92	1.42 1.50	0.67 1.92	2.17 3.09	1.25 1.67	3.00 3.33	ND 3.75	
39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River	0.92 2.00	3.73 3.42	3.42 4.36	3.36 3.50	6.83	2.60	2.50	2.92	4.25 2.33	3.89	ND	
99 Archer Avenue, South Fork South Branch Chicago River 40 Damen Avenue, Chicago Sanitary & Ship Canal	3.40 2.25	5.91 4.55	6.75 4.17	2.55 3.42	6.29 8.00	4.36 3.00	4.75 3.00	3.83 3.33	4.25 ND	7.70 ND	ND 4.11	
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND 4.17	ND 3.67	4.50 3.00	4.40 5.00	ND 3.67	
75 Cicero Avenue, Chicago Sanitary & Ship Canal 41 Harlem Avenue, Chicago Sanitary & Ship Canal	1.92 0.89	4.75 4.08	4.75 3.67	4.08 3.67	7.00 5.83	2.50 3.50	1.67	2.50	2.92	3.17	3.58	
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal	0.67 0.58	3.80 4.40	3.25 4.92	3.91 5.36	6.67 7.50	2.09 2.91	1.83 2.17	3.00 3.58	2.42 2.58	3.17 3.42	2.36 3.82	
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND 4.88	ND 3.21	ND 2.94	ND 3.69	ND 3.48	ND 3.57	4.71 3.68	
92 Lockport Forebay, Chicago Sanitary & Ship Canal	1.08	3.82	4.96	3.00	4.00	3.21	2.37	3.07	3.40	5.57	5.00	
Calumet River System 49 Ewing Avenue, Calumet River	0.00	1.00	0.33	1.20	2.09	3.09	0.40	1.25	1.42	1.58	2.00	
50 Burnham Avenue, Wolf Lake	1.27	3.50	2.42	2.91	4.00	2.50	1.58	2.83	1.58 2.67	3.45 4.09	2.08 2.73	
55 130th Street, Calumet River 86 Burnham Avenue, Grand Calumet River	0.00 8.00	1.78 4.40	1.67 12.60	1.90 8.70	2.55 9.18	2.27 20.90	0.45 8.67	1.70 8.20	7.09	5.90	10.00	
 Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River 	1.10 0.40	3.13 3.82	6.00 5.33	3.56 2.27	5.27 4.91	4.67 3.58	3.67 2.00	5.00 2.55	4.58 3.67	5.38 4.25	3.92 2.75	
52 Wentworth Avenue, Little Calumet River	8.82	8.50	6.60	6.82	7.27	7.55	5.89 2.71	5.50 6.67	5.45 2.71	9.55 2.58	9.91 4.83	
54 Joe Orr Road, Thorn Creek 97 170th Street, Thorn Creek	2.44 7.55	4.44 6.67	1.67 4.18	1.70 4.09	2.89 5.82	19.13 7.64	6.45	5.60	4.17	5.90	ND	
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	6.70 3.00	6.56 3.73	4.80 4.75	5.18 3.09	6.18 5.73	9.00 2.58	5.10 3.92	6.30 5.00	4.75 3.58	6.70 5.83	4.91 3.50	
59 Cicero Avenue, Calumet-Sag Channel	2.30	4.20	4.45	3.64	6.55 4.36	3.00 4.55	3.08 4.30	4.91 5.64	4.25 5.50	4.17 6.25	3.25 5.00	
43 Route 83, Calumet-Sag Channel	1.55	3.80	3.70	4.00	4.30	4.55	4.50	3.04	3.50	0.23	5.00	
Des Plaines River System 90 Route 19, Poplar Creek	3.50	3.64	4.73	3.36	6.17	4.91	3.60	6.20	4.78	4.45	6.29	
63 Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	8.00	ND 4.58	4.00 4.75	9.00 6.42	
89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River	5.42 6.67	5.42 7.58	5.75 8.42	3.67 8.33	4.33 8.58	5.58 10.08	5.18 8.09	6.36 8.75	7.33	9.00	10.55	
79 Higgins Road, Salt Creek	8.25 2.58	7.50 4.83	8.78 3.25	9.70 3.17	9.00 5.08	11.11 4.75	8.50 3.55	9.56 3.67	9.38 3.30	9.30 3.75	10.10 3.67	
80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	2.20	5.18	4.25	5.83	6.00	4.50	4.82	5.50	4.10	5.00	5.33	
24 Wolf Road, Salt Creek 109 Brookfield Avenue, Salt Creek	3.90 2.55	4.92 5.64	6.08 6.00	6.91 6.00	9.42 9.25	6.58 5.17	5.20 5.80	8.00 9.80	5.25 3.67	5.50 ND	6.60 ND	
21 First Avenue, Salt Creek	ND 6.00	ND 7.25	ND 9.80	ND 5.20	ND 11.00	ND 9.50	ND 7.60	ND 7.00	5.00 6.83	4.75 6.36	6.80 8.60	
77 Elmhurst Road, Higgins Creek 78 Wille Road, Higgins Creek	1.33	2.92	3.50	3.25	3.17	1.17	3.40	2.50	2.58	2.75	4.00	
12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River	5.14 3.27	6.33 5.42	6.91 6.08	8.67 5.50	7.44 8.33	ND 5.75	ND 6.80	ND 7.58	ND 7.50	ND 6.92	ND 6.50	
17 Oakton Street, Des Plaines River	3.45 3.36	5.45 5.83	7.18 6.58	5.73 6.82	7.58 8.17	6.08 5.83	5.30 5.50	8.70 7.75	7.09 5.75	6.17 5.83	8.80 5.60	
 19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River 	4.00	5.45	6.58	5.36	8.00	7.00	5.40	7.86	6.08	5.75	5.70	
 Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River 	3.33 3.45	6.27 6.45	6.36 6.18	7.09 5.73	8.75 7.75	7.00 6.17	4.70 5.90	11.00 7.00	5.33 6.00	5.92 6.75	6.10 7.80	
29 Stephen Street, Des Plaines River	5.08	7.45	6.17	4.64	8.83	7.75	7.20	8.82	6.58 7.50	9.50 8.98	7.30 8.06	
91 Material Service Road, Des Plaines River 110 Springinsguth Road, West Branch DuPage River	5.17 3.00	7.75 7.22	6.08 9.45	5.64 8.40	7.50 5.91	8.92 13.55	8.00 10.44	9.83 ND	ND	ND	ND	
ND = No Data.												

TABLE AII-64: TOTAL DISSOLVED SOLIDS MEAN HISTORY 2000 THROUGH 2010

				An	nual N	Aeans	(mg/L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND	1870	1828
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	1135 1036	955 833	965 840	1577 1134	807 885	1018 1202	1244 753	595 764	886 721	894 709	NE NE
31 Lake-Cook Road, Middle Fork North Branch	834	637	776	780	724	864	624	666	663	669	747
104 Glenview Road, North Branch Chicago River	770	676	771	747	654	737	689	703	605	608	NI
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River	767 699	615 643	6 99 750	806 677	661 630	836 677	691 596	664 617	643 584	715 589	814 NE
34 Dempster Street, North Branch Chicago River	883	699	735	832	712	860	786	859	658	729	83
96 Albany Avenue, North Branch Chicago River	868	751	883	837	773	917	662	630	700 309	652 220	60
35 Central Street, North Shore Channel 102 Oakton Street, North Shore Channel	248 403	258 394	316 425	254 432	219 364	236 412	239 329	282 339	395	254	350 NI
36 Touhy Avenue, North Shore Channel	527	614	545	641	464	500	496	481	446	534	56
101 Foster Avenue, North Shore Channel	559	591	569	698	479	534	480	460	463	463	NI
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 	676 628	614 676	642 687	741 603	513 507	598 557	551 528	548 551	501 495	600 624	639 639
46 Grand Avenue, North Branch Chicago River	584	575	690	658	538	582	570	597	485	585	57:
74 Lake Shore Drive, Chicago River	309	240	267	359	249	269	295	309	310	398	389
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River	407 522	324 483	428 547	404 530	328 441	364 474	376 450	403 488	360 450	368 548	NI 50:
108 Loomis Street, South Branch Chicago River	580	492	531	573	481	463	448	482	463	401	NI
99 Archer Avenue, South Fork South Branch Chicago River	553	479	576	549	413	461	458	473	462	431	NI
40 Damen Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal	560 ND	485 ND	541 ND	599 ND	463 ND	464 ND	472 ND	471 ND	ND 463	ND 469	533 NE
75 Cicero Avenue, Chicago Sanitary & Ship Canal	533	485	587	630	462	482	496	488	483	502	50
41 Harlem Avenue, Chicago Sanitary & Ship Canal	614	570	608	749	517	520	541	523	495	574	607
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal	629 656	557 531	615 620	594 583	536 565	571 576	588 591	558 586	546 566	624 615	558 610
48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND .	ND	ND	ND	792
92 Lockport Forebay, Chicago Sanitary & Ship Canal	658	588	706	634	568	604	602	595	561	628	665
Calumet River System										•00	
49 Ewing Avenue, Calumet River	224 323	229	221 295	236 289	237 235	217 273	225 269	232 239	261 243	290 258	269 250
50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River	357	297 387	397	388	345	293	332	325	329	374	350
86 Burnham Avenue, Grand Calumet River	556	768	770	728	844	615	768	894	858	782	91
56 Indiana Avenue, Little Calumet River	407 579	421	454 695	457 637	404 577	345 548	388 564	375 536	447 532	385 606	466 685
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River	572	566 560	731	634	656	574	712	800	808	653	780
54 Joe Orr Road, Thorn Creek	1356	1247	1592	1409	1480	1178	1512	937	1594	1218	1110
97 170th Street, Thorn Creek	1020	943	1163 833	9 7 4 795	1066 851	1196 879	1124 854	1277 918	1261 890	822 739	NE 931
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	774 657	708 557	712	588	621	617	608	585	683	641	735
59 Cicero Avenue, Calumet-Sag Channel	598	555	672	602	658	611	646	609	597	636	756
43 Route 83, Calumet-Sag Channel	665	559	651	612	622	610	610	589	595	638	732
Des Plaines River System 90 Route 19, Poplar Creek	799	(5)	807	770	779	750	740	631	692	715	620
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	ND	652 ND	ND	ND	ND	ND	ND	610	ND	858	658
89 Walnut Lane, West Branch DuPage River	633	594	627	631	645	607	635	590	575	626	628
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	912	638	723 980	643	649 773	663	654 903	592 656	627 708	668 862	612 854
79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek	726 820	701 708	957	941 779	778	1034 723	663	659	658	732	738
18 Devon Avenue, Salt Creek	880	657	970	766	792	851	721	694	632	731	743
24 Wolf Road, Salt Creek 109 Brookfield Avenue, Salt Creek	853 827	728 690	895 857	783 761	698 722	794 784	723 772	696 650	750 547	752 ND	784 ND
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	1366	780	765
77 Elmhurst Road, Higgins Creek	1162	703	1161	623	1118	1081	1040	873	922	1092	840
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	758 891	781 690	824 923	780 775	706 790	713 ND	688 ND	666 ND	757 ND	780 ND	721 ND
13 Lake-Cook Road, Des Plaines River	670	549	723	642	709	718	664	677	678	646	675
17 Oakton Street, Des Plaines River	721	549	737	634	751	761	651	620	704	681	633
19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River	726 725	594	812	662	749 744	760 752	707 691	708 605	730	676 676	643 650
 Roosevelt Road, Des Plaines River Ogden Avenue, Des Plaines River 	725 750	584 590	807 783	677 690	723	752 747	691 691	660	743 790	716	679
23 Willow Springs Road, Des Plaines River	739	595	801	719	716	751	675	637	708	690	688
29 Stephen Street, Des Plaines River	727	593	822	705	729	743	648	625	726	689	692
91 Material Service Road, Des Plaines River 10 Springinsguth Road, West Branch DuPage River	739 752	610 763	801 932	694 879	743 1155	770 1047	679 915	662 ND	758 ND	667 ND	759 ND
	104	100	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	017		4071	- 1 -	4 7 4			

TABLE AII-65: PHENOLS MEAN HISTORY 2000 THROUGH 2010

					Anı	nual N	1eans	(μg/L))			
Sam	pling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chic	eago River System											
30	Lake-Cook Road, West Fork North Branch	ND 0.5	ND 0.5	ND 0.0	ND 1.0	ND 0.8	ND 6.8	ND 8.9	ND 9.0	ND 5.5	21.0 18.2	10.0 NI
106 103	Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River	0.6	0.5	0.0	1.7	1.1	9.9	8.7	5.6	7.6	14.1	NI
31	Lake-Cook Road, Middle Fork North Branch	0.0	0.0	0.0	1.5	0.3 0.3	11.4 6.3	11.5 7.6	9.4 4.3	11.6 5.2	16.5 11.4	24.: NI
104 32	Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River	0.0 0.6	0.0 0.0	0.0 0.0	0.0 0.3	0.3	8.0	11.6	7.9	9.1	15.3	19.
105	Frontage Road, Skokie River	0.6	0.4	0.0	1.1	1.2	5.6 8.4	5.7 6.8	3.2 5.5	5.4 7.3	10.3 11.7	NI 18.
34 96	Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River	0.0 0.0	0.0 0.0	$0.0 \\ 0.0$	0.9 0.0	0.3 0.3	8.3	8.9	6.4	6.6	13.1	14.
35	Central Street, North Shore Channel	0.0	0.0	0.0	0.3 1.5	0.3 1.0	4.3 7.1	6.6 7.8	2.8 6.5	4.5 6.0	4.6 7.9	13. N
02 36	Oakton Street, North Shore Channel Touhy Avenue, North Shore Channel	0.0	0.0	0.0 0.0	1.0	0.5	9.1	9.4	7.3	9.0	14.3	22
01	Foster Avenue, North Shore Channel	0.0	0.0	0.0	0.5	1.0	9.8	9.8	6.2 6.5	9.0 8.3	12.2 13.3	N 20
37 73	Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River	0.0 0.0	0.0 0.0	0.0 0.0	1.2 1.1	1.0 1.0	8.5 10.8	8.9 8.4	6.8	8.6	13.8	20
46	Grand Avenue, North Branch Chicago River	0.0	0.0	0.0	0.8	1.3	9.8	10.3	5.3	8.5 2.7	15.0 7.3	21 15
74	Lake Shore Drive, Chicago River Wells Street, Chicago River	0.0 0.0	0.0 0.0	0.0 0.0	0.4 0.6	0.0 0.3	4.3 4.8	4.4 7.6	3.0 3.8	3.8	11.9	N
39	Madison Street, South Branch Chicago River	0.0	0.0	0.0	0.5	0.0	7.6	9.1	7.6	6.7	10.9	23 N
801	Loomis Street, South Branch Chicago River	0.0 0.7	0.0 0.5	0.0 0.0	1.0 0.3	0.5 0.7	7.7 8.7	8.6 9.5	5.5 5.8	7.4 9.5	9.6 17.7	N N
99 40	Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal	0.5	0.0	0.0	0.6	0.7	8.3	8.3	5.6	ND	ND	23
07	Western Avenue, Chicago Sanitary & Ship Canal	ND 0.0	ND 0.0	ND 0.0	ND 1.5	ND 0.9	ND 6.8	ND 7.9	ND 5.0	7. 5 7.7	11.8 11.7	N 17
75 41	Cicero Avenue, Chicago Sanitary & Ship Canal Harlem Avenue, Chicago Sanitary & Ship Canal	0.7	0.0	0.0	0.8	0.5	6.6	8.5	5.6	6.8	14.8	18
42	Route 83, Chicago Sanitary & Ship Canal	0.5	0.0	0.0	0.5 0.0	0.3 0.0	9.5 9.2	9.7 9.0	6.2 6.6	8.7 8.3	13.4 12.8	19 21
48 82	Stephen Street, Chicago Sanitary & Ship Canal Lockport Trebler, Chicago Sanitary & Ship Canal	0.5 ND	0.0 ND	0.0 ND	ND	ND	NĎ	ND	ND	ND	ND	15
92	Lockport Forebay, Chicago Sanitary & Ship Canal	0.2	0.0	0.0	1.2	0.8	8.8	8.6	5.7	7.5	10.9	18
	imet River System			0.0	0.4	0.0	2.0	27	1.6	17	2.2	7
49 50	Ewing Avenue, Calumet River Burnham Avenue, Wolf Lake	0.0 0.0	0.0 0.0	0.0 0.0	0.4 0.0	0.9 0.0	2.0 5.8	2.7 7.4	1.6 3.2	1.7 3.8	3.3 5.0	11
55	130th Street, Calumet River	0.0	0.0	0.0	0.0	0.4	4.9	3.6	1.1	1.8	5.0	10
86	Burnham Avenue, Grand Calumet River	0.7 0.0	1.4 0.0	0.0	2.3 1.0	1.9 0.3	16.1 5.0	11.9 5.6	7.6 2.5	6.1 4.1	8.0 6.0	22 13
56 76	Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River	0.0	0.0	0.0	1.6	0.9	9.9	8.9	7.2	9.4	11.4	24
52	Wentworth Avenue, Little Calumet River	0.0	0.0	0.0	1.3 1.2	0.8 0.0	14.4 13.3	22.4 9.3	12.6 6.0	16.5 9.0	12.5 10.2	21 19
54 97	Joe Orr Road, Thorn Creek 170th Street, Thorn Creek	0.0 0.0	0.0 0.0	$0.0 \\ 0.0$	1.0	0.0	9.0	9.7	6.2 7.5	8.0	7.8	N
57	Ashland Avenue, Little Calumet River	0.6	0.0	0.0	0.4	0.3	10.2	10.9 9.3	7.5 7.8	8.4 8.8	11.9 11.8	19 21
58 59	Ashland Avenue, Calumet-Sag Channel Cicero Avenue, Calumet-Sag Channel	0.5 5.9	0.0 0.0	0.0 0.0	1.1 0.3	0.3 0.5	9.1 10.5	10.3	7.9	9.3	13.5	20
43	Route 83, Calumet-Sag Channel	0.0	0.0	0.0	0.0	0.4	10.0	9.7	5.5	10.2	11.5	19
	Plaines River System			0.0		0.0	10.4	0.6	<i></i>	5.2	10.4	17
90 63	Route 19, Poplar Creek Longmeadow Lane, West Branch DuPage River	0.6 ND	0.0 ND	0.0 ND	1.0 ND	0.0 ND	10.4 ND	8.6 ND	6.5 9.0	5.3 ND	10.4 18.0	20
89	Walnut Lane, West Branch DuPage River	0.0	0.0	0.0	1.0	0.0	9.5	13.3	8.8	7.8	17.1	19 22
64 79	Lake Street, West Branch DuPage River	0.0 0.0	0.0 0.0	0.0 0.0	0.6 1.5	0.3 0.4	8.2 10.6	9.1 8.4	7.9 7.9	6.3 6.1	15.8 13.4	17
80	Higgins Road, Salt Creek Arlington Heights Road, Salt Creek	0.0	0.0	0.0	0.6	0.5	6.0	9.3	5.0	6.6	15.3	18
18 24	Devon Avenue, Salt Creek	0.0 0.6	0.0 0.4	0.0 0.4	1.2 0.6	0.0 1.2	5.5 5.8	10.4 6.7	6.3 6.0	5.1 5.7	16.2 12.4	17 17
09	Wolf Road, Salt Creek Brookfield Avenue, Salt Creek	0.0	0.0	0.0	0.5	0.9	8.6	7.6	5.4	5.7	ND	N
21 77	First Avenue, Salt Creek	ND	ND	ND	ND	ND 1.9	ND 11.3	ND 13.0	ND 12.2	4.7 5.8	11.9 14.9	20 28
78	Elmhurst Road, Higgins Creek Wille Road, Higgins Creek	0.0 0.6	0.0 0.0	0.0 0.4	0.0 1.6	1.0	8.1	15.5	8.8	11.3	19.0	26
12	Wille Road, Higgins Creek Lake-Cook Road, Buffalo Creek	0.0	0.0	0.0	0.3	0.9	ND 6.2	ND	ND 4.4	ND 4.6	ND 11.4	N 18
13 17	Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River	0.5 0.0	0.0 0.0	0.5 0.0	0.7 1.1	0.0 0.3	6.8	7.6 7.9	5.0	6.4	11.5	19
19	Belmont Avenue, Des Plaines River	0.0	0.0	0.0	0.6	1.3	6.5	9.5 9.7	5.8	5.3 5.3	11.8 11.3	20 19
20 22	Roosevelt Road, Des Plaines River Ogden Avenue, Des Plaines River	0.0 0.0	0.0 0.0	0.5 0.0	0.5 0.6	0.6 0.7	8.4 7.6	9.7 8.8	6.0 7.6	5.0 5.0	12.5	19
23	Willow Springs Road, Des Plaines River	0.0	0.0	0.6	0.7	2.1	7.6	8.7	4.5	5.6	11.5	16
29	Stephen Street, Des Plaines River	0.4 0.0	0.0	0.4 0.0	0.3 0.3	0.9 1.3	6.1 10.5	8.4 7.5	5.3 5.5	5.2 5.1	14.8 9.9	16 18
91 10	Material Service Road, Des Plaines River Springinsguth Road, West Branch DuPage River	0.0	0.0	0.0	1.2	1.3	15.7	18.0	ND	ND	NĎ	N

TABLE AII-66: TOTAL NONYLPHENOLS MEAN HISTORY 2000 THROUGH 2010

	Annual Means (μg/L)											
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00	
Chicago River System												
30 Lake-Cook Road, West Fork North Branch 06 Dundee Road, West Fork North Branch Chicago River	ND ND	ND ND	ND	ND	ND	ND	ND ND	ND	ND	ND	ND	
03 Golf Road, West Fork North Branch Chicago River	ND	ND	ND ND	ND ND	ND ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND	
31 Lake-Cook Road, Middle Fork North Branch 04 Glenview Road, North Branch Chicago River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	
32 Lake-Cook Road, Skokie River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
 Frontage Road, Skokie River Dempster Street, North Branch Chicago River 	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	
96 Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
35 Central Street, North Shore Channel 02 Oakton Street, North Shore Channel	ND 0.00	ND 0.00	0.00	ND ND								
Touhy Avenue, North Shore Channel Foster Avenue, North Shore Channel	0.00	0.00	0.00	ND								
37 Wilson Avenue, North Branch Chicago River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	
73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River	ND 0.00	ND 0.00	ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND	ND	ND ND	
74 Lake Shore Drive, Chicago River	ND	ND	0.00 ND	ND	ND ND	ND	ND	ND	ND	ND ND	ND	
00 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	
08 Loomis Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
99 Archer Avenue, South Fork South Branch Chicago River 40 Damen Avenue, Chicago Sanitary & Ship Canal	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	
07 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
75 Cicero Avenue, Chicago Sanitary & Ship Canal 41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.00	0.00	0.65 0.67	ND ND								
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal	0.00 ND	0.00 ND	0.35 ND	ND ND								
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.00	0.00	0.22	ND								
Calumet River System												
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	ND ND	ND ND	ND ND	ND ND	ND ND	ND 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	
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River	ND 0.00	ND 0.00	ND 0.60	ND ND								
76 Halsted Street, Little Calumet River	0.00	0.00	0.00	ND								
52 Wentworth Avenue, Little Calumet River 54 Joe Orr Road, Thorn Creek	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	
97 170th Street, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
58 Ashland Avenue, Calumet-Sag Channel	ND ND	0.00 ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	
59 Cicero Avenue, Calumet-Sag Channel	0.00 ND	0.00	0.00	ND ND	ND ND	ND ND	ND ND	ND ND	ND	ND	ND	
es Plaines River System	שאו	ND	ND	עא	עמ	מא	ND	ND	ND	ND	ND	
PO Route 19, Poplar Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
63 Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
 Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River 	0.00 0.00	0.00	0.00	ND ND								
79 Higgins Road, Salt Creek	0.00	0.00	0.00	ND								
30 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	0.00 ND	0.00 ND	0.00 ND	ND ND								
Wolf Road, Salt Creek Brookfield Avenue, Salt Creek	0.00	0.00	0.00	ND								
21 First Avenue, Salt Creek	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	
77 Elmhurst Road, Higgins Creek 78 Wille Road, Higgins Creek	0.00	0.00	0.00	ND								
2 Lake-Cook Road, Buffalo Creek	0.00 ND	0.00 ND	0.25 ND	ND ND								
 Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River 	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND	ND	ND ND	
9 Belmont Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND ND	ND ND	ND	
20 Roosevelt Road, Des Plaines River 22 Ogden Avenue, Des Plaines River	ND 0.00	ND 0.00	ND 0.00	ND								
23 Willow Springs Road, Des Plaines River	ND	ND	ND	ND ND								
9 Stephen Street, Des Plaines River Material Service Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
O Springinsguth Road, West Branch DuPage River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	

TABLE AII-67: SULFATE MEAN HISTORY 2000 THROUGH 2010

				Ar	nual I	Means	(mg/I	<u>.</u>)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River	ND 49.2	ND 47.4	ND 52.9	ND 46.6	ND 53.3	ND 63.0	ND 76.5	ND 64.3	ND 61.8	74.5 67.2	77.0 ND
103 Golf Road, West Fork North Branch Chicago River	58.0	56.2	63.1	68.9	77.9	75.4	75.3	76.4	64.5	61.8	ND
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	46.7 54.4	45.1 53.0	52.7 62.7	57.1 60.3	68.0 66.8	86.3 65.1	76.3 69.8	76.4 67.8	72.3 64.1	69.0 64.8	72.0 ND
32 Lake-Cook Road, Skokie River	50.9	51.0	60.0	53.3	61.6	65.4	76.6	80.4	62.3	70.4 62.3	74.4
 Frontage Road, Skokie River Dempster Street, North Branch Chicago River 	54.2 54.6	55.0 51.9	62.0 60.6	52.7 60.3	67.8 71.5	63.4 68.6	67.4 72.4	64.9 71.6	64.8 61.9	63.2	76.1
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	53.0 25.3	54.3 27.2	63.6 34.6	59.7 30.4	73.1 28.7	68.3 26.8	72.3 33.8	74.0 36.6	69.0 34.9	65.8 25.6	59.1 32.5
102 Oakton Street, North Shore Channel	36.7	38.0	44.1	39.9	43.8	40.9	41.7	43.0	43.3	28.2	ND
36 Touhy Avenue, North Shore Channel 101 Foster Avenue, North Shore Channel	41.9 43.2	47.9 46.8	52.1 52.9	49.1 50.6	50.8 51.3	46.6 59.6	51.7 56.8	53.4 53.2	53.3 50.6	79.8 49.0	53.8 NE
73 Wilson Avenue, North Branch Chicago River 73 Diversey Parkway, North Branch Chicago River	47.3	46.7	54.8	54.1	58.0	50.8	59.9	57.3	57.1	57.3	53.8
73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River	47.3 44.2	47.9 45.8	56.1 54.9	52.3 53.6	55.8 57.4	50.9 54.1	62.2 60.6	59.0 58.9	55.6 56.3	58.2 56.3	55.8 55.4
74 Lake Shore Drive, Chicago River	25.8	26.3	30.0	31.7	36.6	29.7	36.8	35.6	32.0	32.0	39.3
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River	31.2 39.8	32.0 42.1	40.9 47.8	36.8 44.9	39.1 49.6	35.4 47.6	40.5 51.8	44.3 54.8	36.6 49.1	36.0 45.8	NE 50.4
108 Loomis Street, South Branch Chicago River	41.4	43.9	52.2	47.2	52.2	49.8	55.2	53.2	49.3	43.3 51.8	ND
 Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal 	44.0 41.2	41.8 43.1	55.1 49.2	46.1 46.3	51.1 52.0	56.0 49.5	52.8 53.0	55.1 53.1	51.6 ND	ND	ND 51.9
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND 41.9	ND	ND 48.5	ND 51.9	ND 50.1	ND 55.4	ND 52.5	49.6 54.3	43.9 46.8	ND 51.6
75 Cicero Avenue, Chicago Sanitary & Ship Canal 41 Harlem Avenue, Chicago Sanitary & Ship Canal	43.0 61.0	56.2	53.6 69.4	67.3	72,1	70.7	76.4	72.9	69.5	63.6	72.3
42 Route 83, Chicago Sanitary & Ship Canal	65.0 75.5	60.9 65.8	67.5 78.7	72.8 83.8	75.1 89.6	74.2 85.6	80.8 91.7	82.5 94.6	78.5 88.1	67.1 88.9	70.8 92.3
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND										
92 Lockport Forebay, Chicago Sanitary & Ship Canal	82.5	76.2	86.0	85.7	86.9	88.1	89.8	96.7	88.7	91.1	96.2
Calumet River System	24.5	26.6	20.2	22.1	29.9	27.0	28.3	29.2	28.4	28.3	29.8
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	24.5 41.4	26.6 47.5	30.2 47.8	32.1 42.6	39.4	41.0	43.5	35.2	36.6	38.9	38.6
55 130th Street, Calumet River 86 Burnham Avenue, Grand Calumet River	52.7 96.1	61.9 145.6	63.2 162.3	82.7 196.1	60.7 262.4	55.2 176.9	57.2 204.9	54.2 260.1	54.7 219.9	63.3 184.3	49.8 177.2
56 Indiana Avenue, Little Calumet River	61.2	64.4	72.4	90.1	74.7	64.1	70.4	74.3	78.9	73.4	77.8
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River	75.2 96.3	76.4 98.1	97.7 134.9	87.7 118.4	91.0 130.0	91.3 116.2	91.6 143.9	100.7 180.2	91.2 146.0	113.3 122.5	143.1 145.1
54 Joe Orr Road, Thorn Creek	509.8	506.7	716.6	596.3	620.0	494.6	620.8	460.4	724.5	521.3	342.4
97 170th Street, Thorn Creek 57 Ashland Avenue, Little Calumet River	318.3 182.2	298.3 166.0	422.5 270.8	352.0 223.0	419.3 241.5	465.3 289.4	403.1 235.0	498.3 293.1	445.9 241.9	255.8 161.0	ND 190.1
58 Ashland Avenue, Calumet-Sag Channel	138.1	88.7	107.4	91.4	107.7 123.1	118.2 120.4	116.5	142.4	146.2	110.3	163.6
59 Cicero Avenue, Calumet-Sag Channel 43 Route 83, Calumet-Sag Channel	96.1 103.5	99.3 93.7	134.4 113.0	94.2 104.5	117.1	130.0	128.6 122.7	136.4 128.4	118.2 109.3	124.3 116.6	151.8 144.1
Des Plaines River System											
90 Route 19, Poplar Creek	41.6	42.0 ND	52.7 ND	53.9 ND	71.5 ND	54.6 ND	66.7 ND	46.9 60.2	62.8 ND	63.0 83.5	60.4 71.7
63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River	ND 57.7	60.0	70.8	65.7	81.8	68.1	77.2	68.1	65.4	73.5	69.3
64 Lake Street, West Branch DuPage River	59.1	61.0	68.0	65.3 62.5	81.9 81.7	71.4 79.4	78.0 93.3	68.1 72.8	68.0 76.0	77.8 89.5	68.5 79.5
79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek	46.3 68.0	62.4 62.5	71.1 75.1	76.8	85.0	82.9	84.9	77.7	79.3	84.4	73.9
18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek	72.1 75.7	61.6 77.3	75.0 82.8	75.7 84.6	84.5 87.0	83.2 92.2	84.6 96.7	76.4 84.1	79.5 95.0	82.4 98.7	74.0 89.4
109 Brookfield Avenue, Salt Creek	72.5	71.7	79.2	79.9	85.2	88.4	97.9	82.4	84.5	ND	ND
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	ND 39.4	ND 36.3	ND 48.7	ND 37.5	ND 47.1	ND 46.7	ND 66.3	ND 44.8	95.8 47.8	94.2 60.9	86.2 47.0
78 Wille Road, Higgins Creek	77.7	81.7	90.0	91.0	91.7	103.6	100.2	90.4	97.1	107.8	94.5
12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River	76.8 58.7	69.5 49.4	87.6 72.3	70.8 75.7	111.5 97.0	ND 84.7	ND 88.9	ND 91.6	ND 84.9	ND 76.8	ND 81.0
17 Oakton Street, Des Plaines River	59.7	52.0	69.8	69.8	92.5	112.2	89.9	88.4	86.3	85.8	75.5
19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River	61.5 61.3	57.5 54.4	75.3 75.5	70.6 70.5	90.7 89.7	88.0 100.1	91.2 90.6	85.4 85.7	85.6 87.4	79.5 80.5	78.1 78.5
22 Ogden Avenue, Des Plaines River	63.6	56.9	74.7	68.8	90.9	85.1	87.9	89.1	87.5	98.9	79.2
 Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River 	65.2 65.0	58.0 57.3	77.7 76.7	73.1 76.9	88.2 91.1	89.3 90.5	92.8 91.4	92.2 95.6	90.0 90.6	83.8 82.9	85.5 83.4
91 Material Service Road, Des Plaines River	66.8	61.0	75.8 77.9	74.9	93.7 112.4	105.3 80.5	94.3 98.7	97.5 ND	95.8 ND	81.2 ND	89.1 ND
110 Springinsguth Road, West Branch DuPage River	48.0	64.2									

TABLE AII-68: FATS, OILS, AND GREASES MEAN HISTORY 2000 THROUGH 2010

				An	nual N	Aeans	(mg/L	.)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River Lake-Cook Road, Skokie River Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River Central Street, North Shore Channel Coukton Street, North Shore Channel Touhy Avenue, North Shore Channel Wilson Avenue, North Shore Channel Diversey Parkway, North Branch Chicago River Diversey Parkway, North Branch Chicago River Lake Shore Drive, Chicago River Wells Street, Chicago River Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River Loomis Street, South Branch Chicago River Damen Avenue, South Fork South Branch Chicago River Cicero Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal	ND NDD NDD NDD NDD NDD NDD NDD NDD NDD	ND NDD NDD NDD NDD NDD NDD NDD NDD NDD	ND NDD NDD NDD NDD NDD NDD NDD NDD NDD	ND ND ND ND ND ND ND 0.30 0.33 0.67 ND 0.27 0.00 0.67 ND 0.27 0.00 0.67 ND 0.25 0.00 0.55 0.00	ND ND ND ND ND ND ND 0.42 0.27 0.67 0.42 ND 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	ND ND ND ND ND ND 0.00 2.14 2.02 2.45 0.86 1.85 ND 0.68 0.80 0.73 ND 0.65 0.73 ND 0.65 0.93 1.14	ND NDD NDD NDD NDD NDD NDD NDD 2.437 1.94 1.833 2.97 NDD 1.93 1.647 2.03 ND 1.59 2.649 ND 1.95	ND ND ND ND ND ND ND ND ND 4.47 2.73 3.38 2.59 ND 3.56 2.87 2.16 ND 2.73 2.06 2.73 2.06 2.73 2.06 2.73 2.06 2.73 2.73 2.73 2.73 2.74 2.74 2.75 2.76 2.76 2.76 2.76 2.76 2.76 2.76 2.76	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND ND ND ND ND ND ND ND 4.79 3.86 4.59 4.79 4.03 ND 4.09 5.79 3.80 5.79 3.92	
Calumet River System 49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River 66 Burnham Avenue, Grand Calumet River 67 Indiana Avenue, Little Calumet River 68 Halsted Street, Little Calumet River 69 User Noad, Thorn Creek 69 170th Street, Thorn Creek 69 Ashland Avenue, Little Calumet River 69 Ashland Avenue, Calumet-Sag Channel 69 Cicero Avenue, Calumet-Sag Channel 69 Route 83, Calumet-Sag Channel	ND ND 0.00 0.00 ND ND ND ND 0.00 0.00 0.	ND ND 0.00 0.00 0.00 ND ND ND ND 0.00 0.00	ND ND 0.50 0.56 0.42 ND ND ND ND 0.42 0.45 0.50	ND ND 0.60 0.00 0.00 ND ND ND ND 0.00 0.00 0.00	ND ND 1.00 1.18 1.18 ND ND ND ND 0.73 0.55 0.73	ND ND 1.77 0.00 0.43 ND ND ND ND 0.58 0.78	ND ND 1.46 1.41 1.28 ND ND ND 1.98 1.78 2.29	ND ND 6.40 3.66 2.91 ND ND ND 3.36 2.58 3.41	ND ND 5.76 4.87 4.39 ND ND ND ND 5.33 4.45 4.38	ND ND 3.17 3.39 4.54 ND ND ND 4.20 3.92 4.33	
Des Plaines River System Toute 19, Poplar Creek	555555555555555555555555555555555555555		255555555555555555555555555555555555555	555555555555555555555555555555555555555	555555555555555555555555555555555555555		255555555555555555555555555555555555555			255555555555555555555555555555555555555	255555555555555555555555555555555555555

TABLE AII-69: TOTAL PHOSPHORUS MEAN HISTORY 2000 THROUGH 2010

	Annual Means (mg/L)										
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River	ND 1.366	ND 1.260	ND 1.198	ND 1.038	ND 0.964	ND 1.508	ND 2.120	ND 1.620	ND 0.963	0.545 1.102	2.200 NE
103 Golf Road, West Fork North Branch Chicago River	0.523	0.397	0.422	0.669	0.572 0.158	0.834		0.614		0.663 0.143	NE 0.185
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River		0.016 0.659	0.136 0.643	0.183 1.028	0.936	1.413	1.014	1.033	1.256	0.844	NE
32 Lake-Cook Road, Skokie River		0.019 0.883	0.058 0.815	0.175	0.599 1.174	0.863 1.538	0.237 1.223	0.331 1.708	0.187 1.477	0.150 0.932	0.224 NE
105 Frontage Road, Skokie River 34 Dempster Street, North Branch Chicago River		0.550		0.879	0.840	1.199	0.925	1.269	1.153	0.624	1.147
96 Albany Avenue, North Branch Chicago River		0.538 0.077	0.507	0.808 0.062	0.760 0.056	1.155 0.016	0.795	1.002 0.213	1.037	0.718 0.058	0.183
35 Central Street, North Shore Channel 102 Oakton Street, North Shore Channel	0.530	0.442	0.432	0.538	0.632	0.444	0.489	0.548	0.655	0.221	NI
36 Touhy Avenue, North Shore Channel		1.054 1.113	1.040 1.082	1.388 1.450	1.033 1.384	1.241	1,170 1,328	1.377 1.287	1.057	1.259 1.406	1.21 NI
101 Foster Avenue, North Shore Channel 37 Wilson Avenue, North Branch Chicago River	1.024	1.031	0.961	1.287	1.191	1.130	1.227	1.143	1.043	1.198	1.30
73 Diversey Parkway, North Branch Chicago River		0.931 0.836	0.897 0.788	1.112	0.986 1.004	0.870 1.121	1.065 0.923	1.055	0.905	0.889	1.102
 46 Grand Avenue, North Branch Chicago River 74 Lake Shore Drive, Chicago River 	0.153	0.003	0.053	0.152	0.125	0.158	0.228	0.226	0.191	0.291	0.373
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River		0.150 0.669		0.308	0.309 0.661	0.355 0.830	0.443		0.429 0.756	0.387	NI 1.130
108 Loomis Street, South Branch Chicago River	0.657	0.574	0.591	0.678	0.723	0.722	0.860	0.775	0.732	0.573	NI
 Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal 	0.682 0.670	0.485	0.580	0.609 0.686	0.590 0.702	0.767 0.755	0.804 0.843	0.857 0.884	0.719 ND	0.610 ND	NE 1.040
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	0.738	0.609	NI
75 Cicero Avenue, Chicago Sanitary & Ship Canal 41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.681	0.493 0.673	0.637 0.829	0.763	0.661 0.825	0.746 0.988	0.803 0.953	0.867 1.100	0.723 0.984	0.671 0.990	
42 Route 83, Chicago Sanitary & Ship Canal	0.837	0.609	0.862	0.830	0.602	0.725	0.978		0.918 1.180	0.760	
48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal	1.008 ND	0.823 ND	0.928 ND	0.964 ND	0.901 ND	1.168 ND	1.103 ND	1.083 ND	ND	1.096 ND	1.355
92 Lockport Forebay, Chicago Sanitary & Ship Canal	1.121	0.864	0.952	0.852	0.935	1.166	1.014	1.138	1.197	1.032	1.414
Calumet River System	0.010	0.000	0.000	0.011	0.044	0.025	0.060	0.022	0.060	0.001	0.131
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	0.018	0.000		0.011		0.023		0.032		0.070	
55 130th Street, Calumet River	0.000	0.004	0.000	0.031	0.038	0.025		0.035			
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River		0.290	0.835 0.340	1.209 0.189	0.699	0.878 0.372		0.607 0.504		0.666 0.554	
76 Halsted Street, Little Calumet River	2.010	1.493	2.035	1.037	1.835	2.083	1.638 0.543		2.038 0.595	1.386 0.495	3.193 0.752
52 Wentworth Avenue, Little Calumet River 54 Joe Orr Road, Thorn Creek		0.493 1.743	0.587 2.664	0.585 2.329	0.645 2.038			1.650		5.645	5.208
97 170th Street, Thorn Creek	0.920	1.144	1.383	1.479	1.170			2.101	2.607 1.481	2.296 1.537	NI 2.170
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	1.578	0.519	0.993 1.957	0.834 0.963	0.764 1.755	1.061 2.077	0.812 1.562	1.223 1.898	2.070	1.442	3.038
59 Cicero Avenue, Calumet-Sag Channel	1.917	1.258	1.803	0.989	1.802 1.318	2.214		2.048	2.129	1.511	3.119
43 Route 83, Calumet-Sag Channel	1.824	1.329	1.378	1.037	1.316	2.200	1.403	1.000	1.017	1.017	2.072
Des Plaines River System	0.007	0.012	0.000	0.100	0.116	0.087	0.075	0.108	0.066	0.060	0 181
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	0.097 ND	0.012 ND	ND	0.100 ND	ND	ND	ND	0.140	ND	0.225	0.184
89 Walnut Lane, West Branch DuPage River	2.310	2.340	2.426 2.119	2.460 2.062	2.270 1.911	2.670	2.745 2.400	2.440	2.603 2.245	2.428 2.030	2.109 1.649
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	1.148 0.120	0.253	0.000	0.132	0.149			0.106	0.109	0.106	
80 Arlington Heights Road, Salt Creek		1.588		0.513	1.791 1.882	2.022	1.850	1.980	1.992 1.955	1.687 1.810	1.688
18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek		1.563		0.548 0.839	1.471	1.981 1.896	1.899 1.595	1.584	1.773	1.227	1.407
109 Brookfield Avenue, Salt Creek	1.041	0.944	0.733	0.765	1.355	1.603	1.317 ND	1.328	1.943	ND 1.073	NE 1 239
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	0.000	ND 0.035	0.000	ND 0.112	ND 0.123	ND 0.098	0.108	0.290	0.117	0.112	0.184
78 Wille Road, Higgins Creek	1.018	0.936	1.176	0.813	0.663 0.122	1.577 ND	0.662 ND	0.478 ND	0.864 ND	0.508 ND	0.578 ND
12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River	0.773	0.012 0.566	0.000	0.167 0.934	1.075	1.498	0.985	1.333	1.268	0.826	0.984
17 Oakton Street, Des Plaines River	0.802	0.502	0.765	0.772	0.873	1.256	0.889	1.333 0.958	1.033	0.691 0.590	0.705
19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River		0.532 0.475	0.743	0.738 0.700	0.816 0.700	1.107 1.069	0.688 0.631	0.891	0.875	0.546	0.583
22 Ogden Avenue, Des Plaines River	0.787	0.631	0.656	0.697	0.923	1.224	0.811	1.272	1.095	0.658	0.732
Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River	0.708	0.535 0.535	0.641 0.699	0.647 0.715	0.930	1.201	0.796 0.834	1.077	0.998	0.618 0.672	0.742
91 Material Service Road, Des Plaines River	0.678	0.552	0.680	0.733	0.915	1.263	0.778	1.104		0.679 ND	
110 Springinsguth Road, West Branch DuPage River	0.190	0.093	0.111	0.1/9	0.184	0.523	0.203	ND	ND	עויו	INL

TABLE AII-70: SOLUBLE PHOSPHORUS MEAN HISTORY 2000 THROUGH 2010

				An	nual N	/leans	(mg/L	.)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.340	1.610
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	0.910 0.448	ND ND
31 Lake-Cook Road, Middle Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.028	0.082
32 Lake-Cook Road, Skokie River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	0.530 0.026	0.111
105 Frontage Road, Skokie River 34 Dempster Street, North Branch Chicago River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	0.633 0.418	ND
96 Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.525	1.103
35 Central Street, North Shore Channel 102 Oakton Street, North Shore Channel	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND		0.053	0.044 ND
36 Touhy Avenue, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.928	0.989
101 Foster Avenue, North Shore Channel 37 Wilson Avenue, North Branch Chicago River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	1.168 0.830	ND 0.904
73 Diversey Parkway, North Branch Chicago River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	0.707	0.814 0.865
74 Lake Shore Drive, Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.390	0.270
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND		0.500 0.594	ND 0.730
108 Loomis Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.555	ND
 99 Archer Avenue, South Fork South Branch Chicago River 40 Damen Avenue, Chicago Sanitary & Ship Canal 	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	0.490 ND	ND 0.703
107 Western Avenue, Chicago Sanitary & Ship Canal 75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND		0.537 0.646	ND 0.672
41 Harlem Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.618	0.834
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND		0.646	
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.846	1.130
Calumet River System) III	\m).TD	NTD	NTO	NTD	MD	NID	NTD	0.046	0.052
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	0.046 0.032	
55 130th Street, Calumet River 86 Burnham Avenue, Grand Calumet River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND		0.013	0.045
56 Indiana Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.090	0.277
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND		1.372 0.240	2.923 0.384
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.608	4.875
97 170th Street, Thorn Creek 57 Ashland Avenue, Little Calumet River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND		1.620 0.915	
58 Ashland Avenue, Calumet-Sag Channel 59 Cicero Avenue, Calumet-Sag Channel	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND		1.300	2.720 2.794
43 Route 83, Calumet-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND		1.046	
Des Plaines River System											
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND		0.020 0.137	
89 Walnut Lane, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.970	1.910
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND		1.772 0.000	1.383
80 Arlington Heights Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.265	1.488
18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	1.287 0.987	1.447 1.094
109 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek	ND ND	ND ND	ND ND	ND ND	ND ND	ND	ND ND	ND ND	ND	ND 0.937	ND 0.045
77 Elmhurst Road, Higgins Creek	ND	ND	ND	ND	ND	ND ND	ND	ND	ND	0.026	0.044
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	0.265 ND	0.385 ND
13 Lake-Cook Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.412	0.716
17 Oakton Street, Des Plaines River 19 Belmont Avenue, Des Plaines River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	0.352 0.315	0.480 0.420
20 Roosevelt Road, Des Plaines River 22 Ogden Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.313	0.416
23 Willow Springs Road, Des Plaines River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND	0.443 0.443	0.544
29 Stephen Street, Des Plaines River 91 Material Service Road, Des Plaines River	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND	0.488 0.380	0.575
110 Springinsguth Road, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ND = No Data.											

TABLE AII-71: TOTAL CYANIDE MEAN HISTORY 2000 THROUGH 2010

	· · · · · · · · · · · · · · · · · · ·		Annual Means (mg/L)											
Sam	npling Station	(No. Name)	10	09	08	07	06	05	04	03	02	01	00	
Chi	cago River Sys	stem												
30	Lake-Cook Road	West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND			
106 103	Golf Road, West	Yest Fork North Branch Chicago River Fork North Branch Chicago River	0.003	0.002	0.000			0.005	0.005	0.002	0.003	0.005	ND ND	
31 104	Lake-Cook Road	I, Middle Fork North Branch	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.001		0.001	0.002 ND	
32	Lake-Cook Road		0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.002	0.002	0.003	
105 34	Frontage Road, S	Skokie River North Branch Chicago River		0.000		0.001		0.002	0.002	0.002	0.002		ND 0.006	
96	Albany Avenue,	North Branch Chicago River	0.001	0.000	0.000	0.001	0.001	0.002	0.003	0.002	0.002	0.004	0.005	
35 102		orth Shore Channel orth Shore Channel		0.000				0.000	0.001	0.001	0.000	0.001	0.002 ND	
36	Touhy Avenue, N	North Shore Channel	0.001	0.001	0.000	0.002	0.001	0.002	0.004	0.003	0.004	0.006	0.006	
101 37	Wilson Avenue, I	Vorth Shore Channel North Branch Chicago River		0.001	0.000	0.003 0.002		0.003	0.003	0.003	0.004	0.005	ND 0.006	
37 73	Diversey Parkwa	y, North Branch Chicago River	0.001	0.001	0.000			0.003	0.003 0.004	0.003	0.003 0.004		0.012	
46 74	Lake Shore Drive	lorth Branch Chicago River e, Chicago River	0.000	$0.000 \\ 0.000$	0.000		0.000	0.001	0.001	0.000	0.001	0.002	0.003	
100 39	Wells Street, Chi	cago River South Branch Chicago River	0.001			0.000		0.000	0.002		0.002		ND 0.005	
108	Loomis Street, S	outh Branch Chicago River	0.001	0.000	0.000	0.001	0.001	0.002	0.003	0.003	0.003	0.003	ND	
99 40		South Fork South Branch Chicago River Chicago Sanitary & Ship Canal	0.001	0.000	0.000		0.001	0.002 0.002	0.002	0.003	0.003 ND	0.005 ND	ND 0.005	
107	Western Avenue,	Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	0.003	0.004	ND	
75 41	Harlem Avenue,	Chicago Sanitary & Ship Canal Chicago Sanitary & Ship Canal	0.000	0.001	0.000	0.001	0.001	0.002	0.003	0.003	0.003	0.004	0.004 0.007	
42	Route 83, Chicag	go Sanitary & Ship Canal	0.001	0.000	0.000	0.002	0.002	0.004	0.003 0.004	0.004 0.003		0.006 0.007	0.007 0.007	
48 82	Lockport Trebler	Chicago Sanitary & Ship Canal , Chicago Sanitary & Ship Canal	0.002 ND	0,001 ND	0.000 ND	ND	0.003 ND	0.004 ND	ND	ND	ND	ND	ND	
92		y, Chicago Sanitary & Ship Canal	0.001	0.000	0.000	0.002	0.003	0.003	0.004	0.003	0.005	0.006	0.007	
	umet River Sys		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.001	
49 50	Ewing Avenue, C Burnham Avenue		0.000	0.000	0.000		0.000		0.000	0.001	0.001	0.002	$0.001 \\ 0.001$	
55	130th Street, Cal	umet River			0.000				0.001 0.005		0.001		0.001	
86 56		e, Grand Calumet River Little Calumet River	0.002	0.000	0.002	0.004 0.001	0.000	0.001	0.001	0.001	0.002	0.002	0.003	
76 52		ittle Calumet River ue, Little Calumet River	$0.001 \\ 0.001$	0.000	0.000	0.002	0.002	0.003	0.003	0.003	0.00 5 0.00 6	0.007	0.010	
54	Joe Orr Road, Th	orn Creek	0.002	0.001	0.000	0.002	0.002	0.003	0.004	0.003	0.006	0.005	0.008	
97 57	170th Street, Tho	om Creek Little Calumet River	0.001	0.000	0.000	0.001		0.002	0.002	0.002	0.004	0.004	0.008	
58	Ashland Avenue	Calumet-Sag Channel	0.002	0.001	0.000	0.002	0.002	0.003	0.004	0.003	0.005	0.007	0.009	
59 43	Route 83, Calum	Calumet-Sag Channel et-Sag Channel	0.001	0.000	0.000		0.002	0.003	0.003	0.003	0.005	0.006	0.008	
Des	Plaines River	_												
90	Route 19, Poplar	Creek	0.001		0.000		0.000			0.001		0.002		
63 89	Longmeadow La Walnut Lane We	ne, West Branch DuPage River est Branch DuPage River	ND 0.003	0.001	ND 0.001	ND 0.005	ND 0.004	ND 0.004	0.006	0.002	ND 0.007	0.004 0.010	0.002	
64	Lake Street, West	t Branch DuPage River	0.003	0.000	0.000	0.003	0.002	0.004	0.004	0.004	0.005	0.008	0.007	
7 9 80	Higgins Road, Sa	alt Creek is Road, Salt Creek	0.001	0.000	0.000		0.000		~ ~ ~ .	0.002			0.002	
18	Devon Avenue, S	Salt Creek	0.003	0.001	0.000	0.002	0.001	0.003	0.004	0.003	0.005	0.008	0.006	
24 109	Wolf Road, Salt C Brookfield Avenu			0.000 0.000	0.000 0.000		0.000 0.001		0.003	0.003		0.006 ND	ND	
21 77	First Avenue, Sal Elmhurst Road, F	t Creek	ND	ND	ND	ND	ND	ND	ND	ND	0.006			
78	Wille Road, Higg Lake-Cook Road	gins Creek		0.000	0.000	0.004	0.003 0.002		0.004	0.003 0.004			0.004	
12 13		, Buffalo Creek , Des Plaines River	0.001	0.000	0.000		0.000	ND	ND 0.001	ND 0.002	ND 0.003	ND 0.006	ND 0.005	
17	Oakton Street, De	es Plaines River	0.000	0.000	0.002	0.001	0.001	0.005	0.002	0.002	0.003	0.005	0.004	
19 20	Roosevelt Road	, Des Plaines River Des Plaines Ríver		0.000		0.002 0.002		0.009		0.003			0.004 0.004	
22	Ogden Avenue, D	Des Plaines River	0.001	0.000	0.002	0.002	0.001	0.003	0.002	0.003	0.003	0.005	0.003	
23 29	Willow Springs R Stephen Street, D	Road, Des Plaines River les Plaines River		0.000		0.002 0.001	0.000	0.002	0.002	0.002 0.002	0.003			
91	Material Service	Road, Des Plaines River	0.000	0.000	0.000	0.001	0.000	0.001	0.002	0.002	0.004	0.004	0.005	
110		ad, West Branch DuPage River	0.000	0.001	0.002	0.002	0.002	0.003	0.003	ND	ND	ND	ND	
ND =	No Data.													

TABLE AII-72: WEAK ACID DISSOCIABLE CYANIDE MEAN HISTORY 2000 THROUGH 2010

					A	nnual l	Means	(mg/l	L)			
Samp	pling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chica	ago River System											
30	Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND		0.000	0.001 NE
103	Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River		0.000	0.000	0.001	$0.001 \\ 0.001$	$0.002 \\ 0.001$	0.001 0.001	$0.001 \\ 0.001$	0.001	0.001	NI
31	Lake-Cook Road, Middle Fork North Branch		0.000				0.001	0.001	0.001	0.000	0.000	0.000 NE
32	Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.00
	Frontage Road, Skokie River Dempster Street, North Branch Chicago River		0.000			0.001	0.001	0.001	0.001		0.000	0.000
96	Albany Avenue, North Branch Chicago River	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.00
	Central Street, North Shore Channel Oakton Street, North Shore Channel		0.000				0.000	0.001	0.000		0.000	0.00 NI
36	Touhy Avenue, North Shore Channel	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.00
	Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River		0.000			0.001	0.001	0.001	0.001	0.001		0.00
73	Diversey Parkway, North Branch Chicago River	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.00
	Grand Avenue, North Branch Chicago River Lake Shore Drive, Chicago River		0.000			$0.001 \\ 0.000$	0.001	0.001 0.001		0.000	0.001	0.00
100	Wells Street, Chicago River Madison Street, South Branch Chicago River		0.000			0.000	0.001	0.001		0.001		0.00
108	Loomis Street, South Branch Chicago River	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	NI
	Archer Avenue, South Fork South Branch Chicago Riv Damen Avenue, Chicago Sanitary & Ship Canal		0.000	0.000		0.001	0.001	0.001	0.001	0.001 ND	0.001 ND	0,00
107	Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	0.001	0.001	NI
	Cicero Avenue, Chicago Sanitary & Ship Canal Harlem Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.00
	Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.00
48 82	Lockport Trebler, Chicago Sanitary & Ship Canal	0.000 ND	0.000 ND	0.000 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 NE
	Lockport Forebay, Chicago Sanitary & Ship Canal		0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	met River System									0.000	0.001	0.001
	Ewing Avenue, Calumet River Burnham Avenue, Wolf Lake		0.000	0.000	0.001	0.000		0.000	0.001		0.001	
55	130th Street, Calumet River	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.000	0.000	0.000	0.000
	Burnham Avenue, Grand Calumet River Indiana Avenue, Little Calumet River		0.000			0.001	0.001		0.001			
76	Halsted Street, Little Calumet River		0.000			0.001	0.001	0.001	0.001		0.001 0.001	0.002
54	Wentworth Avenue, Little Calumet River Joe Orr Road, Thorn Creek		0.000			0.001 0.001	0.002 0.001	0.004 0.001	0.001	0.001	0.001	0.00
	170th Street, Thorn Creek Ashland Avenue, Little Calumet River	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002
58	Ashland Avenue, Calumet-Sag Channel	0.000	0.000	0.000	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.00
	Cicero Avenue, Calumet-Sag Channel Route 83, Calumet-Sag Channel	0.000	0.000	0.000	0.001	0.001	$0.001 \\ 0.001$	0.001	0.001	0.001	$0.001 \\ 0.001$	0.002
_	Plaines River System											
90	Route 19, Poplar Creek	0.000	0.000	0.000	0.001	0.001	0.001	0.001		0.001		0.000
63 89	Longmeadow Lane, West Branch DuPage River Walnut Lane, West Branch DuPage River	ND 0.002	0.000	ND 0.001	ND 0.003	ND 0.002	ND 0.002	0.002	$0.001 \\ 0.002$	0.003	0.001	0.00
64	Lake Street, West Branch DuPage River	100.0	0.000	0.000	0.002	0.001	0.001	0.002	0.002	0.001	0.001	0.00
79 ! 80 .	Higgins Road, Salt Creek Arlington Heights Road, Salt Creek		0.000		0.001	0.001	0.000		0.001			
18	Devon Avenue, Salt Creek	0.001	0.000	0.000	0.001	0.001	0.001	0.002	0.001	0.002	0.001	0.001
	Wolf Road, Salt Creek Brookfield Avenue, Salt Creek	0.000	0.000	0.000	0.001	0.001 0.001	0.001	0.001	$0.001 \\ 0.001$	$0.001 \\ 0.001$	0.001 ND	0.001 NE
21	First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	0.001	0.001	0.001
78 1	Elmhurst Road, Higgins Creek Wille Road, Higgins Creek	0.001	0.000	0.001	0.002	0.001	0.001	0.001	100.0 100.0	0.001	$0.001 \\ 0.001$	0.001
12	Lake-Cook Road, Buffalo Creek Lake-Cook Road, Des Plaines River	0.000	0.000	0.000	0.001	0.000	ND	ND	ND 0.001	ND	ND 0.001	0.000
17	Oakton Street, Des Plaines River	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000
	Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River		0.000					0.001	0.001	0.001	0.001	
22	Ogden Avenue, Des Plaines River	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
23 29	Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River		0.000			100.0	0.001	0.001	$0.001 \\ 0.001$	0.001	$0.001 \\ 0.001$	
91	Material Service Road, Des Plaines River	0.000	0.000	0.000	0.001	0.001	0.001	0.001	100.0	100.0	0.001	0.001
110	Springinsguth Road, West Branch DuPage River	0.001	0.000	0.000	0.001	0.001	0.001	0.001	ND	ND	ND	NI

TABLE AII-73: FLUORIDE MEAN HISTORY 2000 THROUGH 2010

	oling Station (No. Name)											
Chic		10	09	08	07	06	05	04	03	02	01	00
	ago River System											
	Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River	ND 0.505	ND 0.476	ND 0.428	ND 0.345	ND 0.334	ND 0.520		ND 0.450	0.433	0.240 0.408	ND
	Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch	0.374 0.226	0.355	0.339	0.401	0.370 0.296	0.469 0.375	0.360 0.289		0.425 0.343	0.387 0.266	0.310
104	Glenview Road, North Branch Chicago River	0.497	0.418	0.425	0.519	0.457	0.584	0.513	0.460		0.464	ND
	Lake-Cook Road, Skokie River Frontage Road, Skokie River	0.268 0.528	0.225 0.466	0.229 0.441	0.569	0.379 0.538	0.614	0.291 0.557	0.686	0.703	0.500	NE
	Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River	0.395	0.383 0.392	0.398 0.332	0.485 0.478	0.438 0.436		0.473 0.439	0.581 0.528	0.605 0.567	0.378 0.446	0.577 0.642
35	Central Street, North Shore Channel	0.134	0.037	0.051	0.198	0.181	0.135	0.136	0.233	0.307	0.138	0.187
	Oakton Street, North Shore Channel Touhy Avenue, North Shore Channel		0.272 0.614	0.269 0.609	0.420 0.763	0.456 0.662		0.318 0.619		0.512 0.749	0.238	0.812
101	Foster Avenue, North Shore Channel		0.614 0.543	0.618	0.753 0.710	0.683 0.634		0.652 0.617	0.717	0.745 0.693	0.722	NE 0.779
73	Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River	0.657	0.575	0.563	0.699	0.615	0.667	0.624	0.688	0.684	0.648	0.765
	Grand Avenue, North Branch Chicago River Lake Shore Drive, Chicago River		0.529 0.066	0.533	0.688	0.623	0.720 0.196	0.601	0.690 0.250	0.717 0.238	0.665	0.782 0.358
100	Wells Street, Chicago River	0.316	0.196 0.461	0.280	0.312 0.465	0.297	0.316 0.551	0.322	0.458 0.665	0.423	0.363	NE 0.645
108	Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River	0.498	0.463	0.430	0.467	0.489	0.557	0.551	0.596	0.581	0.543	NE
99 40	Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal	0.554 0.505	0.456 0.463	0.443	0.472 0.467	0.461 0.468	0.565 0.555	0.516 0.525	0.578	0.565 ND	0.595 ND	NE 0.667
107	Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND 0.531	ND	ND	0.532 0.578	0.538 0.471	NE 0.617
75 41	Cicero Avenue, Chicago Sanitary & Ship Canal Harlem Avenue, Chicago Sanitary & Ship Canal	0.505 0.598	0.418 0.564	0.464 0.562	0.633	0.479 0.643	0.740	0.686	0.727	0.743	0.633	0.781
42 48	Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal	0.643 0.587	0.570 0.519	0.543 0.519	0.685 0.636	0.696 0.648	0.756 0.701	0.768 0.683	0.825 0.800	0.809 0.809	0.715 0.752	0.806 0.799
82	Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND 0.769	ND	ND	0.914
92	Lockport Forebay, Chicago Sanitary & Ship Canal	0.584	0.532	0.362	0.034	0.003	0./19	0.034	0.709	0.802	0.751	0.610
	met River System	0.102	0.000	0.073	0.170	0.156	0.128	0.115	0.150	N 188	0 144	0 148
50	Ewing Avenue, Calumet River Burnham Avenue, Wolf Lake	0.102 0.362	0.354	0.073 0.338	0.334	0.247	0.275	0.228	0.223	0.213	0.208	0.200
55 86	130th Street, Calumet River Burnham Avenue, Grand Calumet River		0.184 0.768		0.264 0.696		0.219 0.722		0.312 0.812		0.247 0.783	0.230
56	Indiana Avenue, Little Calumet River	0.272	0.235 0.521		0.348 0.534		0.317 0.582	0.278	0.375 0.665	0.394	0.375 0.730	0.382 0.891
76 52	Halsted Street, Little Calumet River Wentworth Avenue, Little Calumet River	0.487	0.858	2.284	2.539	2.962	3.129	1.764	2.838	12.390	4.096	4.255
54 97	Joe Orr Road, Thorn Creek 170th Street, Thorn Creek		0.564 0.471	0.658 0.553	0.549 0.470	0.659	0.474 0.492	0.626	0.483 0.634	1.613	0.674	0.737 NE
57	Ashland Avenue, Little Calumet River	0.422	0.766	0.924 0.593	0.803 0.514	1.115 0.630	1.182 0.646	0.887 0.563	1.107 1.020	2.865 1.188	1.627 0.828	1.609 0.935
59	Ashland Avenue, Calumet-Sag Channel Cicero Avenue, Calumet-Sag Channel	0.492 0.483	0.514	0.575	0.507	0.639	0.637	0.575	0.719	0.935	0.935	0.916
43	Route 83, Calumet-Sag Channel	0.509	0.457	0.534	0.511	0.562	0.662	0.590	0.659	0.925	0.805	0.827
	Plaines River System	0.144	0.155	0.150	0.231	0.208	0.209	0.198	0.206	0.234	0.257	0.171
90 63	Route 19, Poplar Creek Longmeadow Lane, West Branch DuPage River	0.144 ND	0.155 ND	ND	ND	ND	ND	ND	0.170	ND	0.295	0.303
89 64	Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River	0.643 0.377	0.610 0.483	0.550 0.530	0.643 0.569	0.629	0.643	0.568 0.572	0.625	0.744	0.721	0.723 0.587
79	Higgins Road, Salt Creek	0.179	0.155	0.197	0.259	0.213	0.207	0.189			0.253	
80 18	Arlington Heights Road, Salt Creek Devon Avenue, Salt Creek		0.458 0.445	0.503	0.564	0.534	0.498	0.549	0.547 0.568	0.578	0.558	0.608
24 109	Wolf Road, Salt Creek Brookfield Avenue, Salt Creek	0.433	0.408 0.395	0.509 0.522	0.498 0.474	0.480 0.459	0.585 0.467	0.565	0.542 0.474	0.634	0.523 ND	0.542 ND
21	First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	0.447	0.499	0.486
78	Elmhurst Road, Higgins Creek Wille Road, Higgins Creek	0.661	0.085 0.627	0.715	0.296 0.897	0.959	0.879	0.223 0.812	0.858	0.788	0.315 0.762	0.746
12 13	Lake-Cook Road, Buffalo Creek Lake-Cook Road, Des Plaines River		0.044 0.325	0.099	0.234	0.191 0.425	ND 0.438	ND 0.400	ND 0.525	ND 0.508	ND 0.393	ND 0.402
17	Oakton Street, Des Plaines River	0.363	0,292	0.378	0.374	0.369	0.468	0.382	0.459	0.459	0.367	0.400
19 20	Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River	0.420	0.355 0.335	0.424 0.416	0.453	0.452	0.449	0.417	0.541 0.496	0.516	0.464	0.526
	Ogden Avenue, Des Plaines River	0.403	0.345 0.332	0.443	0.437 0.440	0.447 0.440	0.440	0.429 0.431	0.592	0.541 0.557	0.408 0.420	0.410
29	Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River	0.383	0.328	0.390	0.470	0.453	0.510	0.427	0.536	0.516	0.386	0.486
91 110	Material Service Road, Des Plaines River Springinsguth Road, West Branch DuPage River		0.313 0.233		0.421 0.265				0.545 ND	0.518 ND	0,377 ND	0.490 ND

TABLE AII-74: TOTAL ORGANIC CARBON MEAN HISTORY 2000 THROUGH 2010

				A	nnual l	Means	(mg/l	L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.50	7.00
 Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River 	4.89 4.70	4.75 4.53	3.97 3.53	3.90 4.05	4.58 4.08	6.43 6.88	8.88 8.40	10.67 8.88	9.50 9.36	12.60 8.40	ND ND
31 Lake-Cook Road, Middle Fork North Branch	6.79	6.01	5.13	6.75	6.17	9.02	10.10	11.00	11.40	9.73	12.40
 Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River 	4.66 5.60	4.65 5.09	4.08 4.36	4.40 4.96	4.63 5.43	5.98 7.62	8.33 9.30	9.00 9.89	8.00 10.60	8.10 9.36	ND 12.30
105 Frontage Road, Skokie River	4.58	4.37	3.73	4.29	4.43	5.64	7.17	7.75	8.92	7.60	ND
 Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River 	4.33 5.35	4.63 4.51	3.96 3.72	4.25 4.32	4.50 4.51	6.97 6.70	9.67 8.18	8.82 9.30	8.50 8.92	7.83 8.33	10.73 8.33
35 Central Street, North Shore Channel	3.65	2.71	1.67	1.78	1.92	2.49	4.22	4.89	5.33	3.33	5.63
 Oakton Street, North Shore Channel Touhy Avenue, North Shore Channel 	4.09 4.95	3.26 4.16	2.36 3.39	2.92 4.03	3.38 4.12	4.42 6.41	5.92 8.08	7.44 8.92	7.27 8.83	4.20 8.00	NE 10.58
101 Foster Avenue, North Shore Channel	6.04	3.98	3.37	4.07	4.26	6.48	8.25	8.42	8.67	7.60	NI
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 	4.48 4.68	4.02 3.89	3.40 3.32	3.88 4.10	4.32 4.08	6.68 6.26	8.08 7.83	8.67 8.92	9.17 9.25	7.75 7.92	10.13
46 Grand Avenue, North Branch Chicago River	4.53	4.13	3.43	4.01	4.25	6.49	7.92	8.92	8.50	7.83	9.92
74 Lake Shore Drive, Chicago River 100 Wells Street, Chicago River	2.55 2.93	2.23 2.53	1.77 2.39	1.87 2.25	1.75 2.27	2.54 3.55	4.22 5.17	4.30 6.25	4.42 5.33	4.58 4.71	6.58 NE
39 Madison Street, South Branch Chicago River	4.04	3.60	3.09	3.03	3.29	5.03	7.00	7.91	5.33 7.75	6.67	9.08
108 Loomis Street, South Branch Chicago River 99 Archer Avenue, South Fork South Branch Chicago River	4.02 4.44	3.43 3.76	2.96 3.81	3.17 3.34	3.35 3.27	5.52 5.44	6.83 7.08	8.00 7.83	7.00 8.17	6.22 8.50	NE NE
40 Damen Avenue, Chicago Sanitary & Ship Canal	3.84	3.68	2.93	3.15	3.37	5.52	6.67	7.67	ND	ND	12.78
 Western Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal 	ND 3.93	ND 3.51	ND 3.13	ND 3.24	ND 3.75	ND 5.08	ND 7.00	ND 7.33	7.58 7.50	6.90 6.58	NE 8.58
41 Harlem Avenue, Chicago Sanitary & Ship Canal	4.63	4.32	3.56	3.80	4.16	5.92	7.50	8.25	7.92	7.25	9.75
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal	4.91 4.93	4.27 4.37	3.56 3.68	4.19 4.20	4.39 4.54	6.05 6.32	8.17 7.75	8.00 7.92	8.83 8.67	7.67 7.92	12.55 10.09
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	4.83	4.44	3.60	4.34	4.40	6.01	8.00	8.29	8.26	7.59	9.62
Calumet River System	4.50	1.74	1.00	1.40	1.42	1 77	2.40	2 17	2 75	2.25	6 67
Ewing Avenue, Calumet RiverBurnham Avenue, Wolf Lake	4.50 6.28	1.74 4.35	1.29 3.83	1.48 4.00	1.43 3.81	1.77 5.37	3.40 6.42	3.17 6.17	3.75 5.50	3.25 5.18	6.67 6.92
55 130th Street, Calumet River	2.84	3.00	2.31	2.75	2.62	3.39	4.55	4.70	4.92	4.73 9.90	6.27 14.18
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River	10.66 3.64	6.76 3.70	8.99 3.08	17.54 3.47	7.45 3.39	9.27 3.77	12.33 5.11	12.90 5.64	11.36 6.42	5.75	7.67
76 Halsted Street, Little Calumet River	4.96	4.44	4.07	4.19	4.40	5.90	7.67	8.45	8.33	7.50	10.92
52 Wentworth Avenue, Little Calumet River 54 Joe Orr Road, Thorn Creek	7.69 5.96	6.61 6.41	5.54 5.09	6.22 5.04	9.02 5.33	8.54 8.00	12.22 10.43	11.60 9.67	10.73 10.43	10.18 9.08	12.82 12.75
97 170th Street, Thorn Creek	6.19	5.59	4.53	5.22	6.26	6.72	9.27	9.60	9.17	9.10	ND
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	5.60 5.53	5.99 4.70	4.89 4.19	6.68 4.60	5.67 4.65	7.46 6.04	9.60 8.00	9.60 8.50	9.00 8.75	9.10 8.25	12.73 11.58
59 Cicero Avenue, Calumet-Sag Channel	5.55	4.71	4.21	4.55	4.77	6.41	8.17	8.64	8.67	8.17	11.50 17.25
43 Route 83, Calumet-Sag Channel	4.92	4.70	4.03	4.64	4.77	6.54	8.00	8.55	8.25	8.25	17.23
Des Plaines River System 90 Route 19, Poplar Creek	5.67	5.14	4.43	5.13	5.75	7.28	8.64	9.90	9.22	8 82	12.29
63 Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	12.00	ND	8.82 12.75	13.78
 Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River 	6.54 5.80	6.53 6.18	6.23 5.26	6.73 6.05	6.83 6.23	9.55 8.65	12.45 10.09	11.91 10.83	11.75 10.25	11.17 10.64	12.75 12.64
79 Higgins Road, Salt Creek	6.64	6.03	4.72	5.27	5.60	8.42	9.45	9.56	10.00	9.20	11.40
80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	5.58 5.59	5.47 5.33	3.74 3.67	4.45 4.49	5.00 4.90	7.13 6.86	9.42 9.58	9.92 10.08	10.50 9.80	9.83 9.42	10.67 10.58
24 Wolf Road, Salt Creek	4.95	4.77	3.58	4.07	4.68	6.73	8.27 10.82	8.67	8.45	8.33	10.80
109 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek	4.87 ND	4.83 ND	3.72 ND	4.29 ND	4.65 ND	7.30 ND	10.82 ND	8.70 ND	8.83 9.67	ND 8 50	ND 10.10
77 Elmhurst Road, Higgins Creek	3.80	5.28	3.62	4.66	5.13	7.75	11.00	10.40	9.83	10.09	11.80
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	5.02 5.97	5.12	4.83 5.79	5.03 6.10	5.59 5.94	7.94 ND	10.55 ND	10.25 ND	9.83 ND	9.92 ND	12.08 ND
13 Lake-Cook Road, Des Plaines River	5.98	6.41 6.04	4.81	7.90	7.21	7.48	9.27	9.67	9.25	8.67	11.17
17 Oakton Street, Des Plaines River 19 Belmont Avenue, Des Plaines River	5.94	6.06	4.75 4.57	5.98 5.75	5.40 5.56	7.38 7.53	8.73 9.27	9.40 9.50	9.55 9.67	8.83	11.40 11.10
20 Roosevelt Road, Des Plaines River	5.48 5.68	5.77 5.85	4.82	5.74	5.52	7.28	9.36	9.00	9.33	8.75	11.20
22 Ogden Avenue, Des Plaines River	5.28	5.58	4.41	5.36	5.14	7.00	9.27	9.20	9.25		10.80
 Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River 	5.23 5.45	5.55 5.51	4.29 3.98	6.02 5.20	5.20 5.12	7.11 7.08	8.82 8.45	9.10 9.36	9.00 9.00	9.67 9.25	10.40 9.60
91 Material Service Road, Des Plaines River	5.19	5.41	3.99	5.45	5.09	7.19	8.45	8.92	8.83		11.46
	11.70	9.94	10.00	11.28	12.02	13.02	15.70	ND	ND	ND	ND

TABLE AII-75: FECAL COLIFORM MEAN HISTORY 2000 THROUGH 2010

Chicago River System 30 Lake-Cook Road, West Fork North Branch Chicago River 410 Dundee Road, West Fork North Branch Chicago River 411 South Road, West Fork North Branch Chicago River 412 South Road, West Fork North Branch Chicago River 413 Lake-Cook Road, Middle Fork North Branch Chicago River 414 South Road, West Fork North Branch Chicago River 415 South Road, West Fork North Branch Chicago River 416 South Road, West Fork Road, West Fork North Branch Chicago River 417 South Road, West Fork Road, West Fork Road, Provided Road, West Fork Road, Provided Ro						Annu	al Me	ans (fo	cu/100	mL)			
Take-Cook Road, West Fork North Branch Chicago River 406 1083 1133 2469 2184 2476 3194 3174 31	Sam	apling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Take-Cook Road, West Fork North Branch Chicago River 406 1083 1133 2469 2184 2476 3194 3174 31	Chie	cago River System											
103 Golf Road, West Fork North Branch Chicago River 466 1083 1133 660 893 727 622 839 704 853 705 104	30	Lake-Cook Road, West Fork North Branch											4000
31 Lake-Cook Road, Middle Fork North Branch 646 586 1836 633 943 536 760 773 1143 767 101 101 Glenview Road, North Branch Chicago River 775 655 596 736 637 649 1042 546 777 704 1112 112 112 121 102 104		Golf Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River								3740 839			ND ND
232 Lake-Cook Road, Skokie River	31	Lake-Cook Road, Middle Fork North Branch	646	586	1836	633	943	536	760	773	1143	767	1050
105 Frontage Road, Skokie River													ND 1131
96 Albainy Avenue, North Branch Chicago River 37 Central Street, North Shore Channel 38 Central Street, North Shore Channel 39 Cathon Street, North Shore Channel 30 Cathon Street, North Shore Channel 31 Tourly Avenue, North Shore Channel 32 Wilson North Shore Channel 33 Tourly Avenue, North Branch Chicago River 34 Street, North Shore Channel 35 Wilson North Shore Channel 36 Street, North Branch Chicago River 37 Diversey Parkway, North Branch Chicago River 38 Street, North Branch Chicago River 39 Diversey Parkway, North Branch Chicago River 39 Madison Street, South Branch Chicago River 30 Wells Street, Chicago River 30 Madison Street, South Branch Chicago River 31 Street, South Branch Chicago River 31 Street, South Branch Chicago River 32 Street, South Branch Chicago River 31 Street, South Branch Chicago River 32 Street, South Branch Chicago River 33 Madison Street, South Branch Chicago River 34 Damen Avenue, Chicago Sanitary & Ship Canal 35 Care Avenue, Chicago Sanitary & Ship Canal 36 Street, South Branch Chicago River 37 Ciccro Avenue, Chicago Sanitary & Ship Canal 38 Stephen Street, Chicago Sanitary & Ship Canal 39 Madison Street, South Branch Chicago River 39 Chicago Sanitary & Ship Canal 30 Damen Avenue, Chicago Sanitary & Ship Canal 30 No ND 30 N	105	Frontage Road, Skokie River	112	169	151	199	119	160	159	225	357	490	ND
35 Central Street, North Shore Channel 54 80 168 66 90 144 330 291 483 356 291 483 356 291 483 356 291 336 367 301 3													1484 4238
36 Touby Avenue, North Shore Channel 594 8040 6892 8875 8550 1481 5718 7588 8349 4211 94 101 Foster Avenue, North Branch Chicago River 4091 5461 5723 7479 6033 9748 5896 5940 7358 5958 761 762 773 7479 6033 9748 5896 5940 7358 5958 761 773 Diversey Parkway, North Branch Chicago River 3518 8318 4373 3608 4231 794 3426 4228 5833 3832 555 741 4287 541	35												270
101 Foster Avenue, North Branch Chicago River 4091 5461 5723 7479 6033 7917 10250 8703 8703 737 Wilson Avenue, North Branch Chicago River 4091 5461 5723 7479 6033 7479 6033 7599 3426 4228 5833 3832 573 748 4479 6033 7599 3426 4228 5833 3832 573 748 428 5806 7940 738 7598 748									963				ND
37 Wilson Avenue, North Branch Chicago River 37 Diversey Parkway, North Branch Chicago River 37 Diversey Parkway, North Branch Chicago River 38 3818 3733 3608 4237 5799 3426 4222 5833 38322 55. 46 Grand Avenue, North Branch Chicago River 47 Lake Shore Drive, Chicago River 48 241 90 386 31 81 46 5 3 36 66 10 Wells Street, Chicago River 49 241 90 486 31 81 46 5 3 36 66 10 Wells Street, Chicago River 49 49 49 49 49 49 10 10 10 10 10 10 10 10 10 10 10 10 10	101												ND
46 Grand Ávenue, North Branch Chicago River 71 Lake Shore Drive, Chicago River 72 Lake Shore Drive, Chicago River 73 Madison Street, South Branch Chicago River 74 Lake Shore Drive, Chicago River 75 James Street, Chicago River 76 James Avenue, Chicago River 77 Lake Shore Drive, Chicago River 78 Archard Avenue, South Branch Chicago River 79 Archard Avenue, South Branch Chicago River 70 Archard Avenue, Chicago Sanitary & Ship Canal 70 Wells Street, Chicago Sanitary & Ship Canal 70 Western Avenue, Chicago Sanitary & Ship Canal 70 Western Avenue, Chicago Sanitary & Ship Canal 71 Sciecro Avenue, Chicago Sanitary & Ship Canal 72 Calumet River System 73 Ewing Avenue, Calumet River 74 Lake Supham Avenue, Chicago Sanitary & Ship Canal 75 Calumet River System 76 Ewing Avenue, Calumet River 77 Ag Hals Stephen Calumet River 78 Ewing Avenue, Calumet River 79 Ewing Avenue, Calumet River 70 Ewing Avenue, Wolf Lake 70 Ewing Avenue, Wolf Lake 71 Ag Halsen Avenue, Wolf Lake 72 Lockport Trobay, Chicago Sanitary & Ship Canal 76 Halsted Street, Little Calumet River 77 Ag Halsted Street, Little Calumet River 78 Ewing Avenue, Calumet River 79 Ewing Avenue, Calumet River 70 Ewing Avenue, Calumet River 70 Ewing Avenue, Calumet River 71 Ag Halsted Street, Little Calumet River 71 Ag Halsted Street, Little Calumet River 72 Ewing Avenue, Calumet River 73 Ashland Avenue, Little Calumet River 74 Flaisted Street, Little Calumet River 75 Ashland Avenue, Little Calumet River 76 Halsted Street, Little Calumet River 77 Ashland Avenue, Calumet River 78 Sephen River System 87 Ashland Avenue, Calumet River 87 Ashland Avenue, Calumet River 98 Route River System 99 Color Road, Thorn Creek 80 Burnhard Avenue, Chicago Sanitary & Ship Canal 100 Street System 101 Street System 102 Lockport Trophen Creek 103 Street System 104 Stephen River 105 Street System 106 Street System 107 Street System 108 Street System 109 Route System 109 Route System 109 Street System 109 Street System 109 Street System	37	Wilson Avenue, North Branch Chicago River	4091		5723								7677
14 Lake Shore Drive, Chicago River 128 241 90 86 31 81 46 53 36 66 91 90 90 90 91 92 92 92 92 92 92 93 93										2402			1715
39 Madison Street, South Branch Chicago River 18 Loomis Street, South Branch Chicago River 27 334 1427 371 4427 371 445 297 179 181 253 325 N 99 Archer Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal 108 Western Avenue, Chicago Sanitary & Ship Canal 109 Western Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal 108 Western Avenue, Chicago Sanitary & Ship Canal 109 Western Avenue, Chicago Sanitary & Ship Canal 119 321 4642 4908 3906 2668 2637 4314 3609 4126 500 141 Harlem Avenue, Chicago Sanitary & Ship Canal 141 Harlem Avenue, Chicago Sanitary & Ship Canal 142 Route 83, Chicago Sanitary & Ship Canal 143 Stephen Street, Chicago Sanitary & Ship Canal 144 Branch Stephen Street, Chicago Sanitary & Ship Canal 154 Stephen Street, Chicago Sanitary & Ship Canal 155 Lockport Trebler, Chicago Sanitary & Ship Canal 165 Lockport Trebler, Chicago Sanitary & Ship Canal 176 Lockport Trebler, Chicago Sanitary & Ship Canal 177 Signe Sanitary & Ship Canal 178 Stephen Street, Chicago Sanitary & Ship Canal 179 Lockport Trebler, Chicago Sanitary & Ship Canal 170 Lockport Trebler, Chicago S	74	Lake Shore Drive, Chicago River	28	241	90	86	31	81	46	53	36	66	91
Loomis Street, South Branch Chicago River 257 334 1427 371 445 297 179 181 253 3325 N		Wells Street, Chicago River Madison Street, South Branch Chicago River									288 800	1622	ND 1090
Damen Avenue, Chicago Sanitary & Ship Canal ND	108	Loomis Street, South Branch Chicago River	257	334	1427	371	445	297	179	181	253	325	ND
107 Western Avenue, Chicago Sanitary & Ship Canal 137 202 649 347 469 129 104 153 245 303 124 124 124 126													ND 160
Harlem Avenue, Chicago Sanitary & Ship Canal 1391 3321 4642 4908 3906 2668 2637 4314 3609 4126 500 4126 412	107		ND	ND	ND	ND	ND	ND	ND	ND	180	393	ND
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal 99 448 992 645 894 469 386 345 419 812 52 82 Lockport Forebay, Chicago Sanitary & Ship Canal 101 216 255 227 308 205 186 179 159 291 22 Calumet River System 49 Ewing Avenue, Calumet River 15 11 13 12 11 12 11 12 12 20 50 Burnham Avenue, Wolf Lake 21 26 36 70 21 77 53 37 13 32 55 51 300h Street, Calumet River 35 9 25 19 24 37 26 32 19 82 55 51 300h Street, Calumet River 4613 1158 642 2448 420 2377 1104 1695 488 2056 161 dana Avenue, Little Calumet River 176 Halsted Street, Little Calumet River 187 Halsted Street, Little Calumet River 1926 2262 2891 3259 2159 275 2970 2024 2550 477 250		Cicero Avenue, Chicago Sanitary & Ship Canal											154 5043
48 Stephen Street, Chicago Sanitary & Ship Canal 2 Lockport Trebler, Chicago Sanitary & Ship Canal 3 Lockport Forebay, Chicago Sanitary & Ship Canal 40 Lockport Forebay, Chicago Sanitary & Ship Canal 41 Lockport Forebay, Chicago Sanitary & Ship Canal 41 Lockport Forebay, Chicago Sanitary & Ship Canal 42 Ewing Avenue, Calumet River 43 Ewing Avenue, Calumet River 44 Ewing Avenue, Calumet River 45 Burnham Avenue, Wolf Lake 46 11 13 12 11 12 11 12 12 12 20 15 13 13 13 12 11 12 11 12 12 12 20 15 13 13 13 12 13 12 11 12 11 12 12 12 12 12 13 13 13 13 14 11 13 12 11 12 11 12 12 12 12 12 13 13 13 13 14 11 13 12 11 12 12 12 12 12 13 13 13 13 14 11 13 12 11 12 12 12 14 14 14 14 14 14 14 14 14 14 14 14 14		Route 83, Chicago Sanitary & Ship Canal											1046
Calumet River System Female 101 216 255 227 308 205 186 179 159 291 255 221 24 37 38 205 186 179 159 291 255 221 24 37 38 205 38 38 38 38 38 38 38 3		Stephen Street, Chicago Sanitary & Ship Canal											537
Calumet River System		Lockport Forebay, Chicago Sanitary & Ship Canal											ND 256
Section Figure	Calu												
Stock 130th Street, Calumet River 35 9 25 19 24 37 26 32 19 82 35 36 80 10 10 10 10 10 10 10	49	Ewing Avenue, Calumet River											18
86 Burnham Avenue, Grand Calumet River 4613 1158 642 2448 420 2377 1104 1695 488 2056 356 Indiana Avenue, Little Calumet River 74 74 111 49 89 73 103 75 89 344 17 76 Halsted Street, Little Calumet River 1926 2262 2891 3259 2159 2759 2775 2990 2024 2550 477 52 Wentworth Avenue, Little Calumet River 2585 2935 1811 1477 956 1934 1284 2247 976 2211 356 41 Oe Orr Road, Thorn Creek 1086 756 780 698 642 2119 1292 1347 637 1197 N 57 Ashland Avenue, Little Calumet River 1346 563 783 816 431 3181 4103 2329 576 1623 308 58 Ashland Avenue, Calumet-Sag Channel 120 1217													24 53
The first of the	86				642	2448	420	2377	1104		488	2056	3323
52 Wentworth Avenue, Little Calumet River 2585 2935 1811 1477 956 1934 1284 2247 976 2211 356 97 170th Street, Thorn Creek 1086 756 780 698 642 2119 1292 1347 637 1197 N 57 Ashland Avenue, Little Calumet River 1346 563 783 816 431 3181 4103 2329 576 1623 308 58 Ashland Avenue, Calumet-Sag Channel 1280 1407 2174 2122 1580 2365 2616 2135 1157 3095 317 59 Cicero Avenue, Calumet-Sag Channel 127 106 108 188 97 57 147 103 93 298 7 43 Route 19, Poplar Creek 87 138 163 181 264 417 92 387 113 129 94 63 Longmeadow Lane, West Branch DuPage River ND									103	2000			124
54 Joe Orr Road, Thorn Creek 77 170th Street, Thorn Creek 87 170th Street, Thorn Creek 87 183 166 780 698 642 2119 1292 1347 637 1197 N 818 Ashland Avenue, Little Calumet River 88 Ashland Avenue, Calumet-Sag Channel 89 Cicero Avenue, Calumet-Sag Channel 89 Cicero Avenue, Calumet-Sag Channel 80 1407 2174 2122 1580 2365 2616 2135 1157 3095 317 80 Cicero Avenue, Calumet-Sag Channel 80 1407 2174 2122 1580 2365 2616 2135 1157 3095 317 81 178 539 857 1041 1105 471 1057 64 81 188 97 57 147 103 93 298 7 106 108 188 97 57 147 103 93 298 7 107 Poliar Creek 87 138 163 181 264 417 92 387 113 129 94 81 Longmeadow Lane, West Branch DuPage River 81 100 ND	52			2935			956	1934					3501
57 Ashland Avenue, Little Calumet-Sag Channel 1346 563 783 816 431 3181 4103 2329 576 1623 305 58 Ashland Avenue, Calumet-Sag Channel 1060 377 945 1178 539 887 1041 1105 471 1057 305 317 43 Route 83, Calumet-Sag Channel 127 106 108 188 97 57 147 103 93 298 57 Des Plaines River System 87 138 163 181 264 417 92 387 113 129 94 63 Longmeadow Lane, West Branch DuPage River ND 1075 253 89 Walnut Lane, West Branch DuPage River 549 451 1103 2013 857 2026 1121 2181 1600 1273 194 64<	54	Joe Orr Road, Thorn Creek											2617 ND
58 Ashland Avenue, Calumet-Sag Channel 1280 1407 2174 2122 1580 2365 2616 2135 1157 3095 317 43 Route 83, Calumet-Sag Channel 127 106 108 188 97 57 147 103 93 298 7 Des Plaines River System 90 Route 19, Poplar Creek 87 138 163 181 264 417 92 387 113 129 94 63 Longmeadow Lane, West Branch DuPage River ND ND <td< td=""><td>57</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>ND 3088</td></td<>	57												ND 3088
Des Plaines River System		Ashland Avenue, Calumet-Sag Channel											3170
Route 19, Poplar Creek		Route 83, Calumet-Sag Channel						83 / 57					656 79
63 Longmeadow Lane, West Branch DuPage River 84 Walnut Lane, West Branch DuPage River 85 Walnut Lane, West Branch DuPage River 86 Lake Street, West Branch DuPage River 81 Stage Sta	Des	Plaines River System											
89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River 814 538 684 2406 949 2144 967 1731 1532 1739 188 79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek 815 73 184 377 312 417 389 529 678 303 426 62 81 Devon Avenue, Salt Creek 81 73 184 377 312 417 389 529 678 303 426 62 82 49 303 426 62 83 838 298 688 1303 1034 337 2012 440 507 110 84 Wolf Road, Salt Creek 85 358 398 298 688 1303 1034 337 2012 440 507 110 85 Brookfield Avenue, Salt Creek 85 109 Brookfield Avenue, Salt Creek 85 109 Brookfield Avenue, Salt Creek 85 109 ND	90												948
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek 154 97 47 250 153 499 84 568 82 49 30 80 Arlington Heights Road, Salt Creek 154 97 47 250 153 499 84 568 82 49 30 818 Devon Avenue, Salt Creek 154 97 47 250 153 499 84 568 82 49 30 818 Devon Avenue, Salt Creek 154 97 47 250 153 499 84 568 82 49 30 818 Devon Avenue, Salt Creek 158 Devon Avenue, Salt Creek 159 Brookfield Avenue, Salt Creek 150 B													2538 1943
80 Arlington Heights Road, Salt Creek 273 184 377 312 417 389 529 678 303 426 62 18 Devon Avenue, Salt Creek 472 328 734 930 946 1014 1214 1668 939 1140 80 24 Wolf Road, Salt Creek 358 398 298 688 1303 1034 337 2012 440 507 110 109 Brookfield Avenue, Salt Creek 560 615 663 1425 1618 1480 1499 3461 2056 ND NI 21 First Avenue, Salt Creek ND	64	Lake Street, West Branch DuPage River	814	538	684	2406	949	2144	967	1731	1532	1739	1889
18 Devoñ Avenuë, Salt Creek 472 328 734 930 946 1014 1214 1668 939 1140 80 24 Wolf Road, Salt Creek 358 398 298 688 1303 1034 337 2012 440 507 110 109 Brookfield Avenue, Salt Creek 560 615 663 1425 1618 1480 1499 3461 2056 ND ND 21 First Avenue, Salt Creek ND ND <td></td> <td>Arlington Heights Road, Salt Creek</td> <td></td> <td></td> <td>47</td> <td>250</td> <td>153</td> <td>499</td> <td>84 529</td> <td>568 678</td> <td></td> <td></td> <td>305</td>		Arlington Heights Road, Salt Creek			47	250	153	499	84 529	568 678			305
24 Wolf Road, Salt Creek 358 398 298 688 1303 1034 337 2012 440 507 110 109 Brookfield Avenue, Salt Creek 560 615 663 1425 1618 1480 1499 3461 2056 ND	18	Devon Avenue, Salt Creek					946		1214				807
21 First Avenue, Salt Čreek ND N			358	398				1034	337				1109
77 Elmhurst Road, Higgins Creek 210 1296 857 2370 1915 1932 488 7317 2395 598 63 78 Wille Road, Higgins Creek 142 475 266 514 275 382 162 559 475 256 53 12 Lake-Cook Road, Buffalo Creek 140 99 248 823 236 ND		First Avenue, Salt Creek							ND				1459
13 Lake-Cook Road, Des Plaines River 245 193 247 310 362 650 240 566 284 269 44 17 Oakton Street, Des Plaines River 224 208 452 313 616 639 342 1128 345 492 91 19 Belmont Avenue, Des Plaines River 423 301 365 516 525 523 410 1021 709 440 73 20 Roosevelt Road, Des Plaines River 296 511 523 634 897 950 662 1309 913 422 79	77	Elmhurst Road, Higgins Creek	210	1296	857	2370	1915	1932	488	7317	2395	598	636
13 Lake-Cook Road, Des Plaines River 245 193 247 310 362 650 240 566 284 269 44 17 Oakton Street, Des Plaines River 224 208 452 313 616 639 342 1128 345 492 91 19 Belmont Avenue, Des Plaines River 423 301 365 516 525 523 410 1021 709 440 73 20 Roosevelt Road, Des Plaines River 296 511 523 634 897 950 662 1309 913 422 79		Lake-Cook Road, Buffalo Creek			200 248								536 ND
19 Belmont Avenue, Des Plaines River 423 301 365 516 525 523 410 1021 709 440 73 20 Roosevelt Road, Des Plaines River 296 511 523 634 897 950 662 1309 913 422 79	13	Lake-Cook Road, Des Plaines River	245	193	247	310	362	650	240	566	284	269	440
20 Roosevelt Road, Des Plaines River 296 511 523 634 897 950 662 1309 913 422 79													915 734
	20	Roosevelt Road, Des Plaines River	296	511	523	634	897	950	662	1309	913	422	790
		Ugden Avenue, Des Plaines River Willow Springs Road, Des Plaines River										519 232	1121 835
29 Stephen Street, Des Plaines River 162 129 184 617 248 202 568 276 275 52	29	Stephen Street, Des Plaines River							202			275	528
91 Material Service Road, Des Plaines River 63 83 78 192 327 260 135 564 122 367 29		Material Service Road, Des Plaines River	63	83	78	192	327	260	135	564	122	367	295
110 Springinsguth Road, West Branch DuPage River 1500 2621 3454 6187 3225 3763 2603 ND ND ND ND ND ND = No Data.			1300	2021	3434	018/	3443	3/03	2003	עא	מאז	NU	ND

TABLE AII-76: ESCHERICHIA COLI MEAN HISTORY 2000 THROUGH 2010

	- <u></u> -			Annu	al Me	ans (fc	u/100	mL)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River	ND 1195	ND 2068	ND 1008	ND 1800	ND 2068	ND ND	ND 2140	ND 5099	ND ND	ND 1232	ND ND
103 Golf Road, West Fork North Branch Chicago River	411	968	507	347 921	374 799	943 243	451 956	380 319	506 429	541 467	ND ND
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	348 174	466 240	1005 353	266	291	443	432	180	254	629	ND
32 Lake-Cook Road, Skokie River	697	344	312	527	147 71	515 276	579 142	418 134	581 387	905 634	ND ND
105 Frontage Road, Skokie River 34 Dempster Street, North Branch Chicago River	129 2277	247 343	121 446	118 386	840	734	604	1110	534	812	ND
96 Albany Avenue, North Branch Chicago River	1244	148 53	559 231	400 44	470 222	791 78	337 267	934 271	1553 4382	9471 139	ND ND
35 Central Street, North Shore Channel 102 Oakton Street, North Shore Channel	81 3345	362	2052	562	782	974	835	4035	1409	217	ND
36 Touhy Avenue, North Shore Channel 101 Foster Avenue, North Shore Channel	5491 4095	6119 4701	6748 7533	8540 12046	5772 6040	10341 10236	3302 5652	7271 8204	9539 14164	861 8842	ND ND
37 Wilson Avenue, North Branch Chicago River	3511	5609	5922	9093	5411	9844	6376	7083	9158	3387	ND
73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River	2336 573	4607 1599	3816 3263	3900 1197	3231 1245	7280 2667	2569 1272	4688 2882	6747 2128	2627 1123	ND ND
46 Grand Avenue, North Branch Chicago River 74 Lake Shore Drive, Chicago River	17	38	55	81	16	24	49	44	20	24	ND
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River	33 180	93 973	411 1683	169 584	184 1253	119 461	49 463	231 427	307 565	175 417	ND ND
108 Loomis Street, South Branch Chicago River	68	201	621	336	599	61	72	70	176	183	ND
 99 Archer Avenue, South Fork South Branch Chicago River 40 Damen Avenue, Chicago Sanitary & Ship Canal 	201 230	164 260	907 632	115 ND	448 ND	102 156	78 ND	251 ND	173 ND	810 ND	ND ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	342 224	77	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal 41 Harlem Avenue, Chicago Sanitary & Ship Canal	58 1106	161 1669	488 2877	932 5416	403 3330	78 2267	177 2567	94 2488	2925	67 3795	ND ND
42 Route 83, Chicago Sanitary & Ship Canal	667	399	1007	867	1365	1340	553	787	715	2345	ND ND
48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal	202 ND	379 ND	724 ND	645 ND	1049 ND	796 ND	407 ND	322 ND	530 ND	922 ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	81	175	457	251	316	148	128	81	177	69	ND
Calumet River System	22	10		10	10	10	10	14	10	10	ND
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	23 26	10 23	10 29	10 89	10 19	12 183	10 37	14 58	10 12	10 9	ND ND
55 130th Street, Calumet River	43	14	23	12	16	57	15	90	14	10	ND ND
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River	204450 126	1302 257	2342 77	682 29	181	11506 63	619 9 48	6709 142	449 101	220 228	ND
76 Halsted Street, Little Calumet River	3724	2486	2012	1929	2372	2838	2420	2787	1815	3240	ND
52 Wentworth Avenue, Little Calumet River 54 Joe Orr Road, Thorn Creek	2785 1368	1724 1428	1090 699	2677 2611	829 2124	2278 16399	3794 1508	1169 22000	846 721	3688 1339	ND ND
97 170th Street, Thorn Creek	435	815	697	1138	364	2442	1631	2984	529	2237	ND
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	552 436	285 943	1027 1738	1530 3512	288 1259	5565 2253	5967 2454	2705 1264	615 690	1622 2661	ND ND
59 Cicero Avenue, Calumet-Sag Channel	360	193	471	1793	396	797	1139	418	500	271	ND
43 Route 83, Calumet-Sag Channel	26	46	86	822	24	60	218	39	75	145	ND
Des Plaines River System		440	1.40	1.40		226	40	102	0.0	261	NTD
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	144 ND	118 ND	149 ND	148 ND	514 ND	775 ND	42 ND	103 ND	82 ND	251 1259	ND ND
89 Walnut Lane, West Branch DuPage River	588	399	1836	720	675	2202	727	2139	1366	395	ND
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	1509 209	399 63	1472 109	1714 114	1451 22	2216 158	908 89	1357 423	1150 61	1102 34	ND ND
80 Arlington Heights Road, Salt Creek	280	76	443	221	427	487	370	552	209	294	ND
18 Devon Avenue, Salt Creek24 Wolf Road, Salt Creek	552 218	134 232	1239 278	483 286	530 711	1202 1077	1164 165	2722 7589	1146 336	3950 30	ND ND
109 Brookfield Avenue, Salt Creek	442	367	450	492	723	1289	2994	ND	ND	ND	ND
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	ND 200	ND 660	ND 220	ND 1897	ND 1217	ND 890	ND 268	ND 5717	330 2097	375 687	ND ND
78 Wille Road, Higgins Creek	179	315	186	221	207	1077	127	539	425	71	ND
12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River	280 333	117 320	109 218	287 274	216 398	ND 684	ND 77	ND 223	ND 569	ND 163	ND ND
17 Oakton Street, Des Plaines River	185	352	503	232	555	295	161	223 147	553	185	ND
19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River	477 335	399 953	323 391	271 457	839 1165	439 480	458 524	277 773	1018 903	202 419	ND ND
22 Ogden Avenue, Des Plaines River	364	579	681	667	1618	606	724	88	837	515	ND
23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River	154 179	295 197	110 118	268 165	855 431	169 186	202 122	1220 117	506 641	253 273	ND ND
91 Material Service Road, Des Plaines River	59	103	69	263	381	114	248	363	90	644	ND
110 Springinsguth Road, West Branch DuPage River	1606	1719	1739	6129	2664	2794	2596	ND	ND	ND	ND
ND = No Data.									***		

TABLE AII-77: TOTAL CALCIUM MEAN HISTORY 2000 THROUGH 2010

					An	nual N	leans	(mg/L	.)			
Samp	ling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chica	go River System											
30 I	ake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND	106.6	80.3
	Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River	72.1 75.7	68.2 66.4	71.1 68.2	73.6 75.5	62.0 73.9	70.3 80.8	85.3 71.5	54.9 70.9	79.0 72.8	79.8 71.0	ND ND
31 L	Lake-Cook Road, Middle Fork North Branch	61.3	57.6	62.1	64.2	62.9	65.6	64.3	64.1	71.9	74.2	66.0
	Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River	64.3 67.5	61.5 62.7	65.1 66.3	62.8 75.8	62.3 68.5	61.5 70.5	64.4 74.2	65.5 69.8	69.0 75.4	68.8 79.4	ND 73.1
105 F	rontage Road, Skokie River	63.5	62.2	64.3	62.8	62.1	62.0	63.2	59.9	67.7	66.2	ND
34 I 96 A	Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River	69.8 65.4	61.2 65.4	63.0 67.6	64.2 65.5	65.9 67.9	70.6 69.4	68.7 65.1	65.7 64.6	70.0 69.2	70.6 72.8	63.8 56.6
35 C	Central Street, North Shore Channel	38.2	37.1	39.6	39.4	37.5	39.1	38.8	41.0	43.6	37.7	43.4
	Dakton Street, North Shore Channel	48.9 52.3	47.2 60.2	47.6 60.0	49.3 56.0	47.7 53.3	47.8 51.9	45.8 57.1	50.4 53.4	51.9 58.5	42.6 61.8	NE 52.9
101 F	Fouhy Avenue, North Shore Channel Foster Avenue, North Shore Channel	55.0	58.0	60.3	58.0	54.2	52.9	57.7	54.3	58.8	57.6	ND
37 V	Vilson Avenue, North Branch Chicago River	59.9 58.5	57.9	61.0	59.1 57.3	56.4 56.2	55.7 54.7	59.8 60.8	56.4 55.4	60.9 61.7	63.9 65.3	55.6 54.9
73 I	Diversey Parkway, North Branch Chicago River Grand Avenue, North Branch Chicago River	57.0	58.4 56.4	61.7 60.8	57.9	56.9	57.3	62.1	56.6	60.2	64.3	55.4
74 I	ake Shore Drive, Chicago River	38.2	36.8	37.3	42.0	38.4	40.6	44.2	40.9 48.0	43.1 49.3	46.1 49.4	44.2 NE
100 V	Wells Street, Chicago River Madison Street, South Branch Chicago River	43.5 51.3	43.8 53.5	47.4 53.6	44.8 51.8	44.1 51.3	44.1 52.0	46.0 52.8	55.2	57.3	58.4	53.3
108 I	Loomis Street, South Branch Chicago River	52.7	55.1	53.9	52.7	53.6	54.3	52.0	52.8	56.8	51.5	NE
	Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal	54.9 53.4	52.1 53.5	56.8 53.9	50.3 52.3	51.2 53.8	51.9 52.9	53.3 53.1	52.5 53.4	56.7 ND	58.0 ND	53.0
107 V	Vestern Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	57.8	56.1	ND
	Cicero Avenue, Chicago Sanitary & Ship Canal Harlem Avenue, Chicago Sanitary & Ship Canal	53.8 59.2	52.9 56.9	56.8 58.5	53.3 56.2	51.2 54.8	54.5 54.2	55.1 54.6	52.1 53.8	59.9 57.3	55.7 59.6	53.3 54.3
42 F	Route 83, Chicago Sanitary & Ship Canal	58.5	57.0	57.5	56.0	56.3	56.4	56.5	56.6	58.7	59.8	53.6
48 S	stephen Street, Chicago Sanitary & Ship Canal Lockport Trebler, Chicago Sanitary & Ship Canal	60.5 ND	56.4 ND	60.1 ND	58.3 ND	59.0 ND	60.1 ND	59.8 ND	58.7 ND	61.6 ND	63.4 ND	58.5 ND
	ockport Forebay, Chicago Sanitary & Ship Canal	60.7	57.8	60.8	59.1	58.4	59.5	59.9	59.0	62.6	63.8	57.3
Calun	net River System											
49 E	Ewing Avenue, Calumet River	35.2 35.5	35.9 36.1	34.9 3 5 .8	37.3 36.2	35.9 30.9	36. 5 37.3	37.1 36.6	38.6 35.3	41.1 35.9	40.2 34.5	39.7 34.3
	Burnham Avenue, Wolf Lake 30th Street, Calumet River	41.8	43.3	42.6	46.3	42.6	43.4	43.2	43.4	47.2	48.8	44.9
86 E	Burnham Avenue, Grand Calumet River	85.3	82.4	96.3	92.0	98.0	68.3	82.5 49.2	86.9 52.0	79.6 58.6	85.6 52.5	73.3 49.7
	ndiana Avenue, Little Calumet River Halsted Street, Little Calumet River	47.6 60.8	50.2 62.5	50.8 68.1	55.0 66.3	49.6 65.8	47.8 63.1	62.1	62.2	64.8	71.1	63.6
52 V	Ventworth Avenue, Little Calumet River	72.2	75.1	89.9	79.9	88.1	74.4	86.4	96.3 64.1	94.5 85.5	82.8 85.5	85.9 72.8
	oe Orr Road, Thorn Creek 70th Street, Thorn Creek	79.2 73.9	75.7 75.8	83.8 87.0	78.7 71.6	85.4 87.7	76.0 83.0	80.8 84.0	80.6	100.8	88.6	ND
57 A	Ashland Avenue, Little Calumet River	69.4	70.9	82.3	69.8	86.4	75.4	78.9	84.3	86.5	79.0	84.5 67.1
	Ashland Avenue, Calumet-Sag Channel Cicero Avenue, Calumet-Sag Channel	65.3 63.9	61.8 61.8	68.4 67.9	61.8 61.8	68.3 71.3	65.3 65.4	65.4 66.4	66.2 64.8	73.7 68.2	76.2 72.7	68.1
	toute 83, Calumet-Sag Channel	66.9	61.0	66.5	61.8	69.4	64.7	63.1	65.3	69.8	72.5	70.4
	laines River System	7.5 0		50.1	60.E	70.0		76.3	(1.2	77.0	70.0	646
	Route 19, Poplar Creek Longmeadow Lane, West Branch DuPage River	75.9 ND	67.3 ND	73.1 ND	68.5 ND	70.9 ND	65.6 ND	76.3 ND	61.3 59.8	77.0 ND	78.0 99.6	64.8 63.8
89 V	Valnut Lane, West Branch DuPage River	65.3	66.1	63.6	61.6	65.8	58.5	64.5	55.8	63.1	67.8	59.3
	ake Street, West Branch DuPage River liggins Road, Salt Creek	79.2 50.6	65.0 62.2	67.3 70.2	58.8 63.5	63.7 63.3	59.7 65.9	70.4 75.8	55.6 58.1	65.0 67.5	69.3 79.3	59.9 65.9
80 A	Arlington Heights Road, Salt Creek	65.8	61.5	69.9	62.7	64.5	66.4	64.1	60.9	68.7	69.2	59.4
	Devon Avenue, Salt Creek Volf Road, Salt Creek	68.3 70.8	60.7 68.5	69.4 70.9	63.0 65.1	65.4 64.0	66.4 66.1	64.4 69.7	58.9 59.2	68.2 73.7	68.9 75.3	58.8 67.7
	brookfield Avenue, Salt Creek	67.8	66.0	68.2	62.6	63.1	64.2	69.9	58.5	58.5	ND	ND
	irst Avenue, Salt Creek	ND 63.6	ND 51.0	ND 62.4	ND 44.5	ND 54.3	ND 60.1	ND 73.7	ND 48,3	92.5 63.2	80.7 79.6	65.5 62.4
78 V	llmhurst Road, Higgins Creek Ville Road, Higgins Creek	63.6 75.2	51.0 79.1	76.6	71.0	69.4	69.2	70.9	63.4	74.4	80.9	67.6
12 L	Ville Road, Higgins Creek ake-Cook Road, Buffalo Creek ake-Cook Road, Der Bloires Biver	76.8	69.5	78.3	69.2	75.3	ND	ND	ND 65.2	ND 76.8	ND 76.5	ND 67.3
	ake-Cook Road, Des Plaines River Oakton Street, Des Plaines River	67.8 66.3	62.1 61.2	72.5 70.7	67.9 64.2	73.3 69.1	66.8 66.6	71.1 72.2	64.1	75.6	81.1	67.1
19 B	lelmont Avenue, Des Plaines River	65.1	63.3	72.5	64.2	69.2	67.1	72.7	62.4	74.7	77.9	65.5
	coosevelt Road, Des Plaines River Ogden Avenue, Des Plaines River	65.1 65.3	61.6 61.5	72.4 68.4	63.9 62.6	68.6 65.2	65.8 63.7	71.0 69.9	60.9 68.7	74.7 73.8	75.4 75.4	64.2 65.2
23 V	Villow Springs Road, Des Plaines River	63.3	61.8	69.7	62.7	64.5	66.1	69.7	61.7	70.8	75.5	66.0
	tephen Street, Des Plaines River faterial Service Road, Des Plaines River	67.1 67.8	61.8 63.6	71.1 69.8	65.1 66.3	69.8 71.0	67.4 68.3	70.0 71.1	65.9 65.6	76.6 74.9	76.6 73.0	67.2 69.3
	pringinsguth Road, West Branch DuPage River	72.1	74.8	82.5	77.8	85.6	77.1	86.8	ND	ND	ND	ND

TABLE AII-78: TOTAL MAGNESIUM MEAN HISTORY 2000 THROUGH 2010

				Anı	nual M	leans (mg/L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System										46.1	22.0
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River	ND 28.5	ND 28.2	ND 29.7	ND 28.1	ND 25.7	ND 29.0	ND 35.4	ND 23.6	ND 34.0	46.1 37.7	32.8 ND
103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch	29.1 26.4	26.4 24.6	26.3 25.7	29.7 28.7	29.7 28.9	32.2 33.1	27.6 29.2	28.3 29.2	30.5 33.0	31.6 33.9	ND 30.0
104 Glenview Road, North Branch Chicago River	27.0 28.1	25.8 25.4	27.0 26.9	26.9 31.3	27.1 30.3	27.7 32.4	27.3 31.6	28.3 29.8	29.6 33.5	31.3 35.4	ND 32.8
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River	27.0	26.1 25.1	26.5 25.9	26.3 27.2	26.5 27.9	27.2 30.7	26.9 28.4	25.3 27.0	29.2 29.8	30.5 31.8	ND 27.9
34 Dempster Street, North Branch Chicago River 96 Albany Avenue, North Branch Chicago River	28.3 26.3	26.3	27.0	27.6	28.3	29.7	26.8	26.6	29.3 15.2	31.4 12.2	23.2 15.7
35 Central Street, North Shore Channel 102 Oakton Street, North Shore Channel	12.8 16.9	12.5 16.4	13.3 16.2	13.3 16.9	12.5 16.7	13.3 16.9	13.1 15.8	14.1 17.5	17.9	14.4	ND
36 Touhy Avenue, North Shore Channel	18.0 19.1	21.0 20.1	21.2 21.4	19.5 20.2	19.0 19.4	18.2 18.6	20.3 20.8	19.1 19.4	21.2 21.3	23.2 21.3	19.3 ND
101 Foster Avenue, North Shore Channel 37 Wilson Avenue, North Branch Chicago River	22.0	20.8 20.8	22.4 22.5	21.3 20.7	20.9 20.7	20.1 19.5	22.2 22.4	20.5 20.0	22.8 23.1	25.1 25.6	21.0 20.8
73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River	21.1 20.3	20.0	21.8	20.9	21.0	20.8	22.3	20.4	22.5 14.7	24.8 16.1	20.9 15.7
74 Lake Shore Drive, Chicago River 100 Wells Street, Chicago River	12.7 15.0	12.4 15.1	12.6 16.5	14.5 15.9	12.9 15.3	14.2 15.3	15.5 16.3	13.7 16.7	17.4	18.0	ND
39 Madison Street, South Branch Chicago River	18.2 18.7	19.1 19.8	19.1 19.4	18.4 18.7	18.6 19.6	18.6 19.8	19.0 19.0	19.9 18.8	21.1 21.0	22.2 19.0	19.4 ND
99 Archer Avenue, South Fork South Branch Chicago River	19.4 19.0	18.1 19.5	20.1 19.4	17.7 18.6	18.4 19.6	18.5 19.2	19.2 19.3	18.7 19.1	20.6 ND	21.7 ND	ND 20.0
40 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND 19.9	ND 18.5	21.4 21.9	21.2 21.3	ND 19.7
75 Cicero Avenue, Chicago Sanitary & Ship Canal 41 Harlem Avenue, Chicago Sanitary & Ship Canal	19.4 20.9	18.7 20.0	20.7 21.0	18.9 19.8	18.3 19.9	19.7 19.6	19.9	19.2	21.1	23.1	20.1
42 Route 83. Chicago Sanitary & Ship Canal	20.1 21.1	20.1 19.9	20.5 21.4	20.2 21.2	20.4 21.5	20.5 22.2	20.6 21.9	20.2 21.3	21.8 22.9	23.0 24.6	19.8 21.9
48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND 21.3	ND 21.3	ND 21.8	ND 22.0	ND 21.4	ND 23.0	ND 24.9	ND 21.8
92 Lockport Forebay, Chicago Sanitary & Ship Canal	21.2	20.6	21.6	21.3	21.3	21.0	22.0	21.4	23.0	2>	
Calumet River System	11.8	11.7	11.2	12.1	11.5	12.1	12.3	12.8	13.2	13.1	13.1
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	12.4	11.8	11.9 14.0	12.1 15.8	11.9 14.2	13.7 15.0	13.4 14.8	13.2 14.8	14.4 15.9	12.6 16.8	13.0 15.5
55 130th Street, Calumet River 86 Burnham Avenue, Grand Calumet River	14.2 28.2	14.4 36.9	39.0	39.3	48.7	44.4	53.9	65.6	67.1	57.1	57.7
56 Indiana Avenue, Little Calumet River 76 Halsted Street, Little Calumet River	16.2 20.6	17.2 21.5	17.3 23.2	19.8 22.8	17.6 22.6	17.8 22.3	18.5 22.0	19.2 21.5	23.8 23.0	20.1 26.5	22.3 23.4
52 Wentworth Avenue, Little Calumet River	28.6 28.3	28.4 28.2	34.3 30.4	31.4 30.1	33.9 36.3	29.7 33.8	34.3 33.9	37.2 26.5	38.4 38.4	33.6 39.3	35.3 34.2
54 Joe Orr Road, Thorn Creek 97 170th Street, Thorn Creek	29.7	29.9	33.9	28.4 27.0	37.7 35.3	36.6 31.6	36.7 32.5	34.6 35.0	49.1 37.3	41.3 35.1	ND 38.8
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	26.5 23.4	27.0 21.6	31.2 23.6	21.8	24.2	23.8	23.8	24.2	27.9	28.3	26.0
59 Cicero Avenue, Calumet-Sag Channel 43 Route 83, Calumet-Sag Channel	22.4 23.7	22.1 21.9	23.8 23.6	21.8 22.4	25.8 25.4	23.8 23.7	24.7 23.6	23.7 24.1	25.4 26.0	27.7 27.8	26.4 26.9
Des Plaines River System											
90 Route 19, Poplar Creek	32.3	28.7	31.8	30.3	30.6	29.8	34.4 ND	27.5 22.3	34.6 ND	36.7 41.5	31.3 24.1
63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River	ND 24.2	ND 25.1	ND 24.0	ND 23.0	ND 24.3	ND 22.0	23.9	20.2	23.9	26.8	23.7
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	28.3 20.7	24.4 26.3	25.1 28.5	22.3 26.2	23.6 26.4	22.3 29.5	26.2 31.4	20.3 23.2	24.8 31.2	27.8 36.7	23.6 28.9
80 Arlington Heights Road, Salt Creek	24.5 25.6	23.3 23.0	26.2 26.0	24.3 24.5	24.9 25.2	25.9 25.7	24.4 24.5	23.4 22.7	27.0 26.6	28.6 28.5	24.1 23.6
18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek	27.1	26.6	27.6	26.0	25.6 25.3	27.3 26.7	28.2 28.3	23.3 23.2	30.1 24.0	28.5 32.5 ND	28.3 ND
109 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek	26.2 ND	25.8 ND	26.7 ND	25.1 ND	ND	ND	ND	ND	37.4	34.6	27.7
77 Elmhurst Road, Higgins Creek	20.6 27.2	18.2 28.9	20.3 27.9	14.5 25.6	18.5 25.1	20.1 25.6	26.3 26.2	15.6 22.8	22.5 27.9	32.5 32.6	22.9 25.8
12 Lake-Cook Road, Buffalo Creek	32.6	29.5 27.3	33.4 31.3	30.4 30.0	33.1 32.7	ND 29.6	ND 31.8	ND	ND 35.1	ND 36.1	ND 31.6
 Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River 	29.5 28.2	26.4	30.0	28.5	30.7	29.9	32.5	28.7 27.9	33.9 33.0	37.7 35.8	30.7 29.7
19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River	26.8 26.7	26.8 26.2	30.1 30.1	27.7 27.7	29.7 29.3 27.3	29.1 28.7	31.1 31.4	25.9 25.5	33.0	35.0	29.3
22 Ogden Avenue, Des Plaines River	26.5 25.7	25.7 26.0	28.1 29.0	26.6 26.9	27.3 27.4	27.5 28.8	30.1 30.3	27.8 25.9	31.6 31.0	33.8 34.4	29.1 29.7
23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River	27.3	25.8	29.1	28.2	29.5	29.2 29.9	30.2 30.9	27.4 27.5	32.7 32.5	35.7 32.8	30.0 31.0
91 Material Service Road, Des Plaines River 110 Springinsguth Road, West Branch DuPage River	27.8 25.5	26.3 27.1	28.9 29.8	28.2 28.3	30.3 30.4	29.9 28.0	31.9	ND	ND	ND	ND
ND = No Data.											

TABLE AII-79: HARDNESS MEAN HISTORY 2000 THROUGH 2010

				An	nual M	leans ((mg/L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch	ND 297	ND 286	ND 300	ND 300	ND 261	ND 295	ND 359	ND 234	ND 337	456 354	335 ND
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	309	274	278	311	307	335	292	294	307	307	ND
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	262 272	245 260	261 274	278 268	276 267	300 268	281 273	280 280	316 294	325 301	288 ND
32 Lake-Cook Road, Skokie River	284 270	261 263	276 270	318 265	296 264	310 267	316 269	297 254	326 289	344 291	318 ND
105 Frontage Road, Skokie River 34 Dempster Street, North Branch Chicago River	291	256	264	272	279	303	289	275	297	307	274
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	272 148	272 144	280 154	277 153	286 145	296 153	273 151	271 160	293 171	311 144	237 173
102 Oakton Street, North Shore Channel	192	185	186	193	188	189	179	198	203	166	ND 211
36 Touhy Avenue, North Shore Channel 101 Foster Avenue, North Shore Channel	205 216	237 228	237 239	220 228	211 215	205 209	226 229	212 215	233 235	250 231	ND
37 Wilson Avenue, North Branch Chicago River	240	230	244	235 228	227 226	222 217	241 244	225 221	246 249	263 268	225 223
73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River	233 226	231 223	247 242	231	229	229	247	226	243	263	224
74 Lake Shore Drive, Chicago River	148 171	143 172	145 187	165 177	149 173	160 173	174 182	159 189	168 195	182 198	175 ND
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River	203	212	212	205	205	207	210	219	230 228	237 207	213 ND
108 Loomis Street, South Branch Chicago River 99 Archer Avenue, South Fork South Branch Chicago River	209 217	219 205	214 225	209 198	214 204	217 206	208 212	209 208	226	234	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	211	214 ND	214 ND	207 ND	215 ND	211 ND	212 ND	212 ND	ND 233	ND 228	214 ND
107 Western Avenue, Chicago Sanitary & Ship Canal 75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND 214	209	227	211	203	217	219	206	240	227	214
41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal	234 229	224 225	233 228	222 223	219 225	216 225	218 226	213 225	230 236	244 244	218 215
48 Stephen Street, Chicago Sanitary & Ship Canal	238	223	238	233	236	241	240 ND	234 ND	248 ND	260 ND	236 ND
82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND 239	ND 229	ND 241	ND 236	ND 234	ND 238	240	235	251	262	233
Calumet River System											
49 Ewing Avenue, Calumet River	136	138	133	143	137	141	143	149	157	154	153 139
50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River	140 163	139 167	138 164	140 181	126 165	149 170	146 169	143 169	149 183	138 191	176
86 Burnham Avenue, Grand Calumet River	329	358	401	391	445	354	428 199	487 209	475 244	449 214	421 216
56 Indiana Avenue, Little Calumet River 76 Halsted Street, Little Calumet River	185 237	196 245	198 266	219 259	196 258	193 249	246	244	256	287	255
52 Wentworth Avenue, Little Calumet River	298 314	304 305	366 335	329 321	360 363	308 329	357 341	393 269	394 371	345 375	360 323
54 Joe Orr Road, Thorn Creek 97 170th Street, Thorn Creek	307	312	357	296	374	358	361	344	454	391	ND
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	283 259	288 243	334 268	285 244	361 270	318 261	331 261	355 265	370 299	342 307	371 275
59 Cicero Avenue, Calumet-Sag Channel	252	245	268	244	284 278	261 259	268 255	260 262	275 282	296 295	279 286
43 Route 83, Calumet-Sag Channel	265	243	263	247	2/0	237	233	202	202	293	200
Des Plaines River System 90 Route 19, Poplar Creek	323	286	314	296	303	287	332	266	335	346	291
63 Longmeadow Lane, West Branch DuPage River	ND	241	ND	419 280	258 246						
89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River	263 314	268 263	258 271	249 239	265 256	237 241	260 283	222 222	256 264	287	247
79 Higgins Road, Salt Creek	212	264	292 282	266 257	267 263	286 273	319 261	241 248	297 283	349 290	284 248
80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	265 276	249 246	280	258	267 265	272 277	262	241	280	289	244
24 Wolf Road, Salt Creek 109 Brookfield Avenue, Salt Creek	289 277	280 271	291 280	269 260	265 262	277 270	290 291	244 242	308 245	322 ND	286 ND
21 First Avenue, Salt Creek	ND	385	344 332	277 250							
77 Elmhurst Road, Higgins Creek 78 Wille Road, Higgins Creek	244 300	203 317	239 306	171 283	212 277	233 278	292 285	185 252	250 301	336	275
12 Lake-Cook Road, Buffalo Creek	326	295	333	298	324 318	ND 289	ND 308	ND 281	ND 336	ND 340	ND 298
 Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River 	291 282	267 261	310 300	293 278	299	289	314	275	328	358	294
19 Belmont Avenue, Des Plaines River	273 272	268 262	305 305	274 273	295 292	287 283	310 307	263 257	322 323	342 333	286 281
20 Roosevelt Road, Des Plaines River 22 Ogden Avenue, Des Plaines River	272	259	287	266	275	272	298	286	314	327	282
23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River	264 280	261 261	293 297	268 279	274 295	284 288	299 299	260 278	305 326	330 338	287 291
91 Material Service Road, Des Plaines River	284	267	293	282	302	293	305	277	321	317 ND	301 ND
110 Springinsguth Road, West Branch DuPage River	285	298	329	311	339	308	348	ND	ND	עא	שא
ND = No Data.			<u></u>								

TABLE AII-80: GROSS ALPHA RADIOACTIVITY MEAN HISTORY 2000 THROUGH 2010

				An	nual N	leans	(pCi/I	ر.)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River 104 Lake-Cook Road, Middle Fork North Branch	ND 2.75 3.38 3.42	ND 4.53 4.20 2.76	ND 2.95 2.59 2.78	ND 11.71 7.08 5.25	ND 6.01 5.73 4.94	ND 6.20 7.14 5.34	ND 6.38 4.36 4.74	ND 3.79 4.80 4.53	ND 4.49 4.41 3.82	ND 4.77 4.67 6.05	35555
104 Glenview Road, North Branch Chicago River 105 Lake-Cook Road, Skokie River 106 Frontage Road, Skokie River 107 Dempster Street, North Branch Chicago River	3.56 3.10 3.48 3.68	3.62 2.71 3.32 3.61	2.35 2.65 2.28 2.38	5.37 5.29 5.13 6.56	5.40 5.04 4.82 5.01	5.50 5.50 5.03 5.91	4.19 4.51 4.26 4.84	4.47 4.34 3.87 4.92	3.72 3.78 3.79 4.15	4.57 4.86 4.53 4.88	2555 2555 2555
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel 102 Oakton Street, North Shore Channel	3.67 2.05 2.67 2.85	3.93 1.62 2.57 3.25	2.71 1.36 1.60 2.03	6.03 3.85 4.29 5.27	5.04 3.07 3.56 3.73	5.43 3.30 4.07 4.27	4.01 3.00 3.23 3.62	4.25 3.43 3.67 3.54	4.39 3.40 3.64 3.72	4.71 3.45 4.03 4.29	ND 4.23 ND 4.21
 Touhy Avenue, North Shore Channel Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River Grand Avenue, North Branch Chicago River 	ZZZZ ZZZ ZZZ Z	S S S S S S S S S S S S S S S S S S S	22225	N N N N N N N N N N N N N N N N N N N	SE S	ND DD ND	D D D D D D D D D D	2222	ND ND ND ND	N N N N N N N N N N N N N N N N N N N	8888 8888 8888
74 Lake Shore Drive, Chicago River 100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River	2.37 2.23 ND ND	1.64 2.57 ND ND	1.27 1.73 ND ND	4.29 4.27 ND ND	3.09 3.41 ND ND	3.23 3.61 ND ND	3.43 3.44 ND ND	3.14 3.41 ND ND	3.27 3.45 ND ND	4.01 4.25 ND ND	9555 1555 1555 1555 1555 1555 1555 1555
99 Archer Avenue, South Fork South Branch Chicago River 40 Damen Avenue, Chicago Sanitary & Ship Canal 40 Western Avenue, Chicago Sanitary & Ship Canal 40 Cicero Avenue, Chicago Sanitary & Ship Canal	ND ND ND 3.08	ND ND ND 4.73	ND ND ND 2.08	ND ND ND 5.40	ND ND ND 3.84	ND ND ND 4.17	ND ND ND 3.87	ND ND ND 3.67	ND ND ND 3.70	ND ND ND 4.32	ND ND ND 4.22
 Harlem Avenue, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal 	3.41 ND ND ND 3.43	2.96 ND ND ND 3.79	2.26 ND ND ND 2.44	6.13 ND ND ND 4.89	3.88 ND ND ND 4.08	4.27 ND ND ND 4.53	3.93 ND ND ND 4.00	3.49 ND ND ND 3.62	3.66 ND ND ND ND 3.83	4.49 ND ND ND 4.50	4.26 4.36 4.25 ND 4.44
Calumet River System							•••		2.00	2.50	N/P
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake 51 130th Street, Calumet River 68 Burnham Avenue, Grand Calumet River 69 Indiana Avenue, Little Calumet River 60 Halsted Street, Little Calumet River 61 Wentworth Avenue, Little Calumet River 62 Wentworth Avenue, Little Calumet River 63 Joe Orr Road, Thorn Creek 64 Ashland Avenue, Little Calumet River 65 Ashland Avenue, Little Calumet River 66 Ashland Avenue, Calumet-Sag Channel 67 Cicero Avenue, Calumet-Sag Channel 68 Route 83, Calumet-Sag Channel 69 Route 83, Calumet-Sag Channel	1.84 1.95 2.15 ND 2.28 3.07 2.91 3.91 3.98 3.64 ND ND	1.94 1.81 2.58 ND 2.82 2.77 2.84 4.56 4.30 3.88 ND ND ND	1.37 1.41 1.72 ND 1.93 2.35 2.62 3.98 3.13 2.69 ND ND ND	4.14 4.16 4.70 ND 5.08 5.28 5.63 7.27 6.27 5.46 ND ND	3.66 3.44 3.49 ND 3.65 4.08 4.24 6.25 5.38 5.09 ND ND	3.03 3.33 3.50 ND 3.56 4.66 4.88 8.99 7.46 6.19 ND ND	2.90 2.94 3.17 ND 3.43 3.68 3.80 6.72 6.43 4.35 ND ND	3.22 3.12 3.50 ND 3.76 3.99 4.59 4.00 6.15 4.73 ND ND	3.00 2.95 3.30 ND 3.57 3.72 4.46 8.21 5.67 4.68 ND ND	3.79 3.44 3.76 ND 4.25 4.34 4.43 5.73 4.63 ND ND ND	ND N
Des Plaines River System						• • •		2.00	4.05	5.40	\TD
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River 65 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek 80 Devon Avenue, Salt Creek 80 Avenue, Salt Creek 80 Avenue, Salt Creek	3.01 ND 2.97 4.93 3.23 3.16 3.37 3.50	3.04 ND 3.29 3.05 3.34 2.84 2.75 3.41	2.49 ND 2.38 2.44 2.90 2.46 2.44 2.66	5.25 ND 4.82 4.85 5.39 5.18 5.17 5.45	5.66 ND 4.98 5.10 5.27 5.59 5.51 5.00	5.19 ND 4.77 5.06 6.27 5.71 5.85 4.81	4.76 ND 4.32 4.51 5.20 4.59 4.59	3.92 3.57 3.78 3.69 4.65 4.28 4.28 4.32	4.37 ND 4.07 4.18 4.23 4.00 3.97 4.79	5.63 5.23 4.53 4.91 5.54 5.07 5.06 4.45	ND 4.21 4.13 ND 4.37 4.19 ND ND
24 Wolf Road, Salt Creek 109 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek Wille Road, Higgins Creek	3.30 ND 2.64 2.59	4.66 ND 2.37 3.50	2.77 ND 2.76 2.38	5.46 ND 5.20 5.28	5.20 ND 6.74 4.78	4.76 ND 7.77 4.79	4.52 4.55 ND 5.90 4.19	4.32 4.26 ND 4.54 3.98	3.38 7.16 6.04 4.43	ND 4.98 5.82 5.44	ND ND 4.42 4.24
12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River 17 Oakton Street, Des Plaines River 19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River	3.27 3.24 2.71 2.84 4.18	3.11 2.88 2.50 3.08 2.30	2.75 2.41 2.49 2.64 2.43	5.67 5.22 5.35 5.33 5.36	5.13 4.86 4.97 5.06 5.29	ND 5.27 5.30 5.46 5.02	ND 4.08 4.27 4.09 4.43	ND 4.04 4.08 4.15 4.15	ND 4.10 4.50 4.56 4.92	ND 5.26 5.26 4.69 4.80	25555
20 Ogden Avenue, Des Plaines River 22 Ogden Avenue, Des Plaines River 23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River 91 Material Service Road, Des Plaines River 110 Springinsguth Road, West Branch DuPage River	3.46 3.65 3.27 3.48 2.55	3.23 3.10 3.22 3.43 3.90	2.47 2.47 2.85 3.50 3.26	5.54 5.25 5.24 5.11 6.14	4.95 5.06 5.40 4.84 7.04	5.07 4.93 4.93 5.70 6.48	4.10 4.21 4.19 4.72 5.09	4.25 4.19 4.29 4.19 ND	4.62 4.17 4.74 4.13 ND	4.83 4.85 4.86 5.12 ND	ND ND ND 4.54 ND

TABLE AII-81: GROSS BETA RADIOACTIVITY MEAN HISTORY 2000 THROUGH 2010

				An	nual N	Means	(pCi/	L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	8.10 7.99	7.18 6.97	7.85 4.53	11.96 9.70	11.59 9.95	11.58 11.05	16.75 11.05	8.90 10.27	8.00 9.99	11.92 7.77	ND ND
31 Lake-Cook Road, Middle Fork North Branch	5.51	5.56	6.34	6.66	7.40	7.15	7.41	7.37	6.64	7.80	ND
104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River	6.34 6.18	6.32 5.40	4.70 4.65	7.18 5.94	9.08 8.19	11.27 8.83	9.48 7.13	8.90 7.35	12.84 6.70	7.59 6.56	ND ND
105 Frontage Road, Skokie River	7.12	6.50	4.67	8.18	9.65	10.79	9.60	9.93	8.46	7.77	ND
34 Dempster Street, North Branch Chicago River 96 Albany Avenue, North Branch Chicago River	5.94 7.06	5.74 6.02	4.61 4.47	9.02 8.16	9.39 7.91	11.51 10.61	8.93 9.09	10.17 9.53	9.49 8.47	7.41 7.24	ND ND
35 Central Street, North Shore Channel	4.87	5.08	1.92	4.89	4.50	4.28	4.48	4.82	6.79	4.44	6.67
102 Oakton Street, North Shore Channel	5.19 6.36	5.40 6.29	3.79 4.64	5.91 7.70	6.97 7.91	6.88 7.88	5.78 8.29	6.45 7.70	6.70 7.94	5.43 7.12	ND 11.30
36 Touhy Avenue, North Shore Channel 101 Foster Avenue, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
37 Wilson Avenue, North Branch Chicago River	ND	ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River	ND ND	ND ND	ND ND	ND	ND	ND	ND	ND	ND	ND	ND
74 Lake Shore Drive, Chicago River	4.55	4.94	2.06	4.73	4.54	4.29	5.52	4.80	4.87	5.82	ND
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River	5.25 ND	5.04 ND	3.51 ND	5.22 ND	5.22 ND	5.60 ND	6.57 ND	6.36 ND	5.36 ND	7.03 ND	ND ND
108 Loomis Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
 99 Archer Avenue, South Fork South Branch Chicago River 40 Damen Avenue, Chicago Sanitary & Ship Canal 	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	5.97 7.47	5.64 6.32	5.86 6.55	7.36 9.43	6.87 8.29	7.38 7.98	8.91 8.92	8.13 8.38	6.80 6.66	8.01 8.32	9.05 9.33
41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.04
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND ND	ND ND	9.65 ND
82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND 6.85	ND 6.81	ND 6.23	ND 8.06	ND 8.21	ND 8.70	ND 9.03	ND 9,22	8.31	7.93	9.11
Calumet River System											
49 Ewing Avenue, Calumet River	4.38	4.72	2.69 4.30	5.42 7.02	5.39	4.99	4.77	3.99	4.31	4.92	ND
50 Burnham Avenue, Wolf Lake	6.0 5 4.79	5.49 5.66	4.30 4.14	7.02 7.24	6.10 6.50	4.94 6.14	7.01 6.79	4.81 6.10	4.77 5.72	4.89 6.36	ND ND
55 130th Street, Calumet River 86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
56 Indiana Avenue, Little Calumet River	5.82	5.59	5.31	7.77	7.82	6.63 9.11	6.99 8.41	7.48 9.54	6.80 9.00	-8.20 7.44	7.59 10.27
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River	6.34 7.19	6.66 5.99	6.83 6.96	8.74 10.56	8.96 10.37	10.90	12.00	12.91	12.46	9.42	ND
54 Joe Orr Road, Thorn Creek	6.83	8.36	7.63	8.90	10.91	14.81	12.20	10.77	12.05	7.95	ND
97 170th Street, Thorn Creek 57 Ashland Avenue, Little Calumet River	7.91 6.80	8.02 6.86	7.64 7.82	10.69 9.52	10.72 10.20	13.04 11.25	11.68 10.88	12.14 10.93	12.41 10.76	8.40 8.89	ND ND
58 Ashland Avenue, Calumet-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
59 Cicero Avenue, Calumet-Sag Channel 43 Route 83, Calumet-Sag Channel	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND 9.40
Des Plaines River System											
90 Route 19, Poplar Creek	5.93	5.83	3.48	6.26	7.25	6.75	5.59	6.76	5.70	5.91	ND
63 Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND 0.17	5.41	ND	7.02 9.50	7.30
89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River	9.15 9.39	9.31 8.23	7.04 7.51	9.37 9.31	9.90 10.36	10.62 10.94	9.17 10.71	10.50 10.56	10.82 10.72	10.14	9.61 ND
79 Higgins Road, Salt Creek	4.79	5.91	4.27	7.55	7.71	8.35	8.15	8.41	8.09	7.05	7.01
80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	6.94 6.89	6.24 6.61	5.33 5.24	9.10 9.40		10.26 11.03	9.43 9.86	9.54 10.54	9.12 9.77	9.32 8.27	9.75 ND
24 Wolf Road, Salt Creek	6.63	7.12	6.85	9.29	11.12	11.39	9.45	10.43	10.71	9.13	ND
109 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek	8.37 ND	7.30 ND	7.67 ND	8.92 ND	10.50 ND	10.71 ND	8.96 ND	9.41 ND	10.31 10.68	ND 9.41	ND ND
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	4.78	4.99	3.74	6.99	8.79	11.23	8.33	9.76	8.82	7.32	7.37
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	6.42 5.54	7.56 5.44	7.43 3.78	11.79 8.20	12.65 7.37	15.45 ND	13.34 ND	13.15 ND	15.24 ND	15.72 ND	16.49 ND
12 Lake-Cook Road, Bullalo Creek 13 Lake-Cook Road, Des Plaines River	7.23	7.12	6.05	8.94		11.41	9.53	10.71	9.94	8.21	ND
17 Oakton Street, Des Plaines River	5.94	6.18	5.05	8.40	9.12	10.16	9.23 9.77	10.61	9.39	7.81	ND
19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River	6.60 6.24	5.57 6.23	5,54 6.16	9.81 9.70		11.57 10.91	9.77 8.99	10.62 10.23	10.73 10.38	8.37 7.89	ND ND
22 Ogden Avenue, Des Plaines River	7.06	7.07	8.05	9.27	9.32	11.04	9.51	9.44	10.33	7.92	ND
 Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River 	6.11 7.00	6.19 6.25	7.96 7.55	8.01 9.48	9.51 10.39	10.68 10.87	9.37 9.16	9.32 10.23	10.28 10.53	8.78 8.36	ND ND
91 Material Service Road, Des Plaines River	8.06	7.02	6.48	9.94	9.65	12.34	9.48	10.75	9.88	8.77	9.21
110 Springinsguth Road, West Branch DuPage River	4.53	5.60	4.87	7.41	8.04	8.52	8.22	ND	ND	ND	ND
ND = No Data.											

TABLE AII-82: CHLOROPHYLL *a* MEAN HISTORY 2000 THROUGH 2010

Foster Avenue, North Shore Channel 1.5 1.9 1.4 1.1 1.6 2 37 Wilson Avenue, North Branch Chicago River 2.5 2.8 3.2 2.9 4.7 2	D ND 3 29.1. 3 21.1. 0 6.7. 1 12.1. 0 6 20.4. 2 15.8 6 21.5. 6 21.5. 6 21.5. 6 3.8. 3 4.7. 8 3.0. 2 4.1. 4.1. 5 27. 5 27.	ND 1 47.9 1 19.0 7 11.1 1 32.9 5 10.3 4 21.5 8 16.7 5 4.8 4 1.2 9 4.3 9 4.3 9 4.3 10 4.9 10 3.7 7 3.2 9 5.1	ND 9.6 14.4 11.5 21.5 21.5 11.7 12.5 17.0 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	01 2555555555555555555555555555555555555	8 2525555555555555555555555555555555555
Take Cook Road, West Fork North Branch ND ND ND ND ND ND ND N	66 29.1.1 10 21.1.1 12.1.1 10 22.5.6 20.4.2 15.8.6 21.5 21.5 21.5 21.5 21.5 21.5 21.5 21.5 21.5 21.5 2	1 47.9 1 19.0 1 19.0 1 19.0 1 21.5 5 10.3 2.9 5 10.3 8 16.7 18.1 18.1 18.1 19.4 4.3 4.9 4.9 4.9 4.9 4.9 4.9 7 7 7 8 8 7 8 7 8 8 9 8 9 9 9 9 9 9 9	9.6 14.4 11.5 21.5 16.2 11.7 12.5 17.0 1.5 1.9 3.9 3.6 2.7 3.0	555555555555555555555555555555555555555	255555555555555555555555555555555555555
Take Cook Road, West Fork North Branch ND ND ND ND ND ND ND N	66 29.1.1 10 21.1.1 12.1.1 10 22.5.6 20.4.2 15.8.6 21.5 21.5 21.5 21.5 21.5 21.5 21.5 21.5 21.5 21.5 2	1 47.9 1 19.0 1 19.0 1 19.0 1 21.5 5 10.3 2.9 5 10.3 8 16.7 18.1 18.1 18.1 19.4 4.3 4.9 4.9 4.9 4.9 4.9 4.9 7 7 7 8 8 7 8 7 8 8 9 8 9 9 9 9 9 9 9	9.6 14.4 11.5 21.5 16.2 11.7 12.5 17.0 1.5 1.9 3.9 3.6 2.7 3.0	555555555555555555555555555555555555555	255555555555555555555555555555555555555
103 Golf Road, West Fork North Branch Chicago River 14.0 7.5 9.1 12.4 13.4 29 13.1 Lake-Cook Road, Middle Fork North Branch 5.0 5.1 10.6 7.7 12.0 8 10.4 Glenview Road, North Branch Chicago River 7.0 5.9 10.6 12.2 19.7 10.3 12.4 10.5 10.5 10.5 10.6 7.7 12.0 10.5 10.	3 21.1 0 6.7 1 12.1 10 22.5 66 20.4 2 15.8 66 21.5 66 2.9 1 12.5 66 3.8 3 3.8 3 3.8 3 3.7 7.2 5 27.4	1 19.0 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1	14.4 11.6 18.1 11.5 21.5 16.2 11.7 12.5 17.0 1.5 1.9 4.9 3.9 3.6 2.7 3.0 4.6	555555555555555555555555555555555555555	255555555555555555555555555555555555555
1	1 12.10 0 22.5.6 21.5.8 66 21.5.8 66 29.1 12.5.6 6 14.4 22 1.9.8 4.0 3.8 3.8 3.0 4.7 2.7 4.7 2.7	1 32.9 5 10.3 4 21.5 5 18.1 6 18.1 6 4.8 6 4.8 6 4.3 7 3.2 7 3.2 7 3.2 6 5.7 7 3.2 6 5.7 7 3.2 6 6.1	18.1 11.5 21.5 16.2 11.7 12.5 17.0 1.5 1.9 4.9 3.9 3.9 3.6 2.7 3.0	955555555555555555555555555555555555555	
Lake-Cook Road, Skokie River 7.0 6.2 8.3 8.9 7.6 12 105 Frontage Road, Skokie River 10.1 9.7 18.4 18.1 32.9 15 32 15 34 Dempster Street, North Branch Chicago River 7.7 5.6 8.7 9.7 16.7 24 34 34 32 35 35 35 Central Street, North Shore Channel 17.7 9.9 6.3 6.2 4.5 36 36 36 36 36 36 36 3	0 22.5 6 20.4 2 15.8 6 21.5 6 11.5 6 1.4 2 1.9 8 4.0 3.8 3.3 3.3 4.7 7.2 7.4	5 10.3 4 21.5 5 16.7 7 18.1 6 4.8 4 1.2 4.3 9 4.7 3.2 3.7 3.2 5.7 5.7 5.7 5.7 6.7 6.7 6.7 6.7 7.7 7.7 7.7 7.7 7.7 7	11.5 21.5 16.2 11.7 12.5 17.0 1.5 1.9 4.9 3.9 3.6 2.7 3.0 4.6	555555555555555555555555555555555555555	
Dempster Street, North Branch Chicago River 7.7 5.6 8.7 9.7 16.7 24 96 Albany Avenue, North Branch Chicago River 8.8 7.1 7.8 9.0 14.0 35 35 Central Street, North Shore Channel 17.7 9.9 6.3 6.2 4.5 35 102 Oakton Street, North Shore Channel 16.8 11.3 12.6 16.2 22.6 8 8 7.1 7.8 9.0 14.0 35 102 Oakton Street, North Shore Channel 1.5 1.9 1.4 1.1 1.6 2 2.6 2.7 2.0 2.1 1.3 2.0 1 1.0 1.0 2.1 2.0 2.0	2 15.8 6 21.5 2.9 1 12.5 6 1.4 6 3.8 4.0 3 5.8 3 4.7 3 0 4.1 4 1.2 4 1.2 5 27.4	3 16.7 18.1 19 4.8 4 1.2 4.3 4.9 4.9 4.9 4.9 3.3 5.7 3.2 5.7 5.2 6.1	16.2 11.7 12.5 17.0 1.5 1.9 4.9 3.6 2.7 3.0 4.6	555555555555555555555555555555555555555	88888888888
Albany Avenue, North Branch Chicago River 8.8	6 21.5 6 2.9 1 12.5 6 1.4 2 1.9 8 4.0 3.8 3.5 3.8 3.3 4.7 7.2 27.4	18.1 18.1	11.7 12.5 17.0 1.5 1.9 4.9 3.9 3.6 2.7 3.0 4.6	955555555555555555555555555555555555555	8888888888
Touth Avenue, North Shore Channel 16.8 11.3 12.6 16.2 22.6 8 36 Touthy Avenue, North Shore Channel 2.1 2.0 2.1 1.3 2.0 1 1.1 1.6 2.1 2.0 2.1 1.3 2.0 1 1.1 1.6 2.1 2.0 2.1 1.3 2.0 1 1.1 1.6 2.1 2.0 2.1 1.3 2.0 1 1.1 1.6 2.1 2.0 2.1 1.3 2.0 1 1.1 1.6 2.1 2.0 2.1 1.3 2.0 1 1.1 1.6 2.1 2.0 2.1 1.3 2.0 1 1.1 1.6 2.1 2.0 2.1 1.3 2.0 1 1.1 1.6 2.2 2.1 2.0 2.1 2.0 2.1 2.0 2.1 2.0 2.1 2.0 2.1 2.0 2.1 2.0 2.1 2.0 2.1 2.0 2.1 2.0 2.1 2.0 2.1 2.0 2.1 2.0 2.1 2.0 2.1 2.0	1 12.5 6 1.4 2 1.9 8 4.0 6 3.8 3 5.8 3 4.7 8 3.0 2 4.1 4 7.2 5 27.4	4.8 4.1 2.2 4.3 4.9 4.7 3.3 5.7 3.2 3.7 1.5 2.6 6.1	17.0 1.5 1.9 4.9 3.9 3.6 2.7 3.0 4.6		88888888
Touhy Avenue, North Shore Channel	6 1.4 2 1.9 8 4.0 6 3.8 3 5.8 3 4.7 8 3.0 2 4.1 4 7.2 5 27.4	4.3 4.9 4.7 3 5.7 7 3.2 0 3.7 1 5.2 2 6.1	1.9 4.9 3.9 3.6 2.7 3.0 4.6	955555	888888
Wilson Avenue, North Branch Chicago River 2.5 2.8 3.2 2.9 4.7 2.9	8 4.0 6 3.8 3 5.8 3 4.7 8 3.0 2 4.1 4 7.2 5 27.4	4.9 3 4.7 3 5.7 7 3.2 3 3.7 1 5.2 2 6.1	4.9 3.9 3.6 2.7 3.0 4.6	ND ND ND ND ND	88888 88888
Table Tabl	3 5.8 3 4.7 8 3.0 2 4.1 4 7.2 5 27.4	5.7 7 3.2 0 3.7 1 5.2 2 6.1	3.6 2.7 3.0 4.6	ND ND ND	ND ND ND
Take Shore Drive, Chicago River	3 4.7 8 3.0 2 4.1 4 7.2 5 27.4	7 3.2 3.7 1 5.2 2 6.1	2.7 3.0 4.6	ND ND	ND ND
19	2 4.1 4 7.2 5 27.4	5.2 2 6.1	4.6		
108 Loomis Street, South Branch Chicago River 2.3 2.0 3.0 3.7 6.0 5	4 7.2 5 27.4	2 6.1			ND
Damen Avenue, Chicago Sanitary & Ship Canal ND		1 U N	3.4	ND	ND
ND			9.2 ND	ND ND	ND ND
Harlem Avenue, Chicago Sanitary & Ship Canal 4.0 1.9 2.3 2.6 2.8 3 4.2 Route 83, Chicago Sanitary & Ship Canal 5.5 2.9 4.1 5.2 4.1 5.2 4.1 5.2 4.1 5.2 4.1 5.2 4.1 5.2 4.1 5.2 4.1 5.2 4.1 5.2 4.1 5.2 4.1 5.2 4.1 5.2 4.1 5.2 4.1 5.2 4.1 5.2 4.1 5.2 4.1 5.2 4.1 5.2 5.6 6.1 3.7 5 5.2 5.6 6.1 3.7 5 5.2 5.6 6.1 3.7 5 5.2 5.6 6.1 3.7 5 5.2 5.6 6.1 3.7 5 5.2 5.6 6.1 3.7 5 5.2 5.6 6.1 3.7 5 5.2 5.6 6.1 3.7 5.6 5.4 5.5 5.5 4.0 5 5 5 5 5 5 5 5 5	D ND) ND	3.2 5.0	ND ND	ND ND
Route 83, Chicago Sanitary & Ship Canal 5.5 2.9 4.1 5.2 4.1 6 4.8 Stephen Street, Chicago Sanitary & Ship Canal 4.7 5.2 5.6 6.1 3.7 5.2 Lockport Forebler, Chicago Sanitary & Ship Canal ND	.5 6.0 .6 3.4		2.4	ND	ND
ND			4.2 3.9	ND ND	ND ND
Calumet River System	D ND) ND	ND	ND	ND
Swing Avenue, Calumet River 0.9 2.1 1.7 1.1 1.4 0.5	.2 3.9	7.2	5.3	ND	ND
55 130th Street, Calumet River 3.7 6.3 4.6 4.0 3.3 2 86 Burnham Avenue, Grand Calumet River 75.6 30.8 142.5 101.0 27.4 57 56 Indiana Avenue, Little Calumet River 14.1 27.0 20.6 14.0 25.8 16 76 Halsted Street, Little Calumet River 4.1 12.6 7.8 6.6 8.1 7 52 Wentworth Avenue, Little Calumet River 8.2 7.7 5.5 13.0 4.3 6 54 Joe Orr Road, Thorn Creek 4.7 4.8 4.1 3.0 3.7 12 97 170th Street, Thorn Creek 11.2 9.4 8.5 9.2 5.3 8 57 Ashland Avenue, Little Calumet River 8.0 10.5 8.2 7.1 4.7 9 58 Ashland Avenue, Calumet-Sag Channel 7.0 11.3 8.0 7.2 9.5 10 59 Cicero Avenue, Calumet-Sag Channel 4.0 12.4 7.9 7.8 9.0 7 43 <t< td=""><td>.9 1.4</td><td>4 1.6</td><td>1.7</td><td>ND</td><td>ND</td></t<>	.9 1.4	4 1.6	1.7	ND	ND
State	8 4.8	8.7	3.8	ND	ND
56 Indiana Avenue, Little Calumet River 14.1 27.0 20.6 14.0 25.8 16 76 Halsted Street, Little Calumet River 4.1 12.6 7.8 6.6 8.1 7 52 Wentworth Avenue, Little Calumet River 8.2 7.7 5.5 13.0 4.3 6 54 Joe Orr Road, Thorn Creek 4.7 4.8 4.1 3.0 3.7 12 97 170th Street, Thorn Creek 11.2 9.4 8.5 9.2 5.3 8 57 Ashland Avenue, Little Calumet River 8.0 10.5 8.2 7.1 4.7 9 58 Ashland Avenue, Calumet-Sag Channel 7.0 11.3 8.0 7.2 9.5 10 59 Cicero Avenue, Calumet-Sag Channel 4.0 12.4 7.9 7.8 9.0 7 43 Route 83, Calumet-Sag Channel 5.2 9.0 10.0 6.5 6.3 8 Des Plaines River System 90 Route 19, Poplar Creek 10.0 9.0 8.9 10.9 13.9			9.9 31.1	ND ND	ND ND
52 Wentworth Avenue, Little Calumet River 8.2 7.7 5.5 13.0 4.3 6 54 Joe Orr Road, Thorn Creek 4.7 4.8 4.1 3.0 3.7 12 97 170th Street, Thorn Creek 11.2 9.4 8.5 9.2 5.3 8 57 Ashland Avenue, Little Calumet River 8.0 10.5 8.2 7.1 4.7 9 58 Ashland Avenue, Calumet-Sag Channel 7.0 11.3 8.0 7.2 9.5 10 59 Cicero Avenue, Calumet-Sag Channel 4.0 12.4 7.9 7.8 9.0 7 43 Route 83, Calumet-Sag Channel 5.2 9.0 10.0 6.5 6.3 8 Des Plaines River System 90 Route 19, Poplar Creek 10.0 9.0 8.9 10.9 13.9 12 63 Longmeadow Lane, West Branch DuPage River ND ND ND ND ND ND ND ND ND	4 7.2	24.4	26.4	ND	ND
54 Joe Orr Road, Thorn Creek 4.7 4.8 4.1 3.0 3.7 12 97 170th Street, Thorn Creek 11.2 9.4 8.5 9.2 5.3 8 57 Ashland Avenue, Calumet Sag Channel 8.0 10.5 8.2 7.1 4.7 9 58 Ashland Avenue, Calumet-Sag Channel 7.0 11.3 8.0 7.2 9.5 10 59 Cicero Avenue, Calumet-Sag Channel 4.0 12.4 7.9 7.8 9.0 7 43 Route 83, Calumet-Sag Channel 5.2 9.0 10.0 6.5 6.3 8 Des Plaines River System 90 Route 19, Poplar Creek 10.0 9.0 8.9 10.9 13.9 12 63 Longmeadow Lane, West Branch DuPage River ND			9.1 5.7	ND ND	ND ND
57 Ashland Avenue, Little Calumet River 8.0 10.5 8.2 7.1 4.7 9 58 Ashland Avenue, Calumet-Sag Channel 7.0 11.3 8.0 7.2 9.5 10 59 Cicero Avenue, Calumet-Sag Channel 4.0 12.4 7.9 7.8 9.0 7 43 Route 83, Calumet-Sag Channel 5.2 9.0 10.0 6.5 6.3 8 Des Plaines River System 90 Route 19, Poplar Creek 10.0 9.0 8.9 10.9 13.9 12 63 Longmeadow Lane, West Branch DuPage River ND	.4 6.7	7 8.5	9.2	ND	ND
58 Ashland Avenue, Calumet-Sag Channel 7.0 11.3 8.0 7.2 9.5 10 59 Cicero Avenue, Calumet-Sag Channel 4.0 12.4 7.9 7.8 9.0 7 43 Route 83, Calumet-Sag Channel 5.2 9.0 10.0 6.5 6.3 8 Des Plaines River System 90 Route 19, Poplar Creek 10.0 9.0 8.9 10.9 13.9 12 63 Longmeadow Lane, West Branch DuPage River ND ND <td< td=""><td>.2 8.8 .2 7.5</td><td></td><td>10.4 11.2</td><td>ND ND</td><td>ND ND</td></td<>	.2 8.8 .2 7.5		10.4 11.2	ND ND	ND ND
Des Plaines River System	4.8	3 15.3	11.5 11.8	ND ND	ND ND
Des Plaines River System 10.0 9.0 8.9 10.9 13.9 12 63 Longmeadow Lane, West Branch DuPage River ND			15.8	ND	ND
63 Longmeadow Lane, West Branch DuPage River ND ND ND ND ND ND ND NB Walnut Lane, West Branch DuPage River 4.8 5.9 6.6 7.3 5.4 9					
89 Walnut Lane, West Branch DuPage River 4.8 5.9 6.6 7.3 5.4 9			15.9 ND	ND ND	ND ND
CA T 1 D W D D D	.1 3.7	7 9.0	5.9	ND	ND
64 Lake Street, West Branch DuPage River 15.9 18.8 19.4 23.2 20.2 24 79 Higgins Road, Salt Creek 26.3 21.3 33.9 39.0 33.9 31			24.9 30.6	ND ND	ND ND
80 Arlington Heights Road, Salt Creek 15.6 13.6 11.7 13.8 16.5 12	4 11.2	2 18.6	12.9	ND	ND
18 Devon Avenue, Salt Creek 13.6 15.0 13.6 14.3 17.6 14 24 Wolf Road, Salt Creek 8.6 8.0 8.9 7.4 12.0 11		1 12.9	16.2 13.7	ND ND	ND ND
109 Brookfield Avenue, Salt Creek 8.2 9.5 6.1 7.3 16.1 11		17.9	12.8 22.8	ND ND	ND ND
21 First Avenue, Salt Creek ND	1 8.5	5 11.4	14.3	ND	ND
78 Wille Road, Higgins Creek 2.6 2.2 2.4 3.8 3.0 2	5 2.6 D ND		2.8 ND	ND ND	ND ND
13 Lake-Cook Road, Des Plaines River 12.3 10.7 18.8 13.7 16.9 27	5 21.0	34.1	27.3 20.5	ND	ND
17 Oakton Street, Des Plaines River 14.2 19.2 35.1 12.3 13.0 34 19 Belmont Avenue, Des Plaines River 13.7 13.7 22.0 6.1 12.3 23.			20.5 11.2	ND ND	ND ND
20 Roosevelt Road, Des Plaines River 12.6 20.1 23.3 6.7 11.4 23	4 14.2	2 28.7	10.0	ND	ND
22 Ogden Avenue, Des Plaines River 11.5 19.7 20.7 6.1 15.8 19 23 Willow Springs Road, Des Plaines River 12.6 27.5 22.5 5.1 13.5 29			12.9 20.6	ND ND	ND ND
29 Stephen Street, Des Plaines River 16.9 29.9 22.4 9.5 17.5 49	0 25.5	5 49.1	34.5 35.3	ND	ND
91 Material Service Road, Des Plaines River 26.3 24.1 26.3 11.9 23.8 34 110 Springinsguth Road, West Branch DuPage River 17.2 14.0 14.3 21.4 14.5 59			35.3 ND	ND ND	ND ND
ND = No Data.	8 10.6				

TABLE AII-83: BENZENE MEAN HISTORY 2000 THROUGH 2010

					Aı	nnual l	Means	(μg/I	L)			
Sam	pling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chic	cago River System											
30 106	Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River	ND 0.000	ND 0.000	ND 0.000	ND 0.000	0.000	ND 0.000	0.000	ND 0.000	ND ND	ND ND	ND ND
103	Golf Road, West Fork North Branch Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
31 104	Lake-Cook Road, Middle Fork North Branch Glenview Road, North Branch Chicago River		0.000	0.000	0.000		0.000	0.000		ND ND	ND ND	ND ND
32	Lake-Cook Road, Skokie River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
105 34	Frontage Road, Skokie River Dempster Street, North Branch Chicago River		0.000	0.000		0.000	0.000	0.000		ND ND	ND ND	NE NE
96	Albany Avenue, North Branch Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
35 102	Central Street, North Shore Channel Oakton Street, North Shore Channel		0.000			0.000	0.000	0.000	0.000	ND ND	ND ND	ND ND
36	Touhy Avenue, North Shore Channel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	NE
101 37	Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River		$0.000 \\ 0.000$		0.000		0.000	0.000		ND ND	ND ND	ND ND
73	Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
46 74	Grand Avenue, North Branch Chicago River Lake Shore Drive, Chicago River		0.000	0.000		0.000	0.000	0.000		ND ND	ND ND	ND ND
100	Wells Street, Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
39 108	Madison Street, South Branch Chicago River		0.000				0.000	0.000		ND ND	ND ND	ND ND
99	Loomis Street, South Branch Chicago River Archer Avenue, South Fork South Branch Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
40	Damen Avenue, Chicago Sanitary & Ship Canal	0.000 ND	0.000 ND	0.000 ND	0.000 ND	0.000 ND	0.000 ND	0.000 ND	0.000 ND	ND ND	ND ND	ND ND
107 75	Western Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal		0.000						0.000	ND	ND	ND
41	Harlem Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000 0.000	0.000	0.000	0.000 0.000	ND ND	ND ND	ND ND
42 48	Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal	0.000	0.000	0.000		0.000	0.000	0.000	0.000	ND	ND	ND
82 92	Lockport Trebler, Chicago Sanifary & Ship Canal Lockport Forebay, Chicago Sanifary & Ship Canal	ND 0.000	ND 0.000	ND 0.000	ND 0.000	ND 0.000	ND 0.000	ND 0.000	ND 0.000	ND ND	ND ND	ND ND
Calı	imet River System	,										
49	Ewing Avenue, Calumet River		0.000						0.000	ND ND	ND ND	ND ND
50 55	Burnham Avenue, Wolf Lake 130th Street, Calumet River	0.000	0.000	0.000		0.000	0.000	0.000		ND	ND	ND
86	Burnham Avenue, Grand Calumet River	0.000	0.000	0.000	0.000	0.000		0.000		ND	ND ND	ND ND
56 76	Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River		0.000		0.000		0.000	0.000		ND ND	ND	ND
52	Wentworth Avenue, Little Calumet River	0.000	0.000	0.000	0.000	0.000	0.000	0.000		ND ND	ND ND	ND
54 97	Joe Orr Road, Thorn Creek 170th Street, Thorn Creek		0.000		0.000	0.000	0.000	0.000	0.000	ND	ND	ND ND
57	Ashland Avenue, Little Calumet River	0.000	0.000	0.000	0.000	0.000	0.000		0.000	ND	ND	ND
58 59	Ashland Avenue, Calumet-Sag Channel Cicero Avenue, Calumet-Sag Channel	0.000	0.000		0.000		0.000	0.000	0.000	ND ND	ND ND	ND ND
43	Route 83, Calumet-Sag Channel		0.000						0.000	ND	ND	ND
	Plaines River System	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
90 63	Route 19, Poplar Creek Longmeadow Lane, West Branch DuPage River	0.000 ND	ND	0.000 ND	ND	0.000 ND	ND		0.000	ND ND	ND	ND
89	Walnut Lane, West Branch DuPage River	0.000						0.000		ND	ND ND	ND ND
64 79	Lake Street, West Branch DuPage River Higgins Road, Salt Creek	0.000						0.000		ND ND	ND	ND
80	Arlington Heights Road, Salt Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
18 24	Devon Avenue, Salt Creek Wolf Road, Salt Creek							0.000		ND ND	ND ND	ND ND
109	Brookfield Avenue, Salt Creek	0.000	0.000	0.000	0.000	0.000	ND	ND	ND	ND	ND	ND
21 77	First Avenue, Salt Creek Elmhurst Road, Higgins Creek	ND 0.000	0.000	ND 0 000	0 000	0 000	0.000	0.000	0.000	ND ND	ND ND	ND ND
78	Wille Road, Higgins Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
12 13	Lake-Cook Road, Buffalo Creek Lake-Cook Road, Des Plaines River		0.000				0.000	0.000	ND 0.000	ND ND	ND ND	ND ND
17	Oakton Street, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
19 20	Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River		0.000					0.000		ND ND	ND ND	ND ND
22	Ogden Avenue, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
23	Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND ND	ND ND	ND ND
20		U.V.N.N.	0.000	0.000	0.000	U.UUU	U.UUU				110	
29 91	Material Service Road, Des Plaines River		0.000			0.000	0.000	0.000	0.000	ND	ND ND	ND ND

TABLE AII-84: ETHYLBENZENE MEAN HISTORY 2000 THROUGH 2010

					Aı	nnual	Means	s (μg/I	(ــ)			
San	npling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chi	cago River System											
30 106 103 31 104 32 105 34 96 35 102 36 101 37 73 46 74 100	Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River Frontage Road, Skokie River Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River Central Street, North Shore Channel Oakton Street, North Shore Channel Touhy Avenue, North Shore Channel Wilson Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River Grand Avenue, North Branch Chicago River Lake Shore Drive, Chicago River Wells Street, Chicago River Wells Street, Chicago River	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	555555555555555555555555555555555555555	255555555555555555555555555555555555555	
39 108 99 40 107 75 41 42 48 82 92	Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal Harlem Avenue, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal	0.000 0.000 0.000 ND 0.000 0.000 0.000 0.000 ND	0.000 0.000 0.000 ND 0.000 0.000 0.000 0.000 ND	0.000 0.000 0.000 0.000 ND 0.000	0.000 0.000 0.000 ND 0.000 0.000 0.000 0.000 ND	0.000 0.000 0.000 ND 0.000 0.000 0.000 0.000 ND	0.000 0.000 0.000 ND 0.000 0.000 0.000 0.000 ND	0.000 0.000 0.000 ND 0.000 0.000 0.000 0.000 ND	0.000 0.000 0.000 ND 0.000 0.000 0.000 0.000 ND	99999999999		NII NII NII NII NII NII NII NII
49 50 55 86 56 76 52 54 97 57 58 59 43	Ewing Avenue, Calumet River Burnham Avenue, Wolf Lake 130th Street, Calumet River Burnham Avenue, Grand Calumet River Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River Wentworth Avenue, Little Calumet River Joe Orr Road, Thorn Creek 170th Street, Thorn Creek Ashland Avenue, Little Calumet River Ashland Avenue, Calumet-Sag Channel Cicero Avenue, Calumet-Sag Channel Route 83, Calumet-Sag Channel	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	$0.000 \\ 0.000$	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000		0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 ND 0.000 0.000	255555555555555555555555555555555555555		
Des 90 63 89 64 79 80 81 82 109 21 77 78 12 13 17 19 20 22 23 29 91 110	Plaines River System Route 19, Poplar Creek Longmeadow Lane, West Branch DuPage River Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River Higgins Road, Salt Creek Arlington Heights Road, Salt Creek Devon Avenue, Salt Creek Wolf Road, Salt Creek Brookfield Avenue, Salt Creek Eimhurst Road, Higgins Creek Eimhurst Road, Higgins Creek Lake-Cook Road, Buffalo Creek Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River Material Service Road, Des Plaines River Material Service Road, Des Plaines River Springinsguth Road, West Branch DuPage River	ND 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	ND 0.000 0.000 0.000 0.000 0.000 ND 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000	ND 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	ND 0.000 0.000 0.000 0.000 0.000 ND ND 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 ND ND 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 ND ND ND 0.000 0.000 0.000 0.000 0.000	999999999999999999999999999999999999999	255555555555555555555555555555555555555	

TABLE AII-85: TOLUENE MEAN HISTORY 2000 THROUGH 2010

				A	nnual	Means	s (μg/I	L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River	ND 0.000	ND 0.000	ND 0.000	ND 0.000	ND 0.000	ND 0.000	ND 0.000	ND 0.000	ND ND	ND ND	ND ND
103 Golf Road, West Fork North Branch Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND ND	ND	ND ND
104 Glenview Road, North Branch Chicago River	0.000		0.000	0.000	0.000	0.000	0.000	0.000	ND	ND ND	ND
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River		0.000			0.000			0.000	ND ND	ND ND	ND ND
34 Dempster Street, North Branch Chicago River 96 Albany Avenue, North Branch Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND ND	ND ND	ND ND
35 Central Street, North Shore Channel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
102 Oakton Street, North Shore Channel 36 Touhy Avenue, North Shore Channel		0.000	0.000			0.000		0.000	ND ND	ND ND	ND ND
101 Foster Avenue, North Shore Channel 37 Wilson Avenue, North Branch Chicago River		0.000			0.000 0.000		0.667 0.000	0.000	ND ND	ND ND	ND ND
73 Diversey Parkway, North Branch Chicago River	0.000	0.333	0.000	1.067	0.000	2.200	1.000	ND	ND	ND	ND
46 Grand Ávenue, North Branch Chicago Říver 74 Lake Shore Drive, Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND ND	ND ND	ND ND
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River		0.000	0.000	0.000 0.625	0.000	0.000	0.000		ND ND	ND ND	ND ND
108 Loomis Street, South Branch Chicago River		0.000					0.000		ND ND	ND ND	ND ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal 75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	ND 0.000	ND 0.000	ND 0.000	ND ND	ND ND	ND ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal	0.000	0.000 0.000	0.000 0.000	0.000	0.000	0.000	0.000		ND ND	ND ND	ND ND
48 Stephen Street, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
 82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal 	0.000	0.000	ND 0.000	ND 0.000	ND 0.000	0.000	ND 0.000	ND 0.000	ND ND	ND ND	ND ND
Calumet River System											
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	0.000		0.000				0.000		ND ND	ND ND	ND ND
55 130th Street, Calumet River	0.000	0.000 1.033	0.000	0.000	0.000	0.000	0.000	0.000	ND ND	ND ND	ND ND
56 Indiana Avenue, Little Calumet River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River	0.000	0.483	0.433	0.000	0.000	0.000	0.000	0.000	ND ND	ND ND	ND ND
54 Joe Orr Road, Thorn Creek 97 170th Street, Thorn Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.000 0.000	ND 0.000	ND ND	ND ND	ND ND
57 Ashland Avenue, Little Calumet River	0.000	0.000	0.000	0.000	0.000	0.400	0.000	0.000	ND	ND	ND
58 Ashland Avenue, Calumet-Sag Channel 59 Cicero Avenue, Calumet-Sag Channel	0.000	0.467 0.000	0.000	0.000	0.000		0.000	0.000	ND ND	ND ND	ND ND
43 Route 83, Calumet-Sag Channel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
Des Plaines River System 90 Route 19, Poplar Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
63 Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	0.000	ND	ND	ND
 Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River 					0.000	0.000	0.000	0.000	ND ND	ND ND	ND ND
79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek				0.000			0.000		ND ND	ND ND	ND ND
18 Devon Avenue, Salt Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
109 Brookfield Avenue, Salt Creek		0.000	0.000	0.000	0.000	ND	0,000 ND	ND	ND ND	ND ND	ND ND
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	0.000	0.000	0.000	0.000	ND 0.000	0.000	0.000	0.000	ND ND	ND ND	ND ND
78 Wille Road, Higgins Creek	0.000	0.000	0.000	0.000	0.000	0.000 ND	0.000 ND	0.000 ND	ND ND	ND ND	ND ND
13 Lake-Cook Road, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
19 Belmont Avenue, Des Plaines River	0.000		0.000	0.000	0.000	0.000	0.000	0.000	ND ND	ND ND	ND ND
20 Roosevelt Road, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND ND	ND ND	ND ND
23 Willow Springs Road, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
91 Material Service Road, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND ND	ND ND	ND ND
110 Springinsguth Road, West Branch DuPage River	0.000	0.000	0.000	0.625	0.000	2.200	0.000	ND	ND	ND	ND

TABLE AII-86: XYLENE MEAN HISTORY 2000 THROUGH 2010

				A	nnual	Means	; (μg/I	L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND							
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	0.000	0.000	0.000	0.000		0.000	0.000		ND ND	ND ND	ND ND
31 Lake-Cook Road, Middle Fork North Branch	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River		0.000			0.000	0.000		0.000	ND ND	ND ND	ND ND
105 Frontage Road, Skokie River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
34 Dempster Street, North Branch Chicago River 96 Albany Avenue, North Branch Chicago River		0.000			0.000	0,000	0.000		ND ND	ND ND	ND ND
35 Central Street, North Shore Channel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
102 Oakton Street, North Shore Channel 36 Touhy Avenue, North Shore Channel		0.000		0.000		0.000	0.000		ND ND	ND ND	ND ND
101 Foster Avenue, North Shore Channel					0.000	0.000	0.000	0.000	ND	ND	ND
37 Wilson Avenue, North Branch Chicago River		0.000			0.000	0.000	0.000		ND ND	ND ND	ND ND
73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River						0.000			ND	ND	ND
74 Lake Shore Drive, Chicago River		0.000	0.000	0.000		0.000	0.000		ND ND	ND ND	ND ND
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River		0.000		0.000		0.000	0.000		ND	ND	ND
108 Loomis Street, South Branch Chicago River				0.000		0.000			ND ND	ND ND	ND ND
 Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal 	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	0.000	ND 0.000	ND 0.000	ND ND	ND ND	ND ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal 41 Harlem Avenue, Chicago Sanitary & Ship Canal		0.000		0.000		0.000	0.000	0.000	ND	ND	ND
42 Route 83, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal	0.000 ND	ND ND	ND ND	ND ND							
92 Lockport Forebay, Chicago Sanitary & Ship Canal						0.000			ND	ND	ND
Calumet River System							0.000	0.000			
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	0.000	0.000				0.000			ND ND	ND ND	ND ND
55 130th Street, Calumet River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
			0.000		0.000	0.000	0.000		ND ND	ND ND	ND ND
76 Halsted Street, Little Calumet River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 ND	ND ND	ND ND	ND ND
97 170th Street, Thorn Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
		0.000	0.000		0.000	0.000		0.000	ND ND	ND ND	ND ND
59 Cicero Avenue, Calumet-Sag Channel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
43 Route 83, Calumet-Sag Channel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
Des Plaines River System	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	M	M	ND
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	0.000 ND	ND.	ND	0.000 ND	ND.	0.000 ND	0.000 ND	0.000	ND ND	ND ND	ND ND
89 Walnut Lane, West Branch DuPage River			0.000			0.000		0.000	ND	ND	ND
						0.000		0.000	ND ND	ND ND	ND ND
80 Arlington Heights Road, Salt Creek						0.000			ИD	ND	ND
18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND ND	ND ND	ND ND
109 Brookfield Avenue, Salt Creek	0.000	0.000	0.000	0.000	0.000	ND	ND	ND.	ND	ND	ND
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	ND 0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND 0.000	ND ND	ND ND	ND ND
78 Wille Road, Higgins Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
				0.000		0.000	0.000	ND 0.000	ND ND	ND ND	ND ND
17 Oakton Street, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
						0.000			ND ND	ND ND	ND ND
22 Ogden Avenue, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
						0.000			ND ND	ND ND	ND ND
2. Stephen Green, 1965 I miles Kivel							0.000		ND	ND	ND
						0.000		ND	ND	ND	ND

TABLE AII-87: TOTAL SILVER MEAN HISTORY 2000 THROUGH 2010

					A	nnual l	Means	(mg/	L)			
Sampling S	tation (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago Riv	er System											
30 Lake-Co	ok Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND		
103 Golf Roa	Road, West Fork North Branch Chicago River d, West Fork North Branch Chicago River	0.000	0.000				0.000	0.001		0.001		ND ND
31 Lake-Co	ok Road, Middle Fork North Branch Road, North Branch Chicago River		0.000				0.000				0.000	0.001 ND
32 Lake-Co	ok Road, Skokie River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.000	0.001
	Road, Skokie River r Street, North Branch Chicago River		0.000				0.000	0.000			0.001	ND 0.001
96 Albany A	venue, North Branch Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001
	treet, North Shore Channel treet, North Shore Channel		0.000						0.000	0.001		0.000 ND
36 Touhy A	enue, North Shore Channel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.001	0.001
101 Foster Av 37 Wilson A	venue, North Shore Channel venue, North Branch Chicago River		0.000				0.000			0.001	0.001	0.000
73 Diversey	Parkway, North Branch Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000
	venue, North Branch Chicago River ore Drive, Chicago River		0.000			0.000	0.000	0.000	0.002 0.000		0.001	0.000
100 Wells Str	eet, Chicago River Street, South Branch Chicago River	0.000	0.000	0.000	0.000						0.000 0.001	ND 0.000
108 Loomis S	street, South Branch Chicago River		0.000		0.000	0.000	0.000	0.000	0.001	0.003	0.000	ND
	venue, South Fork South Branch Chicago River venue, Chicago Sanitary & Ship Canal		0.000				0.000	0.000		0,002 ND	0.000 ND	ND 0.000
107 Western	Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	0.001	0.000	ND
	venue, Chicago Sanitary & Ship Canal Evenue, Chicago Sanitary & Ship Canal		0.000				0.000		0.001		0.001	0.001
42 Route 83	, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000
48 Stephen: 82 Lockport	Street, Chicago Sanitary & Ship Canal Trebler, Chicago Sanitary & Ship Canal	U.UUU ND	0.000 ND	0.000 ND	0,000 ND	0.000 ND	0.000 ND	0.000 ND	0.001 ND	0.001 ND	0.000 ND	
	Forebay, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001
Calumet Riv					0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.001
	venue, Calumet River Avenue, Wolf Lake				0.000					0.002	0.001	0.001
55 130th Str	eet, Calumet River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	100.0	0.000
	Avenue, Grand Calumet River Avenue, Little Calumet River				0.000				000.0 100.0	0.002		
76 Halsted S	treet, Little Calumet River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.003		0.001
54 Joe Ort R	th Avenue, Little Calumet River oad, Thorn Creek		0.000				0.000			0.003	0.001	0.001
	eet, Thorn Creek Avenue, Little Calumet River		0.000	0.000	0.000			0.000		0.003	0.001	ND 0.002
58 Ashland	Avenue, Calumet-Sag Channel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.000
59 Cicero A	venue, Calumet-Sag Channel , Calumet-Sag Channel		0.000		0.000		0.001	0.000	0.000	0.001	0.002	0.000
	River System	0.000	0.000	0.000	0.000							•
	Poplar Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.000
63 Longmea	dow Lane, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	0.000			0.000
89 Walnut L 64 Lake Stre	ane, West Branch DuPage River et, West Branch DuPage River		0.000		0.000				0.000		0.001	
	Road, Salt Creek Heights Road, Salt Creek		0.000		0.000				0.001		0.001	
18 Devon Av	enue, Salt Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.001	0.000
24 Wolf Roa 109 Brookfiel	d, Salt Creek d Avenue, Salt Creek	0.000	0.000 0.000	0.000	0.000 0.000	0.000 0.000	0.000	0.000	0.001	0.001	0.001 ND	0.000 ND
21 First Ave	nue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	0.000	0.001	0.001
78 Wille Roa	Road, Higgins Creek ad, Higgins Creek		0.000			0.000	0.000		0.000		0.001	0.000
12 Lake-Coo	ok Road, Buffalo Creek	0.000	0.000	0.000	0.000	0.000	ND	ND	ND	ND	ND	ND
13 Lake-Coo 17 Oakton S	ok Road, Des Plaines River treet, Des Plaines River		0.000		0.000	0.000	0.000	0.000	0.000	0.003	0.001	0.001
19 Belmont.	Avenue, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001
22 Ogden Av	t Road, Des Plaines River venue, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.001	0.000
23 Willow S	orings Road, Des Plaines River treet, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.000
91 Material S	Service Road, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.000		0.001	0.000	0.001 0.001	
110 Springins	guth Road, West Branch DuPage River				0.000				ND	ND	ND	ND

TABLE AII-88: TOTAL ARSENIC MEAN HISTORY 2000 THROUGH 2010

				Aı	nnual l	Means	(mg/l	L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River 105 Lake-Cook Road, Skokie River 106 Frontage Road, Skokie River 107 Dempster Street, North Branch Chicago River 108 Albany Avenue, North Branch Chicago River 109 Central Street, North Shore Channel 100 Oakton Street, North Shore Channel 101 Touhy Avenue, North Shore Channel 102 Touhy Avenue, North Shore Channel	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	ND 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.001 0.000 0.001 0.001 0.000 0.001	0.000 0.000 0.001 0.000 0.000 0.000 0.001	0.000 0.000 0.000 0.001 0.000 0.000 0.001 0.000	0.003 0.000 0.000 0.003 0.004 0.002 0.000 0.000 0.002 0.002	0.005 0.006 0.008 0.007 0.009 0.003 0.005 0.006	NE 0.000 NE 0.008 NE 0.007 0.000 0.000
 36 Touhy Avenue, North Shore Channel 101 Foster Avenue, North Shore Channel 37 Wilson Avenue, North Branch Chicago River 38 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River 48 Lake Shore Drive, Chicago River 49 Wells Street, Chicago River 40 Madison Street, South Branch Chicago River 40 Loomis Street, South Branch Chicago River 40 Damen Avenue, Chicago Sanitary & Ship Canal 	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.001 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.001 0.000 0.000 0.000 0.000 0.000	0.000 0.003 0.003 0.000 0.003 0.000 0.000 0.000 0.006 ND	0.005 0.010 0.005 0.004 0.004 0.000 0.007	ND 0.013 0.011 0.000 0.000 ND 0.000 ND 0.000
 Western Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal Harlem Avenue, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal 	0.000 0.000 0.000 ND	ND 0.000 0.000 0.000 0.000 ND 0.000	0.000 0.000 0.000 ND	0.000 0.000 0.000 ND	0.000 0.000 0.000 ND	ND 0.000 0.000 0.000 0.000 ND 0.000	0.000 0.000 0.000 ND	0.000	0.005 0.000 0.003 ND	ND	0.000 0.000 0.000 0.000
Calumet River System	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.007	0.005
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake 51 130th Street, Calumet River 86 Burnham Avenue, Grand Calumet River 166 Indiana Avenue, Little Calumet River 167 Halsted Street, Little Calumet River 168 Wentworth Avenue, Little Calumet River 170th Street, Thorn Creek 170th Street, Thorn Creek 170th Street, Thorn Creek 170th Street, Thorn Creek 170th Street, Calumet River 170th S	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.002 0.000 0.000 0.001 0.000 0.000 0.000 0.001 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.006 0.008 0.002 0.006 0.010 0.000 0.017 0.010 0.003 0.004 0.009	0.007 0.005 0.002 0.004 0.005 0.004 0.006 0.005 0.007 0.006 0.005	0.000 0.005 0.005 0.018 0.000 0.007 ND 0.005
Des Plaines River System 90 Route 19, Poplar Creek	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.003	0.005	0.000
63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek 19 Brookfield Avenue, Salt Creek	ND 0.000 0.000 0.000 0.000 0.000	ND 0.000 0.000 0.000	ND 0.000 0.000 0.000 0.000 0.000	ND 0.000 0.000 0.000 0.000 0.000	ND 0.000 0.000 0.000 0.000 0.000 0.000	ND 0.000 0.001 0.001 0.000 0.000	ND 0.001 0.001 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	ND 0.002 0.004 0.000 0.002 0.002 0.007	0.005 0.006 0.005 0.007 0.003 0.006	0.010 0.000 0.009 0.000 0.000 0.005
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek 78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River 17 Oakton Street, Des Plaines River 19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River 22 Ogden Avenue, Des Plaines River 23 Willow Springs Road, Des Plaines River	ND 0.000 0.000 0.000 0.000 0.000 0.000 0.000	ND 0.000 0.000 0.000 0.000 0.000 0.000	ND 0.000 0.000 0.545 0.000 0.000 0.000 0.000	ND 0.000 0.000 0.000 0.000 0.000 0.000 0.000	ND 0.000 0.000 0.001 0.000 0.000 0.001 0.001	ND 0.000 0.001 ND 0.001 0.001 0.001 0.001 0.002	ND 0.001 0.000 ND 0.000 0.000 0.000 0.000		0.000 0.000 0.002 ND 0.008 0.005 0.004 0.000 0.002	0.003 0.004 0.002 ND 0.003 0.008 0.003 0.003	0.007 0.000 0.007 ND 0.012 0.000 0.000 0.000
29 Stephen Street, Des Plaines River 91 Material Service Road, Des Plaines River 110 Springinsguth Road, West Branch DuPage River ND = No Data.	0.000	0.000 0.000 0.000	$0.000 \\ 0.000$	$0.000 \\ 0.000$	0.000	$0.001 \\ 0.002$	0.001 0.001	0.000 0.000 ND	0.004	0.002 0.004 ND	0.000

TABLE AII-89: TOTAL BARIUM MEAN HISTORY 2000 THROUGH 2010

Annual Means (mg/L)												
Sam	pling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chie	cago River System											
30 106	Lake-Cook Road, West Fork North Branch	ND 0.064	ND 0.060	ND 0.063	ND 0.062	ND 0.056	ND 0.051	ND 0.069	ND 0.048	ND 0.054		0.083 NE
103	Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River	0.054	0.048	0.048	0.052	0.052	0.055	0.048	0.051	0.051	0.052	NI
31 104	Lake-Cook Road, Middle Fork North Branch Glenview Road, North Branch Chicago River	0.039	0.036 0.032	0.042 0.037	0.041 0.034		0.042 0.032	0.040 0.034	0.045	0.045 0.035		0,041 NI
32	Lake-Cook Road, Skokie River	0.042	0.038	0.042	0.048	0.043	0.041	0.046	0.045	0.047	0.053	
105 34	Frontage Road, Skokie River Dempster Street, North Branch Chicago River		0.030 0.035	0.035			0.030 0.041	0.033	0.039		0.047	0.03
96 35	Albany Avenue, North Branch Chicago River Central Street, North Shore Channel		0.037 0.021	0.042 0.024			0.040 0.025	0.037 0.023		0.043 0.030		
102	Oakton Street, North Shore Channel	0.026	0.023	0.025	0.025	0.023	0.025	0.023	0.026	0.025	0.027	NI
36 101	Touhy Avenue, North Shore Channel Foster Avenue, North Shore Channel	0.022	0.026 0.025	0.026 0.027	0.024 0.024		0.022 0.022	0.023	0.020	0.024		0.01 NI
37	Wilson Avenue, North Branch Chicago River	0.028	0.027	0.030	0.027	0.025	0.024	0.026	0.024 0.027	0.028	0.031	0.02
73 46	Diversey Parkway, North Branch Chicago River Grand Avenue, North Branch Chicago River		0.027 0.027	0.030		0.026	0.024 0.025	0.028	0.024	0.028	0.031	0.02
74 100	Lake Shore Drive, Chicago River	0.023	0.022 0.024	0.023 0.026	0.024 0.024		0.023 0.023	0.025 0.024	0.023	0.025 0.027	0.026 0.028	0.023 NI
39	Wells Street, Chicago River Madison Street, South Branch Chicago River	0.026	0.027	0.028	0.027	0.025	0.024	0.024	0.023	0.027	0.031	0.022
108 99	Loomis Street, South Branch Chicago River Archer Avenue, South Fork South Branch Chicago River		0.027		0.028 0.025	0.026	0.025 0.025	0.025 0.025	0.024	0.027 0.029		NI NI
40	Damen Avenue, Chicago Sanitary & Ship Canal	0.027	0.027	0.029	0.028	0.027	0.025	0.025	0.025	ND	ND	
107 75	Western Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal	ND 0.026	ND 0.027	ND 0.030	ND 0.027	ND 0.026	ND 0.025	ND 0.026	ND 0.024		0.031	
41 42	Harlem Avenue, Chicago Sanitary & Ship Canal	0.022 0.021	0.023 0.022	0.024 0.024		0.021 0.020	0.020	0.020 0.020	0.019	0.023 0.023		
48	Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal	0.023	0.023	0.026	0.025	0.023	0.023	0.023	0.023	0.024	0.027	0.020
82 92	Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal	ND 0.023	ND 0.024	ND 0.026	ND 0.023	ND 0.023	ND 0.023	ND 0.024	ND 0.022	ND 0.026	ND 0.028	
	umet River System											
49	Ewing Avenue, Calumet River	0.022	0.022					0.023			0.030	0.022
50 55	Burnham Avenue, Wolf Lake 130th Street, Calumet River	0.035 0.028	0.034		0.036 0.032		0.033		0.028	0.029 0.035	0.031	0.024
86	Burnham Avenue, Grand Calumet River	0.037	0.028	0.031	0.034	0.029	0.043 0.030	0.027		0.029 0.037		
56 76	Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River		0.033 0.025	0.034 0.027	0.033 0.024		0.022	0.022	0.020	0.024	0.030	0.01
52 54	Wentworth Avenue, Little Calumet River Joe Orr Road, Thorn Creek		0.039	0.040 0.031	0.039 0.028		0.037 0.042	0.042 0.034	0.043	0.045 0.030	0.047	0.04
97	170th Street, Thorn Creek	0.041	0.037	0.038	0.035	0.041	0.042	0.042	0.038	0.041	0.043	NI
57 58	Ashland Avenue, Little Calumet River Ashland Avenue, Calumet-Sag Channel		0.037 0.027	0.038	0.036 0.026	0.042	0.040	0.043 0.025		0.040	0.044	
59	Cicero Avenue, Calumet-Sag Channel	0.026	0.027	0.027	0.027	0.028	0.024	0.027	0.026	0.028	0.035	0.02
43	Route 83, Calumet-Sag Channel	0.026	0.027	0.027	0.027	0.028	0.025	0.026	0.028	0.030	0.034	0.024
<u>90</u>	Plaines River System Route 19, Poplar Creek	0.069	0.062	0.071	0.078	0.095	0.112	0.102	0.079	0.071	0.067	0.053
63	Longmeadow Lane, West Branch DuPage River	ND	0.047	ND	0.072	0.044						
89 64	Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River	0.031	0.029	0.032	0.029		0.026	0.028 0.035			0.035 0.042	
79	Higgins Road, Salt Creek	0.038	0.041	0.051	0.045	0.044	0.053	0.052	0.045	0.048	0.061	0.040
80 18	Arlington Heights Road, Salt Creek Devon Avenue, Salt Creek	0.034	0.028	0.031	0.028	0.033	0.031	0.030 0.029	0.030	0.031	0.035	0.028
24 109	Wolf Road, Salt Creek Brookfield Avenue, Salt Creek			0.037	0.034	0.035	0.033	0.034 0.036	0.031	0.036	0.042 ND	0.034 NE
21	First Avenue, Salt Creek	ND	ND	0.046	0.048	0.033						
77 78	Elmhurst Road, Higgins Creek Wille Road, Higgins Creek	0.061	0.043 0.029	0.064	0.043	0.056	0.056	0.067 0.024	0.050	0.060 0.030		
12	Lake-Cook Road, Buffalo Creek	0.050	0.042	0.049	0.044	0.047	ND	ND	ND	ND	ND	NI
13 17	Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River	0.044	0.035	0.041	0.040	0.046	0.040	0.038 0.040	0.041	0.044	0.047	0.039
19	Belmont Avenue, Des Plaines River	0.040	0.034	0.040	0.038	0.043	0.037	$0.038 \\ 0.038$	0.037		0.045	
20 22	Roosevelt Road, Des Plaines River Ogden Avenue, Des Plaines River	0.038	0.034	0.039	0.037	0.042	0.036	0.038	0.036	0.040	0.045	0.034
23 29	Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River	0.037	0.033	0.039	0.036	0.039	0.036	0.037 0.037	0.034	0.038 0.040	0.045	0.031
91	Material Service Road, Des Plaines River	0.037	0.033	0.039	0.037	0.041	0.035	0.038	0.036	0.039	0.044	0.032
110	Springinsguth Road, West Branch DuPage River	0.047	0.045	0.053	0.048	0.054	0.053	0.056	ND	ND	ND	NE

TABLE AII-90: TOTAL BORON MEAN HISTORY 2000 THROUGH 2010

				Aı	nual l	Means	(mg/I	(ـ)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River	ND 0.138	ND 0.160	ND 0.150	ND 0.135	ND 0.129	ND 0.178	ND 0.203	ND 0.147	ND 0.139	0.171	0.208 ND
103 Golf Road, West Fork North Branch Chicago River	0.124	0.113	0.104	0.149	0.145	0.191	0.139	0.137	0.159	0.151 0.104	ND 0.134
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	0.126	0.074 0.107	0.085 0.115		0.142	0.182	0.170 0.155	0.138	0.167	0.156	ND
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River				0.149	0.135 0.161	0.188	0.172	0.193		0.166	0.161 ND
34 Dempster Street, North Branch Chicago River 96 Albany Avenue, North Branch Chicago River		0.103 0.112	0.113	0.139 0.138		0.192 0.185	0.153 0.150	0.164	0.172 0.169	0.157	0.194 0.243
35 Central Street, North Shore Channel 102 Oakton Street, North Shore Channel	0.000	0.011 0.070	0.012				0.037 0.076				0.050 ND
36 Touhy Avenue, North Shore Channel	0.160	0.151	0.173	0.185	0.193	0.180 0.177	0.172	0.190	0.185 0.176	0.211	0.233 ND
101 Foster Avenue, North Shore Channel 37 Wilson Avenue, North Branch Chicago River	0.138	0.147 0.128	0.167 0.146	0.160	0.173	0.168	0.161	0.166	0.160	0.183	0.201
73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River	0.132	0.116	0.132	0.154	0.166 0.163	0.172	0.160	0.162	0.161	0.178	
74 Lake Shore Drive, Chicago River 100 Wells Street, Chicago River	0.044	0.045	0.040 0.069	0.092 0.079		0.061 0.082		0.103	0.055 0.080		0.091 ND
39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River		0.102 0.103	0.109	0.107	0.128 0.131	0.132 0.135		0.149 0.144	0.140 0.136		0.178 ND
99 Archer Avenue, South Fork South Branch Chicago River 40 Damen Avenue, Chicago Sanitary & Ship Canal		0.099	0.125 0.111	0.111	0.117 0.130			0.143 0.145	0.135 ND		ND 0.162
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND 0.095	ND	ND	ND	ND 0.133	ND	ND 0.145	0.136	0.129	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal 41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.152	0.145	0.166	0.168	0.183	0.176	0.207	0.192	0.184	0.190	0.200
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal	0.204	0.164 0.153	0.168 0.175	0.208 0.192	0.223 0.208	0.219 0.216	0.261	0.217	0.232 0.227	0.219	0.247
82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND 0.203	ND 0.162	ND 0.185	ND 0.196	ND 0.218	ND 0.223	ND 0.206	ND 0.203	ND 0.206	ND 0.209	ND 0.224
Calumet River System											
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	0.000 0.242	0.017 0.238	0.017 0.181	0.046 0.171	0.049	0.042	0.046 0.144	0.035	0.039	0.045	0.033
55 130th Street, Calumet River	0.089	0.111	0.119	0.146	0.107		0.111	0.084	0.120 0.383	0.146	0.084
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River	0.111	0.122	0.145	0.165	0.137	0.116	0.127	0.128	0.161	0.152	0.159
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River	0.179	0.171 0.169	0.262	0.231	0.224 0.240	0.224	0.242	0.267	0.321	0.209	0.286 0.276
54 Joe Orr Road, Thorn Creek 97 170th Street, Thorn Creek		0.256 0.207	0.324 0.246	0.313 0.222	0.404 0.297	0.269	0.320 0.269	0.279	0.353 0.332	0.254	0.410 ND
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel		0.191 0.163	0.241 0.202	0.202 0.173	0.258 0.230	0.232 0.206	0.223 0.194		0.270 0.226		0.321 0.280
59 Cicero Avenue, Calumet-Sag Channel 43 Route 83, Calumet-Sag Channel		0.154		0.165 0.168	0.224	0.199		0.192	0.207	0.228	0.277 0.250
Des Plaines River System	0.101	0.1 10	0.107	0.100					-,		
90 Route 19, Poplar Creek	0.025	0.024	0.047	0.058 ND	0.061	0.071		0.056 0.040		0.063 0.083	
63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River	ND 0.216	ND 0.203	ND 0.218	0.248	ND 0.247	ND 0.278	0.274	0.264	0.285	0.296	0.285
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	0.051	0.149 0.079	0.082	0.187 0.085	0.091	0.098	0.225 0.089	0.073	0.100	0.243 0.099	0.086
80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	0.190	0.145	0.176 0.172	0.198	0.191	0.205	0.197	0.191	0.207	0.223	0.207 0.195
24 Wolf Road, Salt Creek 109 Brookfield Avenue, Salt Creek	0.162	0.145 0.150	0.178 0.188	0.182	0.188	0.233	0.193 0.195	0.177	0.227	0.184 ND	0.182 ND
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND 0.084	ND	0.179	0.196	0.176
 77 Elmhurst Road, Higgins Creek 78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek 	0.202	0.055	0.245	0.260	0.289	0.366	0.303	0.282	0.335	0.377	0.367
13 Lake-Cook Road, Des Plaines River	0.141	0.091 0.117	0.157	0.155	0.107 0.181	ND 0.221	ND 0.191	ND 0.192	ND 0.189	ND 0.167	ND 0.166
19 Belmont Avenue, Des Plaines River	0.149	0.112	0.154	0.154	0.155 0.170	0.236	0.181	0.209	0.207	0.178	0.176
20 Roosevelt Road, Des Plaines River	0.155	0.107 0.121	0.168	0.151	0.172 0.183	0.237	0.182	0.207	0.218	0.169	0.181
23 Willow Springs Road, Des Plaines River	0.155	0.116	0.170	0.161	0.185 0.192	0.243	0.182	0.176	0.219 0.204	0.172	0.185
91 Material Service Road, Des Plaines River	0.148	0.116	0.162	0.173	0.198	0.249	0.179	0.217	0.213	0.165	0.215
110 Springinsguth Road, West Branch DuPage River	I CU.U	U.U/3	0,088	0.073	0.079	U.U/8	U.123	ND	ND	ND	ND

TABLE AII-91: TOTAL CADMIUM MEAN HISTORY 2000 THROUGH 2010

				Aı	nnual l	Means	(mg/l	L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River	ND 0.000	ND 0.000	ND 0.000	ND 0.000	ND 0.000	ND 0.000	ND 0.002	ND 0.001		0.002 0.001	0.000 NE
103 Golf Road, West Fork North Branch Chicago River	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.001	0.001	ND
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	0.000		0.000	0.001	0.001 0.000	0.000	0.000	0.000	0.001		0.000 ND
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River		0.000 0.000		0.000	0.000	0.000	0.001		0.001		0.000 NE
34 Dempster Street, North Branch Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.000
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel		0.000			0.000		0.000		0.001	0.001	0.000
102 Oakton Street, North Shore Channel	0.000	0.000	0.000			0.000	0.000			0.001 0.001	0.000
101 Foster Avenue, North Shore Channel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	NI
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 			0.000		0.000	0.000	0.000	0.000		0.001	0.000
46 Grand Avenue, North Branch Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000
74 Lake Shore Drive, Chicago River 100 Wells Street, Chicago River		0.000			0.001 0.001	0.000	0.000	0.000		0.000	0.000 NE
39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River		0.000	0.000		0.001	0.000		0.000			0.000 NE
99 Archer Avenue, South Fork South Branch Chicago River	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.001	NE
40 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal	0.000 ND	0.000 ND	0.000 ND	0.000 ND	0.001 ND	0.000 ND	0.000 ND	0.000 ND	ND 0.001	ND 0.000	0.000 NE
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000		0.001	0.000		0.000	0.001	0.001	0.000
41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal	0.000		0.000	0.000	0.001	0.000	0.000	0.000		0.000	0.000
 42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal 48 Lockport Trebler, Chicago Sanitary & Ship Canal 	0.000 ND	0.000 ND	0.000 ND	0.000 ND	0.001 ND	0.000 ND	0.000 ND	0.000 ND	0.001 ND	0.001 ND	0.000
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.000	0.000						0.000			0.000
Calumet River System											
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake		0.000	0.000		0.001			0.000			
55 130th Street, Calumet River	0.000	0.000	0.000	0.001	0.001	0.000 0.001	0.000	0.000	0.000	0.000	0.000
56 Indiana Avenue, Little Calumet River	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.001	0.002	0.000
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River		0.000	0.000	0.001		0.000		0.000		0.000	0.000
54 Joe Orr Road, Thorn Creek	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.000	0.002	0.001	0.000
97 170th Street, Thorn Creek 57 Ashland Avenue, Little Calumet River		0.000	0.000		0.001	0.000		0.000			0.000
58 Ashland Avenue, Calumet-Sag Channel		0.000	0.000	0.001	0.000	0.000		0.000	0.000 0.001	0.001	0.001
59 Cicero Avenue, Calumet-Sag Channel 43 Route 83, Calumet-Sag Channel			0.000					0.000		0.000	0.000
Des Plaines River System											
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	0.000 ND	0.000 ND	0.000 ND	0.000 ND	0.000 ND	0.001 ND	0.001 ND	0.000	0.001 ND	0.001	0.000
89 Walnut Lane, West Branch DuPage River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	100.0	0.000
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	0.000		0.000					0.000		0.001	
80 Arlington Heights Road, Salt Creek		0.000						0.000		$0.001 \\ 0.001$	
24 Wolf Road, Salt Creek	0.000	0.000	0.000	0.000	0,000	0.000	0.000	0.000	0.001	0.001	0.000
109 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek	0.000 ND	0.000 ND	0.000 ND	0.000 ND	0.000 ND	0.001 ND	0.000 ND	0.000 ND	0.001	ND 0.001	0.000
77 Elmhurst Road, Higgins Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.002	0.001	0.000
12 Lake-Cook Road, Buffalo Creek	0.002	0.000	0.000	0.000	0.000	ND	ND	0.000 ND	ND	0.001 ND	ND
 Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River 				0.000	0.000		0.000	0.000		0.001	0.000
19 Belmont Avenue, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.001	0.000
22 Ogden Avenue, Des Plaines River			0.000		0.000			0.000		0.001 0.001	
23 Willow Springs Road, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.000
91 Material Service Road, Des Plaines River		0.000				0.001		0.000	0.001	0.001	0.000
110 Springinsguth Road, West Branch DuPage River	0.000	0.000	0.000	0.000	0.000	0.001	0.001	ND	ND	ND	ND

TABLE AII-92: TOTAL COPPER MEAN HISTORY 2000 THROUGH 2010

				Aı	nnual l	Means	(mg/l	L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
 Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago Rive 	ND r 0.004	ND 0.003	ND 0.005	ND 0.006	ND 0.012	ND 0.028	ND 0.025	ND 0.020	ND 0.023	0.030 0.027	0.035 NE
103 Golf Road, West Fork North Branch Chicago River	0.000	0.001	0.000	0.002	0.004	0.017	0.013	0.015	0.024	0.021	NE
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River		0.000		0.001		0.021	0.012		0.022 0.020		0.01 NI
32 Lake-Cook Road, Skokie River	0.000	0.001	0.000	0.001	0.006	0.017	0.012	0.011	0.019	0.020	
105 Frontage Road, Skokie River 34 Dempster Street, North Branch Chicago River		0.000		0.002 0.002		0.018	0.013	0.015	0.020 0.021	0.017	0.01
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel		0.000		0.002 0.000		0.017	0.016 0.011		0.022 0.023	0.021 0.016	0.024
102 Oakton Street, North Shore Channel	0.001	0.000	0.000	0.001	0.003	0.013	0.012	0.014	0.021	0.016	NI
36 Touhy Avenue, North Shore Channel 101 Foster Avenue, North Shore Channel		0.000	0.000		0.004		0.012 0.014		0.024 0.023	0.018	0.011 NI
37 Wilson Avenue, North Branch Chicago River	0.000	0.000	0.000	0.002	0.003	0.016	0.013	0.015	0.023	0.019	0.01
 73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River 				0.002 0.003		0.017				0.021	0.013
74 Lake Shore Drive, Chicago River	0.000	0.000	0.000	0.003	0.002	0.015	0.013	0.014	0.013	0.015	0.01
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River		0.000	0.000		0.004	0.016	0.015	0.015	0.019	0.015	0.010
108 Loomis Street, South Branch Chicago River	0.000	0.000	0.001	0.007	0.005	0.018	0.018	0.016	0.020	0.017	NI
 Archer Avenue, South Fork South Branch Chicago Riv Damen Avenue, Chicago Sanitary & Ship Canal 	0.000 0.000		0.000	0.003	0.004	0.015	0.014	0.016	0.017 ND	0.015 ND	0.00
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND 0.005	ND 0.005	ND	ND	ND		0.027	0.012
75 Cicero Avenue, Chicago Sanitary & Ship Canal 41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.000			0.003	0.005 0.003	0.019 0.013	0.015 0.012		0.020 0.016		
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal	0.000	0.000	$0.001 \\ 0.001$	0.005 0.004	0.002 0.002	0.015 0.015	0.016 0.020	0.014 0.015	0.017 0.017	0.017 0.015	0.009
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.000	0.000	0.001	0.002	0.003	0.016	0.013	0.014	0.020	0.016	0.009
Calumet River System	0.000	0.000	0.000	0.001	0.004	0.012	0.010	0.011	0.015	0.015	0.000
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake				0.001					0.013	0.015	
55 130th Street, Calumet River	0.000	0.000	0.000	0.001	0.006	0.013	0.013	0.012	0.015	0.017	0.00
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River	0.001 0.000	0.000	0.000	0.004 0.005			0.016 0.013		0.020	0.022 0.014	
 Halsted Street, Little Calumet River Wentworth Avenue, Little Calumet River 		0.028 0.000	0.001	0.001 0.002		0.015			0.016		
54 Joe Orr Road, Thorn Creek		0.000	0.000	0.000		0.020	0.014	0.008	0.013	0.017	
97 170th Street, Thorn Creek 57 Ashland Avenue, Little Calumet River	0.001	0.000 0.007	0.000	0.003 0.004	0.002	0.017		0.014	0.016 0.017		0.013
58 Ashland Avenue, Calumet-Sag Channel	0.000	0.013	0.000	0.001	0.002	0.020	0.011	0.011	0.017	0.017	0.01
59 Cicero Avenue, Calumet-Sag Channel 43 Route 83, Calumet-Sag Channel		0.000		0.001			0.011			0.018	
Des Plaines River System											
90 Route 19, Poplar Creek		0.000					0.009			0.014	
63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River	ND 0.002	ND 0.003	ND 0.003	0.006	ND 0.007	ND 0.021	ND 0.018	0.017 0.018	0.023	0.019	
64 Lake Street, West Branch DuPage River	0.000	0.000	0.000	0.005	0.006	0.022	0.016	0.019	0.021	0.019	0.008
79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek		0.000		0.002	0.001			0.014		0.014	
18 Devon Avenue, Salt Creek	0.000	0.001	0.000	0.002	0.003	0.021	0.012	0.016	0.019	0.016	0.011
24 Wolf Road, Salt Creek 109 Brookfield Avenue, Salt Creek		0.000 0.001	0.001 0.001	0.005 0.005	0.006	0.020	0.013 0.014		0.020 0.024	0.018 ND	0.011 ND
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND	0.016	0.022	
78 Wille Road, Higgins Creek	0.000		0.001	0.005 0.001	0.006	0.017	0.017 0.012	0.018		0.017 0.016	0.009
12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River	0.000	0.000	0.000	0.002	0.001	ND	ND 0.013	ND 0.016	ND 0.019	ND 0.015	ND
17 Oakton Street, Des Plaines River	0.000	0.000	0.000	0.002	0.002	0.016	0.012	0.015	0.018	0.014	0.010
19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River	0.000	0.000		0.002 0.003	0.003	0.019	0.014 0.011	0.016	0.021	0.017 0.015	
22 Ogden Avenue, Des Plaines River	0.000	0.000	0.000	0.004	0.004	0.020	0.012	0.017	0.020	0.019	0.012
 Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River 		0.000		0.003			0.012		0.023 0.022		
91 Material Service Road, Des Plaines River	0.000	0.000	0.000	0.003	0.003	0.017	0.014	0.015	0.019	0.019	0.011
10 Springinsguth Road, West Branch DuPage River	0.000	0.000	OLUKKI)	0.002	O (3() 1	0.017	0.012	ND	ND	ND	ND

TABLE AII-93: TOTAL CHROMIUM MEAN HISTORY 2000 THROUGH 2010

				Aı	nual l	Means	(mg/	L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chic 103 Golf Road, West Fork North Branch Chicage 31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River 105 Frontage Road, Skokie River 105 Prontage Road, Skokie River 106 Dempster Street, North Branch Chicago River 107 Albany Avenue, North Branch Chicago River 108 Central Street, North Shore Channel 109 Oakton Street, North Shore Channel 100 Touhy Avenue, North Shore Channel 101 Touhy Avenue, North Shore Channel 102 Oakton Street, North Shore Channel 103 Touhy Avenue, North Shore Channel	o River 0.001 0.000 0.000 0.001 0.001 er 0.000 r 0.001 0.000 0.000	0.002 0.001 0.000 0.002 0.001 0.000 0.001	ND 0.002 0.001 0.001 0.001 0.000 0.001 0.002 0.000 0.001 0.000	0.002 0.002 0.001 0.001 0.001	0.002 0.001 0.001 0.001	0.000 0.000 0.000 0.000 0.001 0.002 0.000 0.000	ND 0.001 0.000 0.001 0.000 0.001 0.000 0.001 0.000 0.000	0.000 0.002 0.001 0.001 0.000 0.002 0.000	0.006 0.007 0.006 0.005 0.001 0.003 0.007 0.001 0.008 0.003 0.005	0.006 0.004 0.003 0.005 0.001 0.003 0.004 0.003	ND ND 0.001 ND 0.002 ND 0.000 0.001 0.000 ND 0.003
 Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River Grand Avenue, North Branch Chicago River Lake Shore Drive, Chicago River Wells Street, Chicago River Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River Archer Avenue, South Fork South Branch Chi Damen Avenue, Chicago Sanitary & Ship Ca Cicero Avenue, Chicago Sanitary & Ship Ca 	r 0.000 ver 0.000 0.000 0.000 0.000 0.001 0.001 0.001 0.001 0.001 0.001 nal ND nal 0.001	0.000 0.001 0.002 0.000 0.000 0.001 0.001 0.002 ND 0.003	0.000 0.003 0.001 0.001 0.002 0.004 0.002 0.004 ND 0.005	0.001 0.001 0.003 0.002 0.003 0.004 0.004 0.002 0.003 ND 0.003	0.001 0.002 0.001 0.001 0.002 0.001 0.002 ND 0.002	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 ND 0.001	0.000 0.000 0.001 0.000 0.001 0.001 0.001 ND 0.001	0.002 0.002 0.003 ND 0.003	0.006 0.004 0.005 0.003 0.004 0.005 0.005 0.008 ND 0.005 0.006	0.003 0.000 ND 0.004 0.003	0.002 0.002 0.003 ND 0.003 ND ND 0.002 ND
41 Harlem Avenue, Chicago Sanitary & Ship Ca 42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Cana 82 Lockport Trebler, Chicago Sanitary & Ship C 92 Lockport Forebay, Chicago Sanitary & Ship C Calumet River System	0.001 nal 0.001 Canal ND	0.002 0.002 0.003 ND 0.003	0.008 0.002 0.002 ND 0.003	0.003 0.004 0.004 ND 0.002	0.002 0.002 0.002 NID 0.002	0.000 0.000 0.002 ND 0.001	0.001 0.003 0.002 ND 0.002	0.003 0.004 0.004 ND 0.003	0.004 0.005 0.004 ND 0.007	0.002 0.005 ND	0.006 0.007 0.006 0.000 0.002
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River 66 Burnham Avenue, Grand Calumet River 66 Indiana Avenue, Little Calumet River 67 Halsted Street, Little Calumet River 68 Eventworth Avenue, Little Calumet River 69 Joe Orr Road, Thorn Creek 69 170th Street, Thorn Creek 60 Ashland Avenue, Little Calumet River 61 Ashland Avenue, Calumet-Sag Channel 62 Cicero Avenue, Calumet-Sag Channel 63 Route 83, Calumet-Sag Channel	0.001 0.000 0.000 0.000 0.000 0.003 0.001 0.002 0.002 0.001 0.001	0.001 0.002 0.004 0.001 0.003 0.001 0.001 0.003	0.002 0.001 0.000	0.001 0.001 0.003 0.003 0.002	0.000 0.002 0.003 0.002 0.002 0.001 0.002 0.002	0.000 0.000 0.000 0.009 0.000 0.001 0.004 0.001 0.002 0.000 0.000 0.000	0.000 0.000 0.000 0.002 0.000 0.001 0.001 0.002 0.002 0.002 0.002 0.000	0.000 0.004 0.001 0.001 0.003 0.003 0.002	0.004 0.003 0.003 0.006 0.001 0.007	0.002 0.000 0.006 0.002 0.004 0.003 0.002 0.008 0.003	0.001
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage Riv 89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River 65 Higgins Road, Salt Creek 66 Arlington Heights Road, Salt Creek 67 Bovon Avenue, Salt Creek 68 Brookfield Avenue, Salt Creek 69 Brookfield Avenue, Salt Creek 60 Brookfield Avenue, Salt Creek 61 First Avenue, Salt Creek 62 Wille Road, Higgins Creek 63 Wille Road, Higgins Creek 64 Wille Road, Higgins Creek 65 Wille Road, Buffalo Creek 66 Lake-Cook Road, Des Plaines River 67 Belmont Avenue, Des Plaines River 68 Roosevelt Road, Des Plaines River 69 Roosevelt Road, Des Plaines River 69 Willow Springs Road, Des Plaines River 69 Stephen Street, Des Plaines River 69 Stephen Street, Des Plaines River 69 Springinsguth Road, West Branch DuPage River 69 Springinsguth Road, West Branch DuPage River	0.002 0.001 0.000 0.000 0.001 0.001 ND 0.000 0.002 0.002 0.000 0.001 0.002 0.002 0.002 0.002	0.002 0.002 0.001 ND 0.002 0.001 0.004 0.001 0.002 0.006 0.002 0.002 0.002 0.002 0.002	0.002 0.001 0.000 0.000 0.001 0.002 ND 0.004 0.001 0.001 0.001 0.002 0.002 0.002 0.002 0.002	0.001 0.002 0.002 0.003 0.001 0.002 0.001 0.002 0.002 0.002 0.002 0.002 0.002	0.001 0.003 0.007 0.003 0.001 0.001 0.001 0.001 0.002 0.002 0.002 0.003 0.003 0.004 0.002	0.000 0.001 0.001 0.003 ND 0.000 ND 0.001 0.000 0.013 0.004 0.002 0.005 0.003	0.000 0.000 0.003 ND 0.000 0.001 ND 0.000 0.000 0.000 0.000 0.000 0.001 0.001	0.003 0.000 0.001 0.004 0.003 ND 0.003	0.003 0.009 0.003 0.007 0.007 0.007 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.002	0.009 0.004 0.005 0.005 0.002 0.006 0.001 0.004 ND 0.003 0.005 0.005 0.005 0.005	0.001 0.002 0.004 ND 0.003 0.002 0.003 0.001 0.003 0.003 0.003 0.003 0.003

TABLE AII-94: TOTAL HEXAVALENT CHROMIUM MEAN HISTORY 2000 THROUGH 2010

					Aı	nnual	Means	(μg/I	ر.)			
Sam	pling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	0
Chic	cago River System											
	Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River	ND 0.000	ND	ND 0.000	ND 0.500	ND 1.800	ND 3.500	ND 0.000	ND 2.000	ND	ND 0.000	N N
103	Golf Road, West Fork North Branch Chicago River			0.000				0.500	0.375		0.000	N
31	Lake-Cook Road, Middle Fork North Branch	0.000	0.000	0.000	0.000	0.182	1.300	0.000	0.000	0.000	0.000	N
104 32	Glenview Road, North Branch Chicago River		0.000	0.000			1.500 0.909	0.167	0.000	0.000	0.000	N N
105	Lake-Cook Road, Skokie River Frontage Road, Skokie River			0.000	0.600	0.750		0.000	0.500		0.000	N
34	Dempster Street, North Branch Chicago River	0.000	0.000	0.000	0.545	1.000	1.909	0.167	0.455	0.000	0.000	N
96	Albany Avenue, North Branch Chicago River			0.000		0.333	1.273	0.364	0.400		0.000	N
35 102	Central Street, North Shore Channel Oakton Street, North Shore Channel		0.000	0.000	0.583		1.750	0.000 0.167	0.300	0.000	0.000	N
36	Touhy Avenue, North Shore Channel		0.000			0.500			0.000		0.000	N
01	Foster Avenue, North Shore Channel		0.000		0.583	0.667	1.846	0.417	0.500		0.000	N
37 73	Wilson Avenue, North Branch Chicago River			0.000	0.167	0.667	1.833 1.583	0.333	0.500 0.667		0.000	N N
46	Diversey Parkway, North Branch Chicago River Grand Avenue, North Branch Chicago River		0.000		0.545	0.730	1.667	0.750	0.667		0.000	N
74	Lake Shore Drive, Chicago River	0.000	0.000	0.000	0.909	0.364	0.400	0.222	0.400	0.000	0.000	N
100	Wells Street, Chicago River			0.000			0.417		0.500		0.000	N
39 108	Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River		0.000	0.000	0.167	0.750	0.667 0.500	0.417	0.364		0.000	N
99	Archer Avenue, South Fork South Branch Chicago River		0.000		0.364		0.909	0.417	0.500		0.000	N
40	Damen Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.583	0.500	0.833	0.333	ND	ND	ND	N
107	Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND 0.750	ND	ND 0.250		0.000	N
75 41	Cicero Avenue, Chicago Sanitary & Ship Canal Harlem Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	1.417 2.909	0.333	0.500	0.750	0.333	0.667		0.000	N
42	Route 83, Chicago Sanitary & Ship Canal			0.000		0.667	0.818	0.333	0.167		0.000	N
48	Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.636	0.667		0.333	0.167		0.000	Ŋ
82 92	Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND 0.540	ND 0.627	ND	ND	ND 0.442	ND	ND 0.000	N
	Lockport Forebay, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.540	0.027	1.772	0.404	0.772	0.000	0.000	• '
49	met River System Ewing Avenue, Calumet River	0.000	0.000	0.000	0.400	0.364	0.818	0.400	0.583	0.000	0.000	N
50	Burnham Avenue, Wolf Lake			0.000						0.000		N
55	130th Street, Calumet River			0.000			1.091			0.000		N
86 56	Burnham Avenue, Grand Calumet River Indiana Avenue, Little Calumet River	0.000	0.000	0.000	0.500				0.000			Ň
76	Halsted Street, Little Calumet River	0.000	0.000	0.000	0.909	0.818	1.583	0.000	0.545	0.000	0.000	N
52	Wentworth Avenue, Little Calumet River	0.000	0.000	0.000	0.727	0.727	1.364		1.200		0.000	N
54 97	Joe Orr Road, Thorn Creek 170th Street, Thorn Creek			0.000		0.667 0.818	2.500 1.636		0.667 1.200		0.000	N
57	Ashland Avenue, Little Calumet River			0.000					0.300			N
58	Ashland Avenue, Calumet-Sag Channel	0.000	0.000	0.000	0.727	0.909	1.500	0.167	0.583	0.000	0.000	N
59 43	Cicero Avenue, Calumet-Sag Channel Route 83, Calumet-Sag Channel			0.000		0.727	1.583	0.167	1.273		0.000	N N
		0.000	0.000	0.000	0.213	1.000	1.275	0.000	1.275	0.000	0.000	•
90	Plaines River System Route 19, Poplar Creek	0.000	0.000	0.000	0.000	0.417	1.455	1.091	0.700	0.000	0.000	N
63	Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	0.000	ND	0.000	N
89	Longmeadow Lane, West Branch DuPage River Walnut Lane, West Branch DuPage River						1.250		0.364			N
64 79	Lake Street, West Branch DuPage River		0.000		0.750		1.583		0.750 0.667			N N
80	Higgins Road, Salt Creek Arlington Heights Road, Salt Creek			0.000					0.500			N
18	Devon Avenue, Salt Creek	0.000	0.000	0.000	0.417	0.333	1.667	1.167	0.333	0.000	0.000	N
24	Wolf Road, Salt Creek	0.000	0.000	0.000	0.182	0.417 3.500	2.333	0.636	0.583	0.000	0.000	N
09 21	Brookfield Avenue, Salt Creek First Avenue, Salt Creek	0.000 ND	0.000 ND	0.000 ND	0.182 ND	3.500 ND	1.917 ND	2.364 ND	0.900	0.000	ND 0.000	N N
77	Elmhurst Road, Higgins Creek	0.000	0.000	0.000	0.400	0.714	1.000	0.667	0.200	0.000	0.000	N
78	Wille Road, Higgins Creek	0.000	0.000	0.000	0.167	0.500	1.333	0.364	0.750	0.000	0.000	N
	Lake-Cook Road, Buffalo Creek	0.000	0.000	0.000	0.333	0.778	ND	ND	ND	ND	ND	N
13 17	Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River		0.000	0.000	0.833	0.000	1.583	0.909 1.000	0.667	0.000		N N
19	Belmont Avenue, Des Plaines River	0.000	0.000	0.000	0.000	0.583	10.333	1.000	0.750	0.000	0.000	N
20	Roosevelt Road, Des Plaines River	0.000	0.000	0.000	0.364	0.417	3.833	0.636	1.143	0.000	0.000	N
22 23	Ogden Avenue, Des Plaines River	0.000	0.000	0.000	0.364	0.667	1.500	0.727	0.000			N
23 29	Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River	11.583	0.000	0.000	0.182	0.833		1.273 0.727	0.700	0.000		N
	Material Service Road, Des Plaines River	0.000	0.000	0.000	0.273	0.750	1.417		0.909	0.000		N
91												

TABLE AII-95: TOTAL IRON MEAN HISTORY 2000 THROUGH 2010

				Aı	nnual	Means	(mg/l	(ــ)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
Aske-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River Frontage Road, Skokie River Dempster Street, North Branch Chicago River Lake-Cook Road, Skokie River Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River Central Street, North Shore Channel Coukton Street, North Shore Channel Wilson Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River Wilson Avenue, North Branch Chicago River Active Grand Avenue, North Branch Chicago River Lake Shore Drive, Chicago River Wells Street, Chicago River Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River Archer Avenue, South Fork South Branch Chicago River Archer Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal Harlem Avenue, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal	0.602 0.459 0.605 0.174 0.553 0.134 0.171 0.309 0.274 0.320 0.090 0.126 0.336 0.360 0.393 ND 0.389 0.207 0.209	0.885 0.976 0.631 0.828 0.797 0.278 0.340 0.173 0.182 0.458 0.478 0.546 0.103 0.420 0.437 0.460 0.460 0.460 0.340 0.340 0.340	0.909 1.095 0.711 0.921 1.098 0.300 0.490 0.259 0.484 0.459 0.479 0.192 0.477 0.566 0.483 0.513 ND	0.853 0.617 0.846 0.584 0.693 0.595 0.388 0.158 0.322 0.373 0.552 0.161 0.527 0.527 0.495 ND 0.495 0.418	1.924 1.421 1.756 0.591 1.091 0.322 0.394 0.180 0.214 0.361 0.401 0.506 0.099 0.178 0.294 0.397 0.385 ND	0.319 0.386 0.127 0.171 0.326 0.327 0.393 0.360 ND	0.922 0.856 0.703 0.722 0.297 0.393 0.241 0.320 0.385 0.384 0.637 0.136 0.180 0.394	0.683 0.534 0.744 0.701 0.256 0.522 0.171 0.355 0.509 0.466 0.158 0.493 0.495 0.493 0.261 0.218	0.889 0.355 0.466 0.310 0.347 0.490 0.560 0.594 0.199 0.248	1.040 0.528 0.957 0.666 0.357 0.560 0.284 0.295 0.450 0.531 0.219 0.347 0.550 0.717 0.621 0.324 0.324 0.324	ND N.0634 0.565 ND 0.565 0.320 0.268 ND 0.178 0.345 0.328 0.192 0.386 ND 0.386 ND 0.258 ND 0.258 0.192 0.258 0.192
82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal Calumet River System	0.338	0.561	0.593	0.454	0.477	0.443	0.445	0.434	0.505	0.493	0.320
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake 51 30th Street, Calumet River 86 Burnham Avenue, Grand Calumet River 87 Indiana Avenue, Little Calumet River 88 Halsted Street, Little Calumet River 89 Halsted Street, Little Calumet River 90 Wentworth Avenue, Little Calumet River 91 Joe Orr Road, Thorn Creek 92 170th Street, Thorn Creek 93 Ashland Avenue, Little Calumet River 94 Ashland Avenue, Little Calumet River 95 Ashland Avenue, Calumet-Sag Channel 96 Cicero Avenue, Calumet-Sag Channel 97 Route 83, Calumet-Sag Channel	0.082 0.103 1.404 0.288 0.222 3.213 1.170 2.409 2.236 0.906	0.117 0.183 1.010 0.650 0.381 1.980	0.065 0.234 1.108	0.339 1.567 0.701 0.390 1.842 0.489 1.459 1.423 0.757	0.065 0.479 1.217 0.587 0.380 1.676 0.317 1.217 1.126 0.461	0.148 0.257 2.100 0.684 0.321 1.388 2.309 1.516 1.514 0.548	0.293 0.100 0.244 1.194 0.576 0.382 1.469 0.681 1.468 0.543 0.564 0.505	0.110 0.330 1.315 0.791 0.330 1.350 1.481 1.088 1.084 0.787	1.014 0.449 1.973 0.445 0.867 0.980 0.616 0.637	0.203 0.437 1.111 0.633 0.511 1.504 0.594 1.623 1.435 0.639	0.123 0.365 1.126 0.470 0.329 1.156 0.433 ND 0.642 0.439
Des Plaines River System 90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River 65 Higgins Road, Salt Creek 66 Arlington Heights Road, Salt Creek 67 Elmhurst Road, Salt Creek 68 Brookfield Avenue, Salt Creek 69 Brookfield Avenue, Salt Creek 60 Brookfield Avenue, Salt Creek 61 First Avenue, Salt Creek 62 Elmhurst Road, Higgins Creek 63 Wille Road, Higgins Creek 64 Wille Road, Higgins Creek 65 Wille Road, Buffalo Creek 66 Lake-Cook Road, Des Plaines River 67 Oakton Street, Des Plaines River 68 Roosevelt Road, Des Plaines River 69 Cogden Avenue, Des Plaines River 69 Willow Springs Road, Des Plaines River 69 Willow Springs Road, Des Plaines River 69 Waterial Service Road, Des Plaines River 69 Material Service Road, Des Plaines River 69 Springinsguth Road, West Branch DuPage River	0.913 1.280 0.298 0.374 0.785 0.716 ND 0.078 1.391 0.682 0.525 0.681 0.698 0.773 0.634 0.715	ND 0.334 0.807 1.223 0.538 0.619 0.909 0.934 ND 0.770 0.137 1.227 0.976 1.019	1.035 1.264 0.333 0.427 0.929 0.908 ND 1.844 0.236 1.054 0.975 0.975 0.979 0.916 0.872 0.796 0.762	0.879 1.286 0.447 0.533 1.071 0.941 ND 0.177 1.261 0.863 0.812 0.883 0.865 1.081 0.889 0.849	1.017 1.306 0.397 0.488 1.287 1.371 ND 1.375 0.153 1.086 0.920 0.875 0.892 0.871 1.161 0.932 0.907 0.906	1.009 1.534 0.344 0.421 0.875 0.903 ND 0.866 0.160 ND 0.892 0.722	ND 0.423 0.863 0.869 0.420 0.539 0.701 ND 1.061 0.184 ND 0.757 0.726 0.673 0.688 0.710 0.702 0.805 0.805	1.353 0.608 1.154 1.666 0.345 0.590 1.312 1.580 ND 1.454 0.227 ND 0.964 1.499 1.145 1.292 1.300 1.068 1.176	0.432 0.894 1.448 0.343 0.662 0.605 0.583 1.179 0.417 ND 0.829 0.632 0.640 0.749 0.679	1.256 0.477 1.062 1.119 0.511 0.660 0.859 ND 1.204 1.127 0.334 ND 0.992 1.024 0.887 0.760 0.860 0.897	0.844 0.417 0.773 0.858 0.350 0.518 0.621 ND 0.695 0.733 0.214 ND 0.631 0.632 0.612 0.652

TABLE AII-96: TOTAL LEAD MEAN HISTORY 2000 THROUGH 2010

					Aı	nnual l	Means	(mg/	L)			
San	npling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chi	cago River System											
	Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River Prontage Road, Skokie River Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River Albany Avenue, North Branch Chicago River Central Street, North Shore Channel Oakton Street, North Shore Channel Touhy Avenue, North Shore Channel Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River Grand Avenue, North Branch Chicago River Uells Street, Chicago River Wells Street, Chicago River Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River Archer Avenue, South Fork South Branch Chicago River Archer Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.001 0.001 0.001 0.001 0.000 0.001	0.011 0.018 0.016 0.018 0.009 0.010 0.020 0.017 0.016 0.016 0.003 0.004 0.004 0.007 ND 0.011 0.013 0.013 0.013	0.007 0.009 0.004 0.007 0.005 0.006 0.007 0.006 0.007 0.009 0.008 0.007 0.009 0.007 0.009	0.005 0.006 0.005 0.007 0.006 0.002 0.005 0.004 0.005 0.005 0.008 0.008 0.008 0.009 ND 0.008 0.008	0.007 0.008 0.007 0.006 0.007 0.003 0.004 0.004 0.005 0.005 0.007 0.010 0.011 0.011 0.011 0.011 0.001 0.011 0.001 0.011	0.005 0.004 0.003 0.003 0.005 0.005 0.005 0.004 0.003 0.004 0.004 0.004 0.006 0.007 0.007 ND 0.004 0.005 0.007	0.007 0.006 0.006 0.008 0.007 0.006 0.005 0.005 0.006 0.006 0.006 0.006 0.006 0.006 0.007 0.007 0.007 0.007	0.004 0.004 0.007 0.004 0.006 0.076 0.006 0.004 0.005 0.031 0.125 0.105 0.003 0.004	0.000 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.001 0.001 0.001 0.001 0.003 0.003 0.003 0.003 0.003 0.002 0.002 0.003	0.010 0.006 0.002 0.001 0.003 0.004 0.005 0.005 0.0000 0.0000 0.00	ND 0.004 0.004 0.000 0.000 0.000 0.003 ND 0.003 ND 0.003 ND 0.003 0.005 0.003 0.005 0.003 0.005 0.003 0.005 0.003
	umet River System											
49 50 55 86 56 76 52 54 97 57 58 59 43	Ewing Avenue, Calumet River Burnham Avenue, Wolf Lake 130th Street, Calumet River Burnham Avenue, Grand Calumet River Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River Wentworth Avenue, Little Calumet River Joe Orr Road, Thorn Creek 170th Street, Thorn Creek Ashland Avenue, Little Calumet River Ashland Avenue, Calumet-Sag Channel Cicero Avenue, Calumet-Sag Channel Route 83, Calumet-Sag Channel	0.000 0.000 0.000 0.002 0.000 0.000 0.000 0.002 0.002 0.002	0.002 0.000 0.004 0.000 0.009 0.006 0.004 0.004	0.007 0.005 0.010 0.005	0.007 0.006 0.012 0.027 0.042 0.005 0.004	0.003 0.008 0.013 0.006 0.006 0.004 0.006 0.006 0.006 0.006	0.004 0.004 0.034 0.006 0.005 0.016 0.007 0.008 0.010 0.005	0.003 0.005 0.015 0.006 0.007 0.005 0.010	0.004 0.014 0.007 0.006 0.005 0.005 0.006 0.007	0.002 0.002 0.003 0.003 0.003 0.000 0.003	0.000 0.002 0.000 0.003	0.000 0.010 0.005 0.003 0.000 0.003 0.008 ND
	Plaines River System			0.004	0.000			0.000	0.004	0.000	0.000	
90 63 89 64 79 80 18 24 109 21 77 78 12 13 17 19 20 22 23 29 91	Route 19, Poplar Creek Longmeadow Lane, West Branch DuPage River Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River Higgins Road, Salt Creek Arlington Heights Road, Salt Creek Devon Avenue, Salt Creek Brookfield Avenue, Salt Creek Brookfield Avenue, Salt Creek Elmhurst Road, Higgins Creek Elmhurst Road, Higgins Creek Lake-Cook Road, Buffalo Creek Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River Material Service Road, Des Plaines River Springinsguth Road, West Branch DuPage River	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.014 0.002 0.015 0.011 0.015 ND 0.000 0.016 0.019 0.014 0.012 0.012 0.012 0.012	0.007 0.005 0.007 0.013 0.006 0.007 ND 0.006 0.007 0.008 0.007 0.007 0.007 0.007	ND 0.004 0.005 0.003 0.006 0.006 ND 0.006 0.005 0.005 0.005 0.005 0.005 0.005 0.005	0.005 0.006 0.005 0.007 0.007 ND 0.008 0.004 0.005 0.004 0.005 0.006 0.007	0.012 0.005 0.003 0.004 0.004 0.005 ND 0.004 0.004 0.005 0.005 0.005 0.005 0.005	0.010 0.008 0.009 0.007 0.006 0.008 0.009 ND 0.011 0.007 ND 0.022 0.007 0.008 0.008 0.008	0.008 0.004 ND 0.005 0.006 0.006 0.005 0.008 0.007	0.009 0.002 0.003 0.001 0.002 0.003 0.005 0.002 0.003 ND 0.003 0.003 0.002 0.002	0.000 0.052 0.000 0.000 ND 0.005 0.002 ND 0.027 0.002 0.002 0.002	0.003 0.003 0.004 0.004 0.008 0.000 0.000 0.004 0.004 0.004 0.004 0.000 0.000 0.000 0.000

TABLE AII-97: TOTAL NICKEL MEAN HISTORY 2000 THROUGH 2010

				Aı	nnual l	Means	(mg/l	L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River	ND 0.002	ND 0.000	ND 0.000	ND 0.003	ND 0.003	ND 0.003	ND 0.003	ND 0.004		0.005 0.006	0.020 ND
103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch	0.001	0.001	0.000	0.001	0.002	0.003 0.002	0.001	0.003	0.006 0.005	0.004	ND 0.000
104 Glenview Road, North Branch Chicago River	0.000	0.000	0.000	0.001	0.002	0.002	0.003	0.001	0.004	0.003	ND
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River				0.001	0.002 0.001		0.001		0.005	0.006 0.003	0.000 ND
34 Dempster Street, North Branch Chicago River 96 Albany Avenue, North Branch Chicago River		0.000		0.002	0.002	$0.002 \\ 0.002$	0.001	0.003	0.004	0.004 0.003	0.001
35 Central Street, North Shore Channel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.002	0.003	0.000
102 Oakton Street, North Shore Channel 36 Touhy Avenue, North Shore Channel		0.000		0.001	0.002	0.002 0.002	0.001	0.003 0.005	0.005 0.004		ND 0.004
101 Foster Avenue, North Shore Channel 37 Wilson Avenue, North Branch Chicago River		0.001			0.002	0.003	0.002 0.003	0.005	0.006 0.005	0.007 0.007	ND 0.007
73 Diversey Parkway, North Branch Chicago River	0.000	0.001	0.000	0.002	0.002	0.003	0.002	0.006	0.009	0.008	0.004
46 Grand Avenue, North Branch Chicago River 74 Lake Shore Drive, Chicago River		0.002			0.004	0.004	0.004 0.001	0.001		0.007	0.004 0.003
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River		0.000		0.002 0.012	0.001	0.002 0.004	0.002	0.004	0.004		ND 0.004
108 Loomis Street, South Branch Chicago River	0.000	0.000	0.000	0.004	0.003	0.004	0.003	0.006	0.007	0.004	ND ND
 Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal 	0.000	0.000	0.000	0.003	0.003	0.004 0.004	0.003	0.007	ND	ND	0.003
107 Western Avenue, Chicago Sanitary & Ship Canal 75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.003	0.003	ND 0.004	0.003	ND 0.007	0.006	0.006	ND 0.005
41 Harlem Avenue, Chicago Sanitary & Ship Canal		0.000		0.004 0.006	0.005 0.005	0.006 0.006	0.005 0.007	0.005 0.008		0.005 0.006	0.003 0.005
48 Stephen Street, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.005	0.004	0.006	0.006	0.007	0.009	0.006	0.005
82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	ND 0.004	ND 0.005	ND 0.006	ND 0.005	ND 0.006	0.008	ND 0.005	0.000 0.002
Calumet River System											
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake				0.001		0.000		0.001	0.002		0.003
55 130th Street, Calumet River	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.002		0.004 0.006	0.001 0.002
 86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River 	0.000			0.004	0.003 0.002		0.002	0.003	0.006	0.002	0.003
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River		0.000			0.002	0.004 0.003	0.002		0.004	0.003 0.004	0.004
54 Joe Orr Road, Thorn Creek 97 170th Street, Thorn Creek	0.000	0.000			0.001	0.004	0.001 0.005		0.005 0.007	0.002 0.005	0.002 ND
57 Ashland Avenue, Little Calumet River	0.000	0.000	0.000	0.004	0.003	0.005	0.004	0.004	0.010	0.005	0.001
58 Ashland Avenue, Calumet-Sag Channel 59 Cicero Avenue, Calumet-Sag Channel					0.003			0.004 0.005	0.005		0.003 0.002
43 Route 83, Calumet-Sag Channel	0.001	0.000	0.000	0.003	0.003	0.004	0.002	0.005	0.006	0.005	0.003
Des Plaines River System	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.002	0.000	0.000
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	0.000 ND	0.000 ND	0.002 ND	ND	ND	0.002 ND	ND	0.001 0.002	ND	0.002 0.004	0.000
89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River	0.001	0.003 0.004	0.001	0.002	0.003	0.003	0.001	0.001	0.005		0.000
79 Higgins Road, Salt Creek	0.000	0.000	0.000	0.002	0.002	0.004		0.002 0.002	0.006		0.000
18 Devon Avenue, Salt Creek	0.004	0.000	0.000	0.003	0.002	0.003	0.002	0.003	0.004	0.002	0.000
24 Wolf Road, Salt Creek 109 Brookfield Avenue, Salt Creek	0.003 0.002	0.000 0.000	0.000 0.000	0.004 0.004	0.004 0.004	0.005 0.006	0.005	0.004 0.004	0.009	0.004 ND	0.002 ND
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	ND	ND 0.000	ND	ND 0.002	ND 0.002	ND	ND 0.002	ND	0.003 0.005	0.009 0.004	
78 Wille Road, Higgins Creek	0.004	0.000	0.002	0.007	0.007	0.014	0.006	0.005	0.009	0.008	0.003
12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River	0.000	0.001 0.000	0.000	0.002 0.002		ND 0.005	ND 0.003	ND 0.005		ND 0.003	
17 Oakton Street, Des Plaines River 19 Belmont Avenue, Des Plaines River	0.000	0.002 0.002	0.000	0.001	0.002 0.003	0.004 0.006	0.002	0.004 0.005	0.005 0.006	0.003	0.000
20 Roosevelt Road, Des Plaines River	0.000	0.000	0.000	0.002	0.003	0.006	0.003	0.004	0.007	0.003	0.002
22 Ogden Avenue, Des Plaines River 23 Willow Springs Road, Des Plaines River	0.000	0.000			0.004 0.003	0.006	0.003	0.005 0.004		0.004 0.004	0.002
29 Stephen Street, Des Plaines River 91 Material Service Road, Des Plaines River		0.000 0.500			0.003	0.005		0.005 0.005	0.007	0.003	
110 Springinsguth Road, West Branch DuPage River		0,000			0.002			ND	ND	ND	ND
ND = No Data.											

TABLE AII-98: TOTAL MANGANESE MEAN HISTORY 2000 THROUGH 2010

				Ar	nnual l	Means	(mg/l	L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
Aske-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River Enrottage Road, Skokie River Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River Central Street, North Shore Channel Cakton Street, North Shore Channel Wilson Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River Lake Shore Drive, Chicago River Madison Street, South Branch Chicago River Wells Street, Chicago River Madison Street, South Branch Chicago River Archer Avenue, South Branch Chicago River Damen Avenue, South Branch Chicago River Damen Avenue, South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal Harlem Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal	0.066 0.171 0.072 0.120 0.069 0.058 0.020 0.041 0.023 0.034 0.032 0.034 0.034 0.034 0.034 0.033 0.034 0.035 0.036	0.024 0.016 0.024 0.028 0.034 0.036 0.013 0.026 0.032 0.046 0.029 0.034 0.022 0.041	0.059 0.072 0.085 0.037 0.032 0.024 0.033 0.044 0.017 0.037 0.038 0.049 0.045 ND 0.029 0.027 0.037	0.062 0.120 0.055 0.068 0.015 0.021 0.029 0.026 0.029 0.034 0.033 0.032 ND 0.033 0.033 0.033 0.033 0.033 0.033 0.033	0.086 0.038 0.064 0.060 0.019 0.021 0.022 0.026 0.031 0.022 0.027 0.029 ND 0.029 0.031 0.020 0.031	0.045 0.072 0.059 0.045 0.021 0.021 0.026 0.036 0.012 0.020 0.038 0.031 ND 0.029 0.029 0.039 0.029	0.065 0.062 0.017 0.025 0.019 0.023 0.027 0.037 0.018 0.028 0.028 0.028 0.029 0.029 0.029 0.029 0.029	0.062 0.081 0.108 0.112 0.072 0.020 0.031 0.016 0.038 0.013 0.020 0.028 0.027 0.035 ND 0.030 0.017 0.029 0.039 ND	0.067 0.091 0.148 0.060 0.096 0.083 0.057 0.028 0.026 0.034 0.027 0.036 0.042 0.017 0.036 0.041 0.041 0.036 0.039 0.039	0.107 0.078 0.131 0.057 0.098 0.038 0.037 0.042 0.027 0.027 0.027 0.053 0.042 0.027 0.027 0.053 0.027 0.053 0.027 0.053 0.027 0.053 0.057 0.053	ND 0.080 0.100 ND 0.067 0.035 0.029 ND 0.044 0.038 ND 0.039 ND 0.038 ND 0.046 0.028 0.046 0.028 0.046
92 Lockport Forebay, Chicago Sanitary & Ship Canal Calumet River System	0.042	0.041	0.066	0.039	0.036	0.037	0.047	0.037	0.053	0.043	0.074
49 Ewing Avenue, Calumet River 50 Burmham Avenue, Wolf Lake 51 130th Street, Calumet River 68 Burmham Avenue, Grand Calumet River 69 Indiana Avenue, Little Calumet River 60 Halsted Street, Little Calumet River 61 Wentworth Avenue, Little Calumet River 62 Wentworth Avenue, Little Calumet River 63 Joe Orr Road, Thorn Creek 64 170th Street, Thorn Creek 65 Ashland Avenue, Little Calumet River 65 Ashland Avenue, Calumet-Sag Channel 65 Cicero Avenue, Calumet-Sag Channel 66 Route 83, Calumet-Sag Channel	0.221 0.085 0.049 0.147 0.073 0.115 0.108 0.081 0.064	0.047 0.031 0.088 0.052 0.037 0.119 0.062 0.092 0.116 0.053	0.169 0.059 0.050 0.121 0.064 0.081	0.081 0.028 0.176 0.046 0.078 0.131 0.066 0.097 0.114 0.061	0.029 0.040 0.144 0.029 0.041 0.112 0.050 0.080 0.087 0.048	0.054 0.033 0.093 0.037 0.037 0.115 0.131 0.095 0.123 0.052	0.040 0.030 0.096 0.028	0.039 0.158 0.039 0.041 0.124 0.058 0.080 0.109 0.055	0.028 0.031 0.098 0.086 0.053 0.134 0.073 0.102 0.104	0.043 0.046 0.093 0.041 0.068 0.145 0.070	0.044 0.037 0.090 0.040 0.058 0.138 0.065 ND
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River 65 Alington Heights Road, Salt Creek 66 Arlington Heights Road, Salt Creek 67 Bovon Avenue, Salt Creek 68 Brookfield Avenue, Salt Creek 69 Brookfield Avenue, Salt Creek 60 Brookfield Avenue, Salt Creek 61 Elmhurst Road, Higgins Creek 62 Wille Road, Higgins Creek 63 Wille Road, Higgins Creek 64 Wille Road, Higgins Creek 65 Brookfield Avenue, Salt Creek 66 Wille Road, Higgins Creek 67 Elmhurst Road, Higgins Creek 68 Wille Road, Higgins Creek 69 Lake-Cook Road, Des Plaines River 60 Roosevelt Road, Des Plaines River 60 Roosevelt Road, Des Plaines River 60 Roosevelt Road, Des Plaines River 61 Ogden Avenue, Des Plaines River 62 Stephen Street, Des Plaines River 63 Willow Springs Road, Des Plaines River 64 Stephen Street, Des Plaines River 65 Stephen Street, Des Plaines River 66 Street Road, Des Plaines River 67 Stephen Street, Des Plaines River 68 Stephen Street, Des Plaines River 69 Stephen Street, Des Plaines River 69 Stephen Street, Des Plaines River 60 Roosevelt Road, Des Plaines River 61 Material Service Road, Des Plaines River 61 Springinsguth Road, West Branch DuPage River	0.101 0.112 0.061 0.079 0.066 ND 0.090 0.143 0.084 0.064 0.084 0.066 0.059 0.059	ND 0.035 0.099 0.104 0.056 0.061 0.059 ND 0.092 0.117 0.064 0.062 0.062 0.055 0.055 0.055	0.119 0.068 0.071 0.065 0.069 ND 0.149 0.060 0.145 0.075 0.082 0.074 0.068	0.073 0.110 0.059 0.057 0.065 0.059 ND 0.112 0.040 0.142 0.067 0.060 0.061 0.076 0.055 0.055	0.089 0.046 0.048 0.061 ND 0.107 0.030 0.107 0.067 0.062 0.061 0.058 0.054 0.051	0.087 0.138 0.063 0.059 0.059 0.065 ND 0.106 0.020 0.080 0.079 0.073 0.068 0.064 0.066	ND 0.044 0.071 0.124 0.057 0.055 0.055 ND 0.125 0.025 ND 0.084 0.061 0.062 0.058 0.075 0.058	ND 0.115 0.033 ND 0.083 0.093 0.076 0.074 0.077	ND 0.074 0.069 0.134 0.051 0.052 0.065 0.120 0.048 ND 0.089 0.079 0.145 0.066 0.062	0.092 0.124 0.051 0.055 0.077 ND 0.101 0.163 0.038 ND 0.090 0.102 0.090 0.077 0.075 0.083 0.088	0.065 0.092 0.061 0.085 0.087 ND 0.061 0.133 0.064 ND 0.071 0.093 0.069 0.065 0.063

TABLE AII-99: TOTAL MERCURY MEAN HISTORY 2000 THROUGH 2010

				A	nnual	Means	(μg/I	(ـ)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000	
 Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River 	0.000	0.000	0.000			0.000	0.179	0.000	0.028	0.000	ND ND
31 Lake-Cook Road, Middle Fork North Branch	0.000	0.000	0.000	0.000	0.012	0.013	0.121	0.029	0.015	0.007	0.000
104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River		0.000	0.000	0.007 0.005		0.034	0.111	0.013	0.034	0.006	NE 0.024
105 Frontage Road, Skokie River	0.000	0.000	0.000	0.008	0.011	0.062	0.160	0.021	0.030	0.010	ND
 Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River 		0.000	0.000	0.011 0.027	0.010 0.006	0.034 0.064	0.125 0.028		0.031 0.023	0.000	0.022
35 Central Street, North Shore Channel	0.000	0.000	0.000	0.000	0.007	0.016	0.000	0.010	0.038	0.006	0.000
 Oakton Street, North Shore Channel Touhy Avenue, North Shore Channel 				0.008		0.068	0.076 0.077		0.025		0.017
101 Foster Avenue, North Shore Channel	0.000	0.000	0.000	0.008	0.011	0.046	0.067	0.006	0.026	0.013	NE
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 		0.000	0.000	0.000		$0.041 \\ 0.022$	0.095	0.017	0.024	0.018	0.008
46 Grand Avenue, North Branch Chicago River				0.017		0.018		0.041 0.044		0.000	0.028 0.015
100 Wells Street, Chicago River		0.000		0.015 0.012	0.005 0.016	0.000	0.061	0.033	0.020		ND
39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River		0.000		0.013		0.011	0.021 0.034	0.058 0.040	0.031	0.000	0.029 NE
99 Archer Avenue, South Fork South Branch Chicago River				0.006	0.029	0.020	0.053	0.018			ND
40 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal	0.000 ND	0.000 ND	0.000 ND	0.004 ND	0.023 ND	0.007 ND	0.021 ND	0.033 ND	ND 0.018	ND 0.014	0.011 ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.005	0.022	0.029	0.049	0.038	0.011	0.003	0.028
41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal		0.000		0.007	0.017	0.000	0.022	0.021	0.015 0.007	0.016 0.005	
48 Stephen Street, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.005	0.018	0.016	0.093	0.031	0.008	0.000	0.005
82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.010	ND 0.015	ND 0.017	ND 0.079	ND 0.045	ND 0.026	0.013	0.007
Calumet River System											
49 Ewing Avenue, Calumet River								0.013			0.013
50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River				0.010		0.005	0.020	0.038	0.021	0.009	0.000
86 Burnham Avenue, Grand Calumet River	0.000	0.000	0.000	0.049	0.034	0.148	0.068	0.079	0.055	0.032	0.000
 Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River 		0.000		0.000		0.019	0.000	0.027	0.034 0.047	0.021	0.008
52 Wentworth Avenue, Little Calumet River	0.000	0.000	0.000	0.000	0.015	0.036		0.027			0.015
Joe Orr Road, Thorn Creek170th Street, Thorn Creek	0.000		0.000	0.000	0.018 0.015	0.033	0.000 0.025	0.053 0.034	0.044	0.004	ND
57 Ashland Avenue, Little Calumet River	0.000			0.012 0.007		0.044 0.010	0.052	0.025 0.010	0.041	0.020 0.008	0.000
59 Cicero Avenue, Calumet-Sag Channel	0.000	0.000	0.000	0.000	0.018	0.019	0.050	0.007	0.021	0.013	0.016
43 Route 83, Calumet-Sag Channel	0.000	0.000	0.000	0.005	0.010	0.023	0.017	0.007	0.028	0.018	0.008
Des Plaines River System	0.000	0.000	0.000	0.010	0.000	0.045	0.051	0.016	0.029	0.007	0.000
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	0.000 ND	0.000 ND	0.000 ND	0.019 ND	0.008 ND	0.045 ND	0.051 ND	0.016	ND	0.027 0.000	0.000
89 Walnut Lane, West Branch DuPage River						0.007		0.016 0.044			0.017
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	0.000	0.000	0.000	0.012	0.000	0.008	0.014	0.032	0.051	0.005	0.018
		0.000	0.000	0.000	0.013	0.023 0.044	0.025	0.041 0.040			
24 Wolf Road, Salt Creek		0.000		0.003	0.013	0.011	0.037	0.046		0.014	0.000
	0.000 ND	0.000 ND	0.000 ND	0.005 ND	0.013 ND	0.000 ND	0.075 ND	0.035 ND	0.023	ND 0.000	ND 0000
77 Elmhurst Road, Higgins Creek	0.000	0.000	0.000	0.010	0.000	0.000	0.040	0.048	0.030	0.015	0.000
		0.000			0.013	0.013 ND	0.032 ND	0.038 ND	0.018 ND	0.017 ND	0.008 ND
13 Lake-Cook Road, Des Plaines River	0.000	0.000	0.000	0.006	0.020	0.014	0.035	0.021	0.023	0.016	0.000
			0.000	0.009		0.017 0.000	0.025	0.075	0.028 0.041	0.019	
20 Roosevelt Road, Des Plaines River	0.000	0.000	0.000	0.005	0.013	0.013	0.032	0.114	0.038	0.011	0.000
		0.000			0.018	0.013 0.013	0.050	0.054		0.017 0.033	
29 Stephen Street, Des Plaines River	0.000	0.000	0.000	0.013	0.047	0.011	0.037	0.016	0.044	0.029	0.000
		0.000			0.012	0.021 0.031	0.017	0.015 ND	0.033 ND	0.016 ND	0.002 ND
	_,	2.200	2.200								- 1

TABLE AII-100: LOW LEVEL MERCURY MEAN HISTORY 2000 THROUGH 2010

				An	nual N	/leans	(ng/L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch	ND 7.0	ND 6.9	ND 3.7	ND 2.4	ND 5.6	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	9.7	11.0	6.9	3.6	9.5	ND	ND	ND	ND	ND	ND
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	1.9 3.0	3.2 3.8	2.9 3.9	2.0 1.8	3.6 6.8	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
32 Lake-Cook Road, Skokie River	5.2	6.5	6.3	2.8	6.2	ND	ND	ND	ND	ND	ND
105 Frontage Road, Skokie River 34 Dempster Street, North Branch Chicago River	2.4 3.3	3.7 5.3	3.6 5.5	1.4 2.9	3.1 5.8	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
96 Albany Avenue, North Branch Chicago River	4.3	6.3	8.0	3.4	5.7	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel 102 Oakton Street, North Shore Channel	1.8 7.2	2.3 4.9	2.3 5.4	0.7 2.7	1.6 4.7	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
36 Touhy Avenue, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
101 Foster Avenue, North Shore Channel 37 Wilson Avenue, North Branch Chicago River	ND ND	4.4 4.5	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
73 Diversey Parkway, North Branch Chicago River	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND
46 Grand Avenue, North Branch Chicago River 74 Lake Shore Drive, Chicago River	ND 1.0	12.0 1.7	ND 1.9	ND 1.4	ND 1.3	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
100 Wells Street, Chicago River	2.2	2.9	2.7	1.6	2.1	ND	ND	ND	ND	ND	ND
39 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River	ND ND	ND 1.1	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
99 Archer Avenue, South Fork South Branch Chicago River	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
 Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal 	ND ND	ND 6.1	ND 0.0	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
Calumet River System											
49 Ewing Avenue, Calumet River	0.6	2.1 1.9	1.4	0.7	3.1	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River	$\frac{0.9}{2.2}$	2.1	1.6 1.7	0.2 1.6	1.8 4.2	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND ND	ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
56 Indiana Avenue, Little Calumet River 76 Halsted Street, Little Calumet River	ND	1.4 ND	ND ND	ND	ND	ND	ND	ND	ND	ND	ND
52 Wentworth Avenue, Little Calumet River	6.4 3.1	8.3 4.9	2.7 1.6	3.0 2.8	6.1 2.5	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
97 170th Street, Thorn Creek	15.1	8.3	5.4	5.7	10.5	ND	ND	ND	ND	ND	ND
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	9.2 ND	8.1 ND	3.6 ND	4.2 ND	7.6 ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
58 Ashland Avenue, Calumet-Sag Channel 59 Cicero Avenue, Calumet-Sag Channel	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND
43 Route 83, Calumet-Sag Channel	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND
Des Plaines River System		• •		2.6	2.0	NTD	NT	N	NID	NITO	NID
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	1.5 ND	2.0 ND	1.5 ND	2.6 ND	2.9 ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
89 Walnut Lane, West Branch DuPage River	5.1	3.4	3.7	1.6	4.4	ND	ND	ND	ND	ND	ND
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	3.0 3.3	3.3 3.4	2.6 2.5	2.3 1.5	4.0 4.1	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek	2.5	2.5	1.6	0.5	2.3	ND	ND	ND	ND	ND	ND
18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek	2.1 4.8	2.7 4.9	1.4 3.1	0.9 2.7	2.2 6.2	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
109 Brookfield Avenue, Salt Creek	3.9	7.3	3.9	2.5	8.6	ND	ND	ND	ND	ND	ND
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	ND 5.2	ND 5.8	ND 4.6	ND 2.2	ND 7.8	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
78 Wille Road, Higgins Creek	0.8	2.3	1.7	0.7	2.0	ND	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	2.3 1.9	4.0 2.8	2.1 1.5	2.1 1.4	3.3 3.1	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
17 Oakton Street, Des Plaines River	2.4	3.5	2.2 2.7	1.7	3.6	ND	ND	ND	ND	ND	ND
19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River	2.8 3.7	3.4 4.4	2.7 2.9	1.8 2.0	3.9 4.2	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
22 Ogden Avenue. Des Plaines River	3.7	5.5	3.3	2.5	6.9	ND	ND	ND	ND	ND	ND
 Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River 	3.6 4.2	5.2 5.1	3.4 3.3	2.4 2.1	5.3 6.4	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
91 Material Service Road, Des Plaines River	3.9	4.9	3.0	2.6	6.2	ND	ND	ND	ND	ND	ND
110 Springinsguth Road, West Branch DuPage River	1.4	3.3	9.8	1.4	4.2	ND	ND	ND	ND	ND	ND

ND = No Data.

TABLE AII-101: TOTAL ZINC MEAN HISTORY 2000 THROUGH 2010

				Aı	ınual l	Means	(mg/l	L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
 Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch 	0.002	0.012 0.005	ND 0.040 0.014 0.017	0.019	0.026 0.029	0.019	ND 0.052 0.032 0.021	$0.028 \\ 0.022$	0.031 0.046 0.022	0.047 0.056	NE NE 0.020
 Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River Frontage Road, Skokie River Dempster Street, North Branch Chicago River 	0.015	0.053 0.009 0.023 0.015	0.028 0.021 0.021 0.028	0.039 0.021 0.026 0.021	0.036	0.038 0.027 0.035 0.031	$0.021 \\ 0.042$	0.038 0.024 0.047 0.046	0.029 0.043	0.038	0.024 NE 0.036
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel 102 Oakton Street, North Shore Channel	0.007 0.002 0.012	0.018 0.009 0.013	0.020 0.004 0.018	0.023 0.010 0.030	0.024 0.011 0.027	0.030 0.019 0.030	0.032 0.020 0.026	0.036 0.025 0.042	0.038 0.028 0.037	0.041 0.023 0.030	0.03 0.01 NI
Touhy Avenue, North Shore Channel Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River	0.019 0.018 0.020	0.025	0.030	0.039 0.036 0.036	0.035 0.032 0.032	0.037	0.042 0.036	0.046 0.043 0.058	0.044 0.042 0.045	0.055 0.056	0.062
46 Grand Avenue, North Branch Chicago River 74 Lake Shore Drive, Chicago River 100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River	0.001 0.013 0.013	0.029 0.007 0.012 0.028	0.010 0.018 0.031	0.030 0.026 0.046	0.018 0.021 0.029	0.049 0.029 0.030 0.043	0.046	0.042	0.023 0.028 0.077		0.049 0.03 NI 0.043
 Loomis Street, South Branch Chicago River Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal 	0.011 0.010 0.015 ND	0.030 0.023 0.030 ND	0.037 0.033 0.036 ND	0.043 0.032 0.043 ND	0.033 0.028 0.042 ND	0.038 0.039 0.045 ND	0.042 0.040 0.047 ND	0.038 0.065	0.040 0.044 ND 0.045	0.045 0.055 ND 0.078	NE NE 0.039 NE
75 Cicero Avenue, Chicago Sanitary & Ship Canal 41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal	0.020 0.015	0.026 0.029 0.028 0.028	0.034 0.035 0.031 0.033	0.046 0.046 0.045 0.045	0.035	0.040 0.041 0.038 0.044	0.042 0.037 0.045 0.056	0.041 0.038 0.047 0.047	0.038	0.057 0.046 0.048 0.052	0.046 0.047 0.036 0.046
22 Lockport Trebler, Chicago Sanitary & Ship Canal 22 Lockport Forebay, Chicago Sanitary & Ship Canal 23 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND 0.049	ND	ND	0.07
Calumet River System 49 Ewing Avenue, Calumet River	0.000	0.008	0.016	0.021	0.016	0.014	0.019	0.018	0.021	0.030	0.022
50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River 86 Burnham Avenue, Grand Calumet River	0.003 0.004	0.009 0.005	0.007 0.008	0.047 0.019 0.053	0.008 0.053	0.015 0.022	0.016 0.026	0.019 0.022 0.081	0.013 0.025 0.087	0.026 0.044	0.013 0.022 0.078
 Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River Wentworth Avenue, Little Calumet River 	0.016	0.015 0.032 0.027	0.059 0.022	0.053 0.026	0.041 0.027	0.051 0.035	0.032 0.052 0.047	0.050 0.036	0.051 0.065 0.064	0.046	0.04 0.04
 Joe Orr Road, Thorn Creek 170th Street, Thorn Creek Ashland Avenue, Little Calumet River 	0.025 0.018	0.029 0.033	$0.031 \\ 0.027$	0.050 0.038 0.035	0.031 0.027	0.046 0.059	0.052	0.048 0.050	0.054 0.041	0.052	0.060 NI 0.060
58 Ashland Avenue, Calumet-Sag Channel 59 Cicero Avenue, Calumet-Sag Channel 43 Route 83, Calumet-Sag Channel	0.015 0.012 0.010	0.024	0.059 0.038 0.030		0.040 0.037 0.034	0.044		0.055 0.049 0.055		0.066 0.050 0.064	0.054 0.044 0.062
Des Plaines River System 90 Route 19, Poplar Creek	0.002	0.003	0.014	0.013	0.014	0.035	0.017	0.033	0.027	0.024	0.012
 63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River 	0.032	0.035	0.038	0.034	0.044	0.051	0.062 0.048	0.032 0.053 0.051 0.029	0.069 0.045	0.061	0.037
 79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek 	0.011	0.008 0.023 0.023 0.030	0.019	0.036	0.025	0.039	0.078	0.029 0.036 0.036 0.051	0.031	0.039	0.034
109 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	0.016 ND 0.020	0.028 ND 0.021	0.032 ND 0.051	0.032 ND 0.035	0.040 ND 0.042	0.050 ND 0.041	0.040 ND 0.053	0.049 ND 0.050	0.045 0.049 0.040	ND 0.059	0.038
 78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River 	0.026 0.014 0.007	0.036 0.017 0.019	0.050 0.016 0.032	0.047 0.019 0.025	0.049 0.017 0.024	0.076 ND 0.036	0.066 ND 0.034	0.066 ND 0.043	0.075 ND 0.039	0.062 ND 0.036	0.067 ND 0.030
17 Oakton Street, Des Plaines River 19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River	0.012 0.015	0.023	0.028 0.033	0.029 0.031	0.033	0.054 0.046	0.040 0.037	0.048 0.060 0.059	0.044 0.047	0.038	0.030 0.029
22 Ogden Avenue, Des Plaines River 23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River 29 Material Service Road, Des Plaines River	0.017 0.010 0.015	0.020 0.021	0.028 0.027		0.034 0.033	0.043 0.042	0.037 0.035	0.048	0.037 0.041	0.050 0.048 0.047	0.056 0.043
91 Material Service Road, Des Plaines River 10 Springinsguth Road, West Branch DuPage River	0.000	0.020	0.027	0.027	0.033	0.040	0.039	0.052 ND	0.037 ND	0.049 ND	0.046 ND

TABLE AII-102: TOTAL SELENIUM MEAN HISTORY 2000 THROUGH 2010

-					Aı	nual	Means	(mg/	L)			
Sam	apling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chie	cago River System											
30 106 103 31	Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River Lake Cook Boad Middle Fork North Branch		ND 0.011 0.000 0.000	ND 0.000 0.000 0.000	0.000			0.015	0.003	0.010 0.007		ND ND
104 32 105	Lake-Cook Road, Middle Fork North Branch Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River Frontage Road, Skokie River	0.000	0.000 0.000 0.000 0.000	0.000	0.000 0.000 0.000 0.000	$0.001 \\ 0.001$	0.005	0.012	0.002 0.005	0.003 0.009	0.005 0.000 0.002 0.002	0.000 ND 0.000 ND
34 96 35	Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River Central Street, North Shore Channel	0.000 0.000 0.000	0.000 0.000 0.013	0.000 0.000 0.000	0.000 0.000 0.000	0.001 0.001 0.000	0.006 0.004 0.007	0.012 0.009 0.008	0.008 0.006 0.003	0.010 0.006 0.008	0.000 0.004 0.007	0.000
102 36 101 37	Oakton Street, North Shore Channel Touthy Avenue, North Shore Channel Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River	0.000		0.000	0.000 0.000 0.000 0.000	0.001		0.011 0.010 0.010 0.011		$0.008 \\ 0.013$	0.000 0.002 0.004 0.007	0.000 ND 0.000
73 46 74	Diversey Parkway, North Branch Chicago River Grand Avenue, North Branch Chicago River Lake Shore Drive, Chicago River	0.000	0.000	0.000	0.000 0.000 0.000		0.005 0.009	0.010 0.010	0.006 0.007 0.005	0.012 0.006 0.009	0.000 0.006 0.003	
100 39 108	Wells Street, Chicago River Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River	0.000	0.000 0.000	$0.000 \\ 0.000$	$0.000 \\ 0.000$	0.000	0.007 0.008	0.008 0.009 0.007	0.004 0.004		0.003 0.003	0.000 ND
99 40 107 75	Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal	0.000 ND	0.000 ND	0.000 0.000 ND 0.000		0.000 0.000 ND 0.000	ND	0.009 0.008 ND 0.008	0.005 0.005 ND 0.004	ND 0.008	0.002 ND 0.007 0.007	0.000 ND 0.000
41 42 48	Harlem Avenue, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal	0.000 0.000 0.000	$0.000 \\ 0.000 \\ 0.000$	$0.000 \\ 0.000 \\ 0.000$	0.000 0.000 0.000	$0.000 \\ 0.000 \\ 0.000$	0.008 0.007 0.007	0.010 0.008 0.008	0.004 0.004 0.005	0.006 0.008 0.009	0.004 0.005 0.007	0.000
82 92 Calı	Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal 1met River System	ND 0.000	ND 0.004	ND 0.000	ND 0.000	0.000	ND 0.007	ND 0.011	ND 0.005	ND 0.007	ND 0.009	0.000 0.001
49	Ewing Avenue, Calumet River	0.000	0.014	0.000	0.000	0.000	0.004	0.008	0.005	0.005	0.003	0.000
50 55 86	Burnham Avenue, Wolf Lake 130th Street, Calumet River Burnham Avenue, Grand Calumet River	0.000	$0.000 \\ 0.000 \\ 0.000$	0.000			0.005	0.007 0.011 0.015	0.003	0.008	0.003 0.004 0.006	
56 76 52	Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River Wentworth Avenue, Little Calumet River	$0.000 \\ 0.000$	$0.010 \\ 0.013$	$0.000 \\ 0.000$	0.000 0.000	0.000	0.006 0.004	0.008 0.011 0.012	0.003	0.006 0.012	0.008	0.017 0.000
54 97 57 58	Joe Orr Road, Thorn Creek 170th Street, Thorn Creek Ashland Avenue, Little Calumet River Ashland Avenue, Calumet-Sag Channel	$0.000 \\ 0.000$	0.013 0.011 0.000 0.013	0.000 0.000 0.000	$0.000 \\ 0.000$	0.000 0.000 0.000 0.000	0.005 0.005 0.007 0.005	0.006 0.008 0.012	0.009 0.005 0.004 0.006	0.008 0.007	0.003 0.004 0.007 0.003	
59 43	Cicero Avenue, Calumet-Sag Channel Route 83, Calumet-Sag Channel	0.000	0.013	0.000	0.000	0.000	0.005	0.013 0.010	0.003	0.005	0.008	0.000
90	Plaines River System Route 19, Poplar Creek	0.000	0.000	0.000	0.000	0.000	0.008	0.013	0.016	0.010	0.004	0.000
63 89 64	Longmeadow Lane, West Branch DuPage River Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River	0.000	0.000	0.000		0.000		0.012 0.013		0.010 0.007	0.005	
79 80 18 24	Higgins Road, Salt Creek Arlington Heights Road, Salt Creek Devon Avenue, Salt Creek Wolf Road, Salt Creek	0.000		0.000		$0.000 \\ 0.000$	0.009 0.008	0.013 0.010 0.011	0.003	0.016 0.005	0.011 0.010 0.008 0.012	0.000
109 21 77	Brookfield Avenue, Salt Creek First Avenue, Salt Creek Elmhurst Road, Higgins Creek	0.000 ND 0.000	0.000 ND 0.000	0.000 ND 0.000	0.000 ND 0.000	0.000 ND 0.000	0.007 ND 0.010	0.011 ND 0.014	0.003 ND 0.005	0.004 0.020 0.008	ND 0.007 0.008	ND
78 12 13	Wille Road, Higgins Creek Lake-Cook Road, Buffalo Creek Lake-Cook Road, Des Plaines River	0.000	$0.000 \\ 0.000$	0.000 0.000 0.000	0.000 0.000 0.000	0.001 0.001 0.000	0.008 ND 0.007	0.011 ND 0.014			ND 0.009	
17 19 20 22	Oakton Street, Des Plaines River Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River Ogden Avenue, Des Plaines River	0.000 0.000	$0.000 \\ 0.000$			0.000	0.007 0.007	0.011 0.010 0.013 0.011	0.004 0.002	0.006	$0.008 \\ 0.007$	
23 29 91	Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River Material Service 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 0.000	0.000 0.000 0.002	0.008 0.008 0.010	0.010 0.011 0.013	0.004 0.003 0.005	0.006 0.003 0.003	0.005 0.006 0.005	0.000 0.000 0.005
110 ND =	Springinsguth Road, West Branch DuPage River No Data.	0.000	0.000	0.000	0.000	0.000	0.009	0.014	ND	ND	ND	ND

TABLE AII-103: SOLUBLE CALCIUM MEAN HISTORY 2000 THROUGH 2010

					An	nual N	Aeans	(mg/L	ر.)			
Sampl	ling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicag	go River System											
30 L 106 D 103 C 31 L 104 G 32 L 105 F 34 D 96 A 35 C 101 F 37 N 46 G 73 D 46 G 74 L 100 W 39 M 107 W 75 C 40 D	Jake-Cook Road, West Fork North Branch Chicago River Cook Road, West Fork North Branch Chicago River Cook Road, West Fork North Branch Chicago River Cook Road, Middle Fork North Branch Chicago River Cook Road, Middle Fork North Branch Chicago River Cook Road, Skokie River Channel Chicago River Cook Road, Skokie River Channel Chicago River Cook Road, Skokie Road, Skokie River Cook Road, Skokie Road, Sko	ND 75.3 72.4 63.8 65.0 72.2 63.7 71.7 63.8 48.4 55.2 60.0 57.5 37.3 43.7 51.2 54.6 ND 52.8 57.4	ND 65.8 65.2 55.7 59.5 61.4 60.5 59.6 35.3 46.1 56.4 56.4 56.7 54.8 36.0 42.6 52.3 50.8 ND 50.9 554.4	ND 68.8 65.8 59.0 63.6 61.7 38.1 45.8 57.0 60.1 60.8 37.5 47.0 52.7 ND 57.0 57.7	ND 70.9 72.2 63.4 61.4 72.8 60.2 62.6 62.6 738.6 47.0 556.8 56.4 40.6 449.1 49.8 49.4 50.9 53.0 50.9 53.1	ND 57.9 70.4 58.4 58.1 59.9 62.8 64.7 35.3 45.2 49.8 51.5 53.7 49.3 49.3 49.3 49.3 49.3 49.3 49.3 49.3	ND 65.7 74.0 59.4 555.5 64.0 55.7 61.3 42.7 49.6 49.1 52.7 37.9 41.8 49.1 51.1 51.1 51.1 53.6	ND 81.4 69.0 62.4 62.9 70.5 61.7 65.7 64.1 57.6 58.1 57.6 50.7 50.7 50.5 ND 51.6 53.7	ND 53.7 66.0 62.0 65.4 56.8 61.4 39.0 46.2 51.2 53.8 52.7 54.4 39.1 46.2 51.5 49.8 ND 49.9 55.2	ND 73.3 66.2 65.9 63.8 62.0 63.1 64.7 39.5 47.4 55.8 55.1 40.2 43.9 50.9 ND 52.5 52.5 52.4 54.4	ND 70.3 66.1 65.0 73.8 61.8 61.3 34.7 39.7 55.5 56.4 48.6 ND 48.9 50.7 51.6	255555555555555555555555555555555555555
48 St 82 L	ockport Trebler, Chicago Sanitary & Ship Canal ockport Trebler, Chicago Sanitary & Ship Canal ockport Forebay, Chicago Sanitary & Ship Canal	58.5 ND 59.0	54.4 ND 56.3	58.8 ND 59.2	55.7 ND 56.9	55.9 ND 55.0	56.1 ND 54.9	59.0 ND 56.8	57.7 ND 55.7	55.8 ND 56.4	56.7 ND 57.0	ND ND ND
Calum	net River System											
49 E 50 B 55 12 86 B 56 In 76 H 52 W 54 Jc 57 A 58 A 59 C	wing Avenue, Calumet River turnham Avenue, Wolf Lake 30th Street, Calumet River turnham Avenue, Grand Calumet River diana Avenue, Little Calumet River lalsted Street, Little Calumet River ventworth Avenue, Little Calumet River oe Orr Road, Thorn Creek shland Avenue, Little Calumet River shland Avenue, Little Calumet River shland Avenue, Calumet-Sag Channel cicero Avenue, Calumet-Sag Channel oute 83, Calumet-Sag Channel	34.4 36.0 41.5 78.8 47.5 61.6 65.1 77.0 68.6 68.2 59.7 62.5 64.9	34.2 34.8 41.2 80.8 47.4 61.1 71.7 74.1 75.3 69.2 59.3 60.8 59.3	34.3 35.0 41.5 91.4 49.4 65.8 88.8 84.4 85.3 80.5 65.7 66.3 65.4	35.1 34.7 45.6 86.4 51.5 63.3 74.3 74.9 68.0 66.1 59.6 58.3 59.4	32.2 28.7 38.4 92.8 45.1 58.2 80.9 79.6 80.8 61.7 65.2 63.0	34.4 34.8 40.9 64.3 44.7 70.9 66.9 78.0 68.9 63.2 61.6 60.7	35.1 35.1 40.5 77.0 45.7 60.4 82.2 77.3 81.3 74.3 61.9 62.8 59.9	35.8 31.8 41.1 83.9 47.4 59.3 90.7 60.7 77.4 82.1 62.8 61.7 61.1	36.4 30.4 42.4 75.5 51.7 60.1 87.2 79.1 85.8 80.2 63.4 62.3 60.8	35.4 28.4 43.0 69.2 48.5 63.1 70.1 74.7 67.7 62.9 62.6 64.0	
	aines River System			1				700	60.7	70.1) (D
63 L 89 W 64 LH 80 A LH 180 D 21 FF 77 E 12 LL 13 LC 19 B 20 R 22 W 22 W 23 SM	oute 19, Poplar Creek ongmeadow Lane, West Branch DuPage River valmut Lane, West Branch DuPage River ake Street, West Branch DuPage River liggins Road, Salt Creek rlington Heights Road, Salt Creek evon Avenue, Salt Creek volf Road, Salt Creek inst Avenue, Salt Creek irst Avenue, Salt Creek limhurst Road, Higgins Creek irst Avenue, Salt Creek just Road, Higgins Creek ake-Cook Road, Buffalo Creek ake-Cook Road, Des Plaines River elmont Avenue, Des Plaines River gden Avenue, Des Plaines River just Road, Des Plaines River lillow Springs Road, Des Plaines River tephen Street, Des Plaines River pringinsguth Road, West Branch DuPage River	69.9 ND 62.0 75.0 47.1 63.4 67.5 70.4 66.1 71.9 62.9 62.9 62.1 61.6 63.3 61.2 66.7	65.5 ND 64.0 60.4 59.2 66.4 63.6 ND.2 76.9 66.9 758.9 61.1 59.2 59.5 59.5 59.5 73.7	70.4 ND.4 60.4 68.4 68.9 67.0 65.3 75.0 76.2 68.5 67.3 68.5 67.3 67.9 67.9	66.6 ND.5 60.5 61.9 61.5 61.9 60.7 ND.9 68.0 64.4 62.6 61.6 60.5 59.4 63.2 67.6	67.0 ND 63.2 60.6 61.2 60.7 59.6 ND 52.5 66.7 70.9 67.1 66.5 62.8 62.1 66.1 83.4	60.5 ND 54.8 56.7 60.1 62.7 59.7 58.0 52.2 64.0 62.6 62.6 62.5 59.2 58.0 59.2 61.8	70.9 ND 58.7 63.0 69.8 61.9 66.4 66.2 ND 67.1 ND 66.9 67.6 65.6 65.6 65.9 67.1 79.9	60.5 53.2 53.0 56.7 57.2 56.9 55.1 NG 61.2 ND 62.0 59.4 59.3 54.9 56.2 60.3 62.0 ND	72.1 ND 58.2 60.3 59.0 63.5 69.6 55.4 84.9 70.5 ND 70.2 68.7 68.5 69.2 66.9 70.4 70.4 ND	66.9 84.6 58.8 62.1 72.1 60.8 66.2 ND 66.1 ND 68.8 69.1 67.8 66.2 66.6 67.3 64.0	555555555555555555555555

ND = No Data.

TABLE AII-104: SOLUBLE MAGNESIUM MEAN HISTORY 2000 THROUGH 2010

				An	nual N	leans	(mg/L	.)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River	ND 30.8	ND 27.8	ND 29,2	ND 28.1	ND 23.9	ND 27.3	ND 33.3	ND 21.6	ND 31.8	ND 34.0	ND ND
103 Golf Road, West Fork North Branch Chicago River	29.2	26.3	26.0	29.2	28.7	29.9	26.5	26.0	27.8	30.8	ND
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	28.2 28.5	24.3 25.6	25.0 26.7	28.9 26.8	27.0 25.5	30.8 25.4	28.1 26.5	27.6 28.0	30.6 27.8	30.8 29.4	ND ND
32 Lake-Cook Road, Skokie River	31.5	25.5	26.0	30.9	28.3	30.2	30.0 26.1	27.9 23.9	31.0 27.2	31.5 28.8	ND ND
 Frontage Road, Skokie River Dempster Street, North Branch Chicago River 	27.9 29.9	26.0 24.8	26.8 25.5	26.0 27.0	26.0 26.8	25.0 27.2	26.9	24.8	27.0	27.2	ND
96 Albany Avenue, North Branch Chicago River	27.4 13.1	26.1 12.3	26.4 13.0	27.8 13.3	27.3 11.9	27.7 11.3	26.4 12.1	25.7 13.4	27.3 13.8	28.8 11.3	ND ND
35 Central Street, North Shore Channel 102 Oakton Street, North Shore Channel	17.2	16.3	15.8	16.5	15.9	15.2	15.0	15.6	16.4	14.6	ND
36 Touhy Avenue, North Shore Channel	18.5 19.8	20.8 19.8	21.0 21.4	19.2 20.1	18.0 18.7	16.8 16.9	19.1 19.4	18.2 18.5	19.9 19.7	19.8 20.1	ND ND
101 Foster Avenue, North Shore Channel 37 Wilson Avenue, North Branch Chicago River	22.7	20.7	22.4	20.9	20.1	18.2	20.9	19.4	20.9	21.7	ND
73 Diversey Parkway, North Branch Chicago River 46 Grand Avenue, North Branch Chicago River	21.3 20.4	20.6 19.9	22.6 21.5	20.9 20.8	20.0 20.1	17.8 19.5	21.0 20.5	18.8 19.4	20.4 20.3	22.0 21.9	ND ND
74 Lake Shore Drive, Chicago River	12.9	12.3	12.8	14.3	12.6	13.4	14.1	13.1	13.7	14.3 17.1	ND ND
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River	15.2 18.0	15.0 18.9	16.7 19.1	15.7 17.8	15.0 18.2	14.7 17.8	15.3 17.9	16.0 19.1	15.5 19.8	18.4	ND
108 Loomis Street, South Branch Chicago River	18.6	19.0	19.0	18.0	18.8	18.9	18.0	18.1 17.5	19.7 18.5	17.9 17.9	ND ND
 Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal 	19.7 18.8	17.8 19.1	20.2 19.2	17.6 18.1	18.1 18.4	17.4 18.3	18.0 18.0	ND	ND	ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND 20.8	ND 18.4	ND 17.6	ND 18.8	ND 18.5	ND 17.3	19.8 19.6	18.1 18.3	ND ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal 41 Harlem Avenue, Chicago Sanitary & Ship Canal	19.3 21.0	18.4 20.2	21.2	19.0	17.6	18.9	19.1	18.1	19.3	19.2	ND
42 Route 83, Chicago Sanitary & Ship Canal	20.3 20.9	19.6 19.5	20.7 21.2	19.7 20.6	19.5 20.7	19.8 21.0	19.7 21.4	19.5 20.4	20.0 20.8	19.8 21.7	ND ND
48 Stephen Street, Chicago Sanitary & Ship Canal 82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND									
92 Lockport Forebay, Chicago Sanitary & Ship Canal	21.2	20.4	21.2	21.0	20.3	20.4	20.6	20.1	20.9	22.3	ND
Calumet River System	117	11.3	11.4	11.7	10.5	11.5	11.6	11.9	11.8	11.4	ND
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake	11.7 12.6	11.5	12.0	11.7	11.3	13.1	13.0	12.2	12.6	11.2	ND
55 130th Street, Calumet River	14.5 27.1	14.0 37.1	14.0 36.8	15.7 38.6	13.0 47.6	14.2 43.0	13.9 50.1	13.7 62.4	14.5 64.5	15.0 49.4	ND ND
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River	16.6	16.5	17.2	19.1	16.3	16.7	17.2	17.4	21.2	19.1	ND
76 Halsted Street, Little Calumet River 52 Wentworth Avenue, Little Calumet River	21.3 26.3	21.2 27.4	23.0 34.6	22.3 29.7	20.7 32.0	21.7 28.6	21.1 32.1	20.1 35.3	21.5 35.5	23.4 29.5	ND ND
54 Joe Orr Road, Thorn Creek	28.3	28.0	31.7	29.6	34.8	30.2	32.5	24.8	35.9	35.2	ND
97 170th Street, Thorn Creek 57 Ashland Avenue, Little Calumet River	28.2 26.5	29.9 26.9	34.4 31.4	27.3 25.9	35.7 32.8	35.0 29.1	35.2 30.1	33.5 33.3	42.6 34.7	36.5 30.7	ND ND
58 Ashland Avenue, Calumet-Sag Channel	21.6	21.4	23.4	21.5	22.4	23.2	22.3	22.8	24.2	23.9	ND
59 Cicero Avenue, Calumet-Sag Channel 43 Route 83, Calumet-Sag Channel	22.7 23.8	22.0 21.9	23.8 23.8	20.9 21.9	24.1 23.6	22.7 22.7	23.1 22.1	22.2 22.2	23.3 23.3	24.0 24.9	ND ND
Des Plaines River System											
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	31.9 ND	28.6 ND	31.6 ND	30.1 ND	29.5 ND	28.2 ND	32.3 ND	26.4 19.4	32.5 ND	32.3 34.8	ND ND
89 Walnut Lane, West Branch DuPage River	23.7	25.1	23.1	23.0	23.9	20.9	21.8	18.9	22.2	23.7	ND
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek	28.0 19.5	24.4 25.7	24.3 28.4	21.8 26.0	22.9 25.4	21.8 27.6	23.3 29.4	18.9 21.2	23.0 27.4	24.5 34.0	ND ND
79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek	24.4	22.5	26.4	24.3 24.3	24.3	25.0	23.6	21.8	25.5	24.5	ND
18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek	25.8 27.2	22.6 26.3	25.8 27.4	24.3 25.3	24.4 24.6	24.6 25.3	23.6 26.9	21.4 21.9	25.1 28.6	25.3 29.1	ND ND
109 Brookfield Avenue, Salt Creek	26.0	25.2	26.2	24.8	24.1	24.6	26.8	21.4	28.6 22.9	ND	ND
21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek	ND 15.7	ND 18.1	ND 19.1	ND 13.9	ND 17.7	ND 17.8	ND 25.4	ND 14.3	33.6 20.1	28.7 26.3	ND ND
78 Wille Road, Higgins Creek	26.7	29.0	28.0	25.3	24.9	24.3	24.7	21.7	26.1 ND	30.4 ND	ND ND
12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River	31.6 29.0	28.7 26.7	33.3 31.4	30.2 29.4	31.8 31.7	ND 28.9	ND 30.1	ND 27.1	32.3	32.5	ND
17 Oakton Street, Des Plaines River	27.3	25.9	29.7	28.5	30.3	28.6	30.7	25.6	31.4 30.2	33.0 31.4	ND ND
19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River	26.1 25.8	26.4 25.6	29.5 29.7	27.3 27.0	29.0 28.4	27.7 27.2	30.0 30.0	23.8 22.3	30.9	31.4	ND
22 Ogden Avenue, Des Plaines River	26.3	25.1	27.6	25.8	26.7	25.6	28.5 29.3	25.3 22.9	29.9 29.5	30.2 30.7	ND ND
23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River	25.7 26.7	25.5 25.1	28.5 28.8	26.1 27.8	26.8 28.4	26.4 27.6	29.2	24.6	30.2	30.5	ND
91 Material Service Road, Des Plaines River	28.0	25.6	28.7	27.5 28.5	29.1 29.9	27.7 26.7	29.3 29.4	25.5 ND	30.8 ND	29.3 ND	ND ND
110 Springinsguth Road, West Branch DuPage River	25.2	27.2	29.3	20.3	47.7	40.7	47.4	HD	MD	HD	עויו

TABLE AII-105: SOLUBLE SILVER MEAN HISTORY 2000 THROUGH 2010

					A	nnual l	Means	(mg/l	L)			
Sam	pling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
	cago River System											
	Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River Prontage Road, Skokie River Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River Albany Avenue, North Branch Chicago River Central Street, North Shore Channel Oakton Street, North Shore Channel Touhy Avenue, North Shore Channel Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River Grand Avenue, North Branch Chicago River Lake Shore Drive, Chicago River Wells Street, Chicago River Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River Damen Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.001 0.000 0.001 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.001 0.000 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	
107 75 41 42 48 82 92	Western Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal Harlem Avenue, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal	ND 0.000 0.000 0.000 0.000 ND	ND 0.000 0.000 0.000 0.000 ND	ND 0.000 0.000 0.000 0.000 ND	ND 0.000 0.000 0.000 0.000 ND	ND 0.000 0.000 0.000 0.000 ND	ND 0.000 0.000 0.000 0.000 ND	ND 0.000 0.000 0.000 0.000 ND	ND 0.000 0.000 0.000	0.001 0.001 0.001 0.002 0.002 ND	0.000 0.000 0.000 0.000 0.000 ND	NI NI NI NI NI NI
49	met River System Ewing Avenue, Calumet River								0.000			NE
43	Burnham Avenue, Wolf Lake 130th Street, Calumet River Burnham Avenue, Grand Calumet River Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River Wentworth Avenue, Little Calumet River Joe Orr Road, Thorn Creek 170th Street, Thorn Creek Ashland Avenue, Little Calumet River Ashland Avenue, Calumet-Sag Channel Cicero Avenue, Calumet-Sag Channel Route 83, Calumet-Sag Channel Plaines River System	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.001 0.001 0.000 0.000 0.000 0.000	0.003 0.001 0.002 0.001 0.000 0.002 0.001 0.002 0.001	0.000 0.000 0.001 0.000 0.000 0.001 0.000	
90 63 89 64 79 80 18 24 109 27 78 12 13 17 19 20 22 23 29	Route 19, Poplar Creek Longmeadow Lane, West Branch DuPage River Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River Higgins Road, Salt Creek Arlington Heights Road, Salt Creek Devon Avenue, Salt Creek Wolf Road, Salt Creek Brookfield Avenue, Salt Creek Brookfield Avenue, Salt Creek Elmhurst Road, Higgins Creek Wille Road, Higgins Creek Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River Roosevelt Road, Des Plaines River Roosevelt Road, Des Plaines River Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River Material Service Road, Des Plaines River Springinsguth Road, West Branch DuPage River	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	ND 0.000 0.000 0.000 0.000 0.000 0.000 ND 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	ND 0.000 0.000 0.000 0.000 0.000 0.000 ND 0.000 ND 0.000 0.000 0.000 0.000 0.000 0.000	ND 0.000 0.000 0.000 0.000 0.000 0.000 ND 0.000 ND 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.001 0.000 0.000 0.000 0.000 0.000 ND 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.001 0.002 0.002 0.001 0.000 0.002 0.002 0.001 0.001 0.001 0.002 0.001 0.001 0.001	0.000 0.000 0.001 0.000 ND 0.000 0.001 0.001 ND 0.000 0.000 0.000 0.000	

TABLE AII-106: SOLUBLE ARSENIC MEAN HISTORY 2000 THROUGH 2010

					A	nnual	Means	(mg/l	L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System	m											
30 Lake-Cook Road, Vest 103 Dundee Road, West 103 Golf Road, West Fo 31 Lake-Cook Road, N 104 Glenview Road, No 32 Lake-Cook Road, S 105 Frontage Road, Sko 34 Dempster Street, Nort 102 Oakton Street, Nort 102 Oakton Street, Nort 101 Foster Avenue, Nor 101 Foster Avenue, Nor 107 Wilson Avenue, Nor 108 Grand Avenue, Nor 109 Wester Roen 100 Wells Street, Chicag 100 Madison Street, Sout 100 Archer Avenue, Sou 101 Horoman Street, Sout 102 Oamen Avenue, Ch 103 Western Avenue, Ch 104 Usestern Avenue, Ch 105 Western Avenue, Ch	Vest Fork North Branch Fork North Branch Chicago River rk North Branch Chicago River fliddle Fork North Branch rth Branch Chicago River kokie River kie River orth Branch Chicago River rth Branch Chicago River rth Branch Chicago River rth Branch Chicago River h Shore Channel th Shore Channel th Shore Channel th Shore Channel rth Branch Chicago River North Branch Chicago River North Branch Chicago River th Fork South Branch Chicago River icago Sanitary & Ship Canal icago Sanitary & Ship Canal	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.001 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.001 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.001 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.001 0.002 0.001 0.001 0.002 0.000 0.000 0.000 0.001 0.003 0.003 0.001 0.003 0.001 0.000 0.001 0.000 0.001	0.002 0.002 0.001 0.003 0.003 0.002 0.003 0.004 0.003 0.004 0.002 0.003 0.004 0.002 0.003	
75 Cicero Avenue, Chi 41 Harlem Avenue, Ch 42 Route 83, Chicago 5 48 Stephen Street, Chi 82 Lockport Trebler, C 92 Lockport Forebay, C	cago Sanitary & Ship Canal icago Sanitary & Ship Canal Sanitary & Ship Canal cago Sanitary & Ship Canal hicago Sanitary & Ship Canal Chicago Sanitary & Ship Canal	0.000 0.000 0.000 0.000 ND	0.000 0.000 0.000 0.000 ND	0.000 0.000 0.000 0.000 ND	0.000 0.000 0.000 0.000 ND	0.000	0.000 0.000 0.000 ND	0.000	0.000 0.000 0.000 0.000 ND	0.000	0.004 0.000 0.003 0.002 ND	ND N
Calumet River System 49 Ewing Avenue, Calumet River System 40 Ewing Av		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.001	ND
50 Burnham Avenue, V 55 130th Street, Calum 86 Burnham Avenue, C 56 Indiana Avenue, Little 76 Halsted Street, Little 52 Wentworth Avenue, 54 Joe Orr Road, Thorn 57 Ashland Avenue, Li 58 Ashland Avenue, Cal 59 Cicero Avenue, Cal 43 Route 83, Calumet-	Volf Lake let River frand Calumet River tle Calumet River e Calumet River Little Calumet River n Creek Creek ttle Calumet River alumet-Sag Channel Limet-Sag Channel Sag Channel	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.001 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.001 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.001 0.003 0.003 0.004 0.001 0.003 0.005 0.003 0.003	0.002 0.001 0.000 0.000 0.002 0.000 0.001 0.002 0.004 0.000	
Des Plaines River Sy 90 Route 19, Poplar Cr		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	ND
63 Longmeadow Lane, 89 Walnut Lane, West I 64 Lake Street, West B 79 Higgins Road, Salt G 80 Arlington Heights R 18 Devon Avenue, Salt 24 Wolf Road, Salt Cre 109 Brookfield Avenue, 21 First Avenue, Salt C 77 Elmhurst Road, Hig 78 Wille Road, Higgins 12 Lake-Cook Road, B	West Branch DuPage River Branch DuPage River ranch DuPage River Creek toad, Salt Creek ck Salt Creek ek Salt Creek gins Creek of Creek uffalo Creek	ND 0.000 0.000 0.000 0.000 0.000 0.000 ND 0.000 0.000	ND 0.000 0.000 0.000 0.000 0.000 ND 0.000 0.000 0.000	ND 0.000 0.000 0.000 0.000 0.000 ND 0.000 0.000 0.000	ND 0.000 0.000 0.000 0.000 0.000 ND 0.000 0.000 0.000	ND 0.000 0.000 0.000 0.000 0.000 0.000 ND 0.000 0.000 0.000	ND 0.000 0.000 0.000 0.000 0.000 ND 0.000 0.000 ND	ND 0.000 0.000 0.000 0.000 0.000 ND 0.000 ND 0.000 ND	0.000 0.000 0.000 0.000 0.000 0.000 0.000 ND 0.000 0.000 ND	ND 0.001 0.000 0.000 0.004 0.001 0.000 0.003 0.000 0.002 ND	0.000 0.001 0.001 0.003 0.002 0.002 0.001 ND 0.005 0.004 0.002 ND	555555555555555555555555555555555555555
 Lake-Cook Road, D Oakton Street, Des I Belmont Avenue, De Roosevelt Road, De Ogden Avenue, Des Willow Springs Roa Stephen Street, Des Material Service Ro 	es Plaines River Plaines River es Plaines River s Plaines River Plaines River d, 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 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.001 0.000 0.000 0.000 0.000 0.000 0.000	0.001 0.000 0.000 0.000 0.000 0.000 0.000	100.0	0.002 0.002 0.001 0.000 0.003 0.000 0.000	0.006 0.000 0.003 0.005 0.000	ND N

TABLE AII-107: SOLUBLE BARIUM MEAN HISTORY 2000 THROUGH 2010

				Aı	nual l	Means	(mg/I	(ـ)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch	ND	ND 0.051	ND 0.052	ND 0.054	ND 0.042	ND 0.043	ND 0.054	ND 0.034	ND 0.044	ND 0.053	ND ND
106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River	0.046	0.042	0.043	0.046	0.044	0.046	0.042	0.043	0.040	0.040	ND
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River		0.028	0.035 0.032	0.030	0.035 0.028	0.034 0.026	0.034 0.028	0.037 0.033		0.040 0.030	ND ND
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River		0.034		0.042 0.027		0.035	0.040	0.039	0.039 0.025	0.040 0.029	ND ND
34 Dempster Street, North Branch Chicago River	0.037	0.030	0.034	0.033	0.033	0.032	0.033 0.032	0.032 0.032	0.030	0.033	NE NE
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	0.022	0.019	0.037 0.022	0.035 0.022	0.020		0.020	0.021	0.022	0.021	ND
102 Oakton Street, North Shore Channel 36 Touhy Avenue, North Shore Channel	0.022	0.021	0.022	0.022	0.020 0.019	0.021 0.018	0.020		0.019	0.021 0.019	NE NE
101 Foster Avenue, North Shore Channel	0.022	0.023 0.025	0.025 0.027	0.023 0.024	0.020	0.018 0.020	0.019		0.018 0.021	0.018 0.021	NE NE
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 	0.024	0.024	0.027	0.023	0.021	0.019	0.021	0.019	0.020	0.022	NE
46 Grand Avenue, North Branch Chicago River 74 Lake Shore Drive, Chicago River	0.022	0.023	0.026	0.023 0.022	0.021 0.021	0.020			0.019 0.021		NE NE
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River	0.022	0.023 0.023	0.024 0.024	0.022 0.022	0.021	0.020 0.020	0.020 0.019	0.020 0.017	0.021 0.020	0.022 0.021	ND ND
108 Loomis Street, South Branch Chicago River	0.023	0.023	0.024	0.022	0.022	0.021	0.019	0.019	0.020	0.021	ND
99 Archer Avenue, South Fork South Branch Chicago River 40 Damen Avenue, Chicago Sanitary & Ship Canal	0.023	0.023	0.026 0.024	$0.022 \\ 0.022$	0.021 0.021	0.020	0.019	ND	0.020 ND	ND	ND ND
107 Western Avenue, Chicago Sanitary & Ship Canal 75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND 0.021	ND 0.022	ND 0.025	ND 0.022	ND 0.020	ND 0.020	ND 0.019	ND 0.017	0.020	0.020 0.020	ND ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.020	0.020	0.022	0.019	0.016	0.016	0.016	0.015		0.017	ND ND
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal		0.019 0.019	0.020 0.021	0.017 0.018	0.017 0.018	0.016 0.017	0.016 0.017	0.017	0.017	0.019	ND
82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND 0.020	ND 0.020	ND 0.021	ND 0.019	ND 0.018	ND 0.017	0.018	ND 0.017	ND 0.018	ND 0.019	ND ND
Calumet River System											
49 Ewing Avenue, Calumet River	0.021		0.021	0.020	0.019	0.020	0.020	0.019	0.021	0.022	ND
50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River	0.034 0.027	0.032 0.028	0.033	0.034	0.025 0.026	0.030	0.029	0.025 0.024	0.024	0.025 0.031	ND ND
86 Burnham Avenue, Grand Calumet River	0.025	0.023 0.029	0.025	0.022 0.029	0.019 0.026	0.016	0.016 0.026		0.017 0.028	0.017 0.028	ND ND
56 Indiana Avenue, Little Calumet River 76 Halsted Street, Little Calumet River	0.018	0.021	0.021	0.021	0.017	0.018	0.018	0.016	0.018	0.022	ND
52 Wentworth Avenue, Little Calumet River 54 Joe Orr Road, Thorn Creek		0.030 0.026	0.034 0.030		0.033	0.028 0.026		0.034	0.032 0.026	0.031	NE NE
97 170th Street, Thorn Creek	0.029	0.031	0.034			0.032 0.029	0.034 0.032	0.027 0.032	0.029 0.030		NE NE
57 Ashland Avenue, Little Calumet River 58 Ashland Avenue, Calumet-Sag Channel	0.022	0.022	0.022	0.022	0.019	0.020	0.020	0.018	0.020	0.021	NE
59 Cicero Avenue, Calumet-Sag Channel 43 Route 83, Calumet-Sag Channel	0.022 0.023	0.023	0.023 0.024	0.021 0.023	0.021 0.021	0.019 0.019	0.021 0.021		0.019 0.020		NE NE
Des Plaines River System											
90 Route 19, Poplar Creek	0.062 ND	0.059 ND	0.065 ND	0.071 ND	0.085 ND	0.095 ND	0.091 ND	0.071 0.035	0.061 ND	0.055 0.058	ND ND
63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River	0.027	0.028	0.028	0.027	0.027	0.022	0.022	0.024	0.024	0.024	ND
64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek		0.030			0.029						ND ND
80 Arlington Heights Road, Salt Creek	0.027	0.024	0.028	0.024	0.028	0.028	0.024	0.027	0.024	0.025	ND ND
18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek			0.028 0.032	0.024 0.029	0.027		0.028		0.028	0.027 0.031	ND
109 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek	0.031 ND	0.029 ND	0.032 ND	0.029 ND	0.027 ND	0.026 ND	0.029 ND		0.022	ND 0.032	ND ND
77 Elmhurst Road, Higgins Creek	0.040	0.038	0.051	0.036	0.048	0.049	0.059	0.040	0.048	0.056	ND
78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek		0.027 0.037	0.023 0.043		0.021 0.041	0.018 ND	ND	0.018 ND	ND	0.024 ND	ND ND
13 Lake-Cook Road, Des Plaines River	0.035 0.038	0.028		0.034	0.038 0.041	0.031 0.033		0.031 0.032	0.034 0.035	0.033 0.035	ND ND
19 Belmont Avenue, Des Plaines River	0.034	0.029	0.035	0.033	0.037	0.031	0.032	0.027	0.033	0.033	ND
20 Roosevelt Road, Des Plaines River 22 Ogden Avenue, Des Plaines River			0.035		0.037 0.033				0.034 0.032		ND ND
23 Willow Springs Road, Des Plaines River	0.032	0.028	0.034	0.031	0.033	0.029	0.031	0.027	0.031	0.033	ND
	0.031	0.028	0.033 0.034	0.032		0.027		0.028	0.031	0.032 0.031	ND ND
110 Springinsguth Road, West Branch DuPage River	0.042	0.040	0.046	0.043	0.049	0.044	0.046	ND	ND	ND	ND

TABLE AII-108: SOLUBLE BORON MEAN HISTORY 2000 THROUGH 2010

				Aı	nnual l	Means	(mg/l	L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River 106 Albany Avenue, North Branch Chicago River 107 Albany Avenue, North Branch Chicago River 108 Central Street, North Shore Channel 109 Oakton Street, North Shore Channel 100 Oakton Street, North Shore Channel 101 Foster Avenue, North Shore Channel 102 Oakton Avenue, North Branch Chicago River 103 Diversey Parkway, North Branch Chicago River 104 Lake Shore Drive, Chicago River 105 Loomis Street, Chicago River 106 Wells Street, Chicago River 107 Madison Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River 109 Archer Avenue, South Fork South Branch Chicago River 109 Archer Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal 108 Street, South Branch Chicago River 109 Archer Avenue, Chicago Sanitary & Ship Canal 100 Cicero Avenue, Chicago Sanitary & Ship Canal 101 Cicero Avenue, Chicago Sanitary & Ship Canal 102 Cicero Avenue, Chicago Sanitary & Ship Canal 103 Cicero Avenue, Chicago Sanitary & Ship Canal 104 Route 83, Chicago Sanitary & Ship Canal 105 Chicago Sanitary & Ship Canal 107 Chicago Sanitary & Ship Canal 108 Stephen Street, Chicago Sanitary & Ship Canal 109 Lockport Frebler, Chicago Sanitary & Ship Canal 109 Lockport Freber, Chicago Sanitary & Ship Canal	0.125 0.088 0.131 0.109 0.136 0.113 0.013 0.077 0.161 0.145 0.145 0.145 0.144 0.109 0.114 0.121 0.121 0.121 0.121 ND	0.105 0.129 0.111 0.120 0.036 0.083 0.156 0.136 0.136 0.106 0.106 0.106 0.106 0.106 0.106 0.156 0.106	0.103 0.079 0.111 0.093 0.118 0.105 0.033 0.074 0.162 0.144 0.138 0.129 0.054 0.077 0.107 0.111 0.122 0.108 ND 0.155 0.166 0.166 0.166 0.168 ND	0.149 0.110 0.141 0.115 0.150 0.139 0.035 0.188 0.186 0.160 0.166 0.165 0.070 0.110 0.108 ND 0.119 0.119 0.119 0.190 ND	0.133 0.128 0.151 0.135 0.141 0.035 0.180 0.184 0.162 0.155 0.055 0.055 0.152 0.055 0.118 0.121 0.114 0.119 ND 0.161 0.205 0.198 ND	0.163 0.170 0.151 0.175 0.174 0.037 0.085 0.168 0.164 0.155 0.150 0.053 0.053 0.126 0.126 0.126 0.126 0.126 0.126 0.126	0.130 0.162 0.146 0.123 0.161 0.143 0.032 0.071 0.158 0.159 0.147 0.060 0.082 0.130 0.125 0.129 ND 0.125 0.129 ND 0.129 ND	0.122 0.098 0.130 0.115 0.174 0.150 0.044 0.081 0.173 0.157 0.148 0.155 0.050 0.050 0.130 ND ND 0.132 0.132	0.101 0.148 0.103 0.167 0.151 0.148 0.030 0.104 0.169 0.158 0.144 0.044 0.044 0.125 0.123 0.123 0.130	0.139 0.093 0.143 0.198 0.148 0.111 0.023 0.060 0.186 0.169 0.160 0.164 0.081 0.117 0.117 0.119 0.121 ND 0.119 0.189 0.189	255555555555555555555555555555555555555
Calumet River System 49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River 86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River 76 Halsted Street, Little Calumet River 78 Wentworth Avenue, Little Calumet River 79 Use Orr Road, Thorn Creek 70 170th Street, Thorn Creek 71 Ashland Avenue, Little Calumet River 72 Ashland Avenue, Calumet-Sag Channel 73 Cicero Avenue, Calumet-Sag Channel 74 Route 83, Calumet-Sag Channel 75 Route 83, Calumet-Sag Channel	0.236 0.096 0.686 0.115 0.172 0.175 0.220 0.185 0.188 0.159 0.174	0.239 0.123 0.357 0.134 0.176 0.175 0.263 0.214 0.199 0.167 0.163	0.172 0.117 0.642 0.146 0.197 0.250 0.316 0.237 0.227 0.191	0.169 0.152 0.528 0.167 0.195 0.228 0.314	0.108 0.103 0.578 0.131 0.218 0.231 0.290 0.247 0.219 0.214	0.142 0.109 0.271 0.111 0.193 0.216 0.252 0.235 0.222 0.199 0.189	0.131 0.094 0.403 0.109 0.170 0.220 0.288 0.242 0.196 0.173 0.177	0.065 0.375 0.113 0.177 0.256 0.243 0.230 0.254 0.181	0.088 0.108 0.358 0.145 0.186 0.296 0.327 0.290 0.247 0.208 0.188	0.097 0.124 0.327 0.143 0.194 0.185 0.324 0.228 0.198 0.203 0.194	255555555555555555555555555555555555555
Des Plaines River System 90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek 19 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek 22 Elmhurst Road, Higgins Creek 23 Wille Road, Higgins Creek 14 Lake-Cook Road, Buffalo Creek 15 Lake-Cook Road, Des Plaines River 16 Oakton Street, Des Plaines River 17 Oakton Street, Des Plaines River 18 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River 21 Willow Springs Road, Des Plaines River 22 Stephen Street, Des Plaines River 23 Willow Springs Road, Des Plaines River 24 Material Service Road, Des Plaines River 25 Stephen Street, Des Plaines River 26 Stephen Street, Des Plaines River 27 Material Service Road, Des Plaines River 28 Springinsguth Road, West Branch DuPage River	0.119 0.075 0.190 0.190 0.164 0.184 ND 0.055 0.202 0.141 0.144 0.152 0.157 0.152 0.158	ND 0.211 0.157 0.085 0.147 0.150 0.156 ND 0.067 0.201 0.121 0.121 0.121 0.128 0.128 0.125 0.119	ND 0.214 0.083 0.168 0.165 0.176 0.180 ND 0.113 0.235 0.235 0.288 0.150 0.151 0.163 0.162 0.166 0.156 0.158	ND 0.248 0.184 0.084 0.196 0.199 0.183 0.181 ND 0.089 0.254 0.093 0.153 0.152 0.152 0.156 0.156	0.186 0.088 0.180 0.190 0.184 0.199 ND 0.078 0.078 0.099 0.170 0.151 0.166 0.166 0.184 0.182 0.189 0.189	0.222 0.092 0.192 0.198 0.227 0.254 ND 0.074 0.341 ND 0.211 0.204 0.225 0.230 0.229 0.235 0.235 0.241	ND 0.245 0.209 0.081 0.179 0.172 0.178 ND 0.077 0.284 ND 0.168 0.168 0.165 0.162 0.161	0.068 0.171 0.164 0.160 0.158 ND 0.055 0.256 ND	0.262 0.203 0.077 0.185 0.174 0.198 0.227 0.306 ND 0.162 0.152 0.178 0.189 0.191	0.068 0.296 0.292 0.090 0.217 0.208 0.182 ND 0.182 0.103 0.384 ND 0.159 0.169 0.164 0.161 0.161	2525252525252525255555

ND = No Data.

TABLE AII-109: SOLUBLE CADMIUM MEAN HISTORY 2000 THROUGH 2010

	Annual Means (mg/L)										
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River	ND 0.001	ND 0.000	ND	ND 0.000	ND	ND 0.000	ND 0.000	ND	ND 0.001	ND 0.001	ND ND
103 Golf Road, West Fork North Branch Chicago River	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.001	ND
31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River	0.001	0.000	0.000		0.001	0.001 0.000		0.000		0.001	ND ND
32 Lake-Cook Road, Skokie River 105 Frontage Road, Skokie River		0.000 0.000				0.000		0.000 0.000			ND ND
34 Dempster Street, North Branch Chicago River	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	ND
96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	0.000	0.000 0.000	0.000	0.000	0.000		0.000	0.000		0.000	ND ND
102 Oakton Street, North Shore Channel 36 Touhy Avenue, North Shore Channel		0.000					0.000		0.000		ND ND
101 Foster Avenue, North Shore Channel	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	ND ND
 Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River 	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
46 Grand Avenue, North Branch Chicago River 74 Lake Shore Drive, Chicago River		0.000						0.000			ND ND
100 Wells Street, Chicago River 39 Madison Street, South Branch Chicago River	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000		ND ND
108 Loomis Street, South Branch Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
 40 Archer Avenue, South Fork South Branch Chicago River 40 Damen Avenue, Chicago Sanitary & Ship Canal 	0.000	0.000	0.000	0.000		0.000 0.000	0.000	0.000	0.000 ND	0.000 ND	ND ND
107 Western Avenue, Chicago Sanitary & Ship Canal 75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND 0.000	ND 0.000	ND 0.000	ND 0.000	ND 0.000	0.000	0.000	ND 0.000	0.001		ND ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.000 0.000	0.000		0.000	0.000	ND ND
82 Lockport Trebler, Chicago Sanitary & Ship Canal 92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND ND
Calumet River System											
49 Ewing Avenue, Calumet River							0.000				ND
50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND ND
86 Burnham Avenue, Grand Calumet River 56 Indiana Avenue, Little Calumet River		0.000					0.000				ND ND
76 Halsted Street, Little Calumet River	0.000		0.000		0.000		$0.000 \\ 0.000$	0.000	0.000		ND ND
52 Wentworth Avenue, Little Calumet River 54 Joe Orr Road, Thorn Creek	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.001	ND
97 170th Street, Thorn Creek 57 Ashland Avenue, Little Calumet River		0.000			0.001		0.000				ND ND
58 Ashland Avenue, Calumet-Sag Channel	0.000		$0.000 \\ 0.000$	$0.000 \\ 0.000$	0.001	0.000	$0.000 \\ 0.000$	0.000	0.000	0.000	ND ND
59 Cicero Avenue, Calumet-Sag Channel 43 Route 83, Calumet-Sag Channel	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000		ND
Des Plaines River System		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NTD
90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River	0.000 ND	ND	0.000 ND	0.000 ND	0.000 ND	ND		0.000		0.001	ND ND
63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River		0.000		0.000			0.000			0.000	ND ND
79 Higgins Road, Salt Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek	0.000	0.000	0.000		0.000	0.000	$0.000 \\ 0.000$	0.000	0.000	0.000	ND ND
24 Wolf Road, Salt Creek 109 Brookfield Avenue, Salt Creek		0.000 0.000	0.000	0.000 0.000	0.000	0.000 0.000	$0.000 \\ 0.000$	0.000	0.000	0.000 ND	ND ND
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	0.001	0.001	ND
77 Elmhurst Road, Higgins Creek 78 Wille Road, Higgins Creek 12 Lake-Cook Road, Buffalo Creek	0.000	0.000	0.000	0.000	0.001	0.000	$0.001 \\ 0.000$		0.000 0.001		ND ND
12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River		0.000			0.000	0.000	ND 0.000	ND 0.000	ND 0.001	ND 0.000	ND ND
17 Oakton Street, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	ND
19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	ND ND
 Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River 							0.000				ND ND
29 Stephen Street, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
91 Material Service Road, Des Plaines River 110 Springinsguth Road, West Branch DuPage River						0.000	0.000	ND	ND	ND	ND ND
ND = No Data.											

TABLE AII-110: SOLUBLE COPPER MEAN HISTORY 2000 THROUGH 2010

					Aı	nnual	Means	(mg/	L)			
San	npling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chi	cago River System											
30 106 103 31 104 32 105 34 96 35 102 36	Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River Frontage Road, Skokie River Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River Central Street, North Shore Channel Oakton Street, North Shore Channel Touthy Avenue, North Shore Channel	0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	0.001 0.000 0.000 0.000 0.000 0.000 0.001 0.000 0.000	0.000 0.000 0.000 0.001 0.001 0.000 0.001 0.000	0.001 0.001 0.001 0.002 0.001 0.001 0.000 0.001	0.002 0.002 0.000 0.001	0.002 0.001 0.001 0.001 0.001 0.001 0.001 0.001	0.006 0.007 0.008 0.006 0.006 0.006	0.007 0.004 0.004 0.005 0.003 0.004 0.004	255555555555555555555555555555555555555
101 37 73 46 74 100 39 108 99 40 107	Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River Grand Avenue, North Branch Chicago River Lake Shore Drive, Chicago River Wells Street, Chicago River Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal	0.000 0.000 0.001 0.000 0.001 0.002 0.000 0.002 0.000 ND 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 ND 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.001 0.000 ND 0.000	0.001 0.001 0.000 0.001 0.002 0.000 0.002 0.000 0.001 ND 0.001	0.002 0.000 0.000 0.001 0.002 0.001 0.002 0.000 0.001 ND 0.001	0.000 0.001 0.000 0.000 0.001 0.002 0.001 0.002 ND 0.001	0.001 0.001 0.001 0.003 0.002 0.002 0.001 0.002 ND 0.002	0.001 0.001 0.000 0.001 0.002 0.001 0.002 0.001 ND ND 0.002	0.003 0.006 0.005 0.004 0.004 0.004 0.005 0.006 ND 0.005 0.005	0.003 0.002 0.003 0.002 0.003 0.004 0.003 0.004 ND 0.005 0.005	555555555555555555555555555555555555555
41 42 48 82 92	Harlem Avenue, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal	0.000 0.000 0.000 ND 0.000	0.000 0.000 0.000 ND 0.000	0.000 0.000 ND	0.000 0.000 ND	0.001	0.000 0.000 0.000 ND 0.000	0.001 0.001 ND	0.001 0.000 0.000 ND 0.001	0.003 0.004 0.005 ND 0.005		ND N
49 50 55 86 56 76 52 54 97 57 58 59 43	Ewing Avenue, Calumet River Burnham Avenue, Wolf Lake 130th Street, Calumet River Burnham Avenue, Grand Calumet River Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River Wentworth Avenue, Little Calumet River Joe Orr Road, Thorn Creek 170th Street, Thorn Creek Ashland Avenue, Little Calumet River Ashland Avenue, Calumet-Sag Channel Cicero Avenue, Calumet-Sag Channel Route 83, Calumet-Sag Channel	0.000 0.000 0.000 0.001 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.001 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.006 0.000 0.001 0.001 0.001 0.001 0.001 0.001	0.001 0.000 0.001 0.000 0.000 0.000 0.001 0.000 0.001	0.002 0.002 0.003 0.004 0.003 0.003 0.006 0.005 0.002 0.004 0.004 0.004	0.001 0.003 0.002 0.002 0.003 0.003 0.003 0.004 0.003	
Des 90 63 89 64 79 80 18 24 109 21 77 78 12 13 17 19 20 22 23 29 110	Plaines River System Route 19, Poplar Creek Longmeadow Lane, West Branch DuPage River Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River Higgins Road, Salt Creek Arlington Heights Road, Salt Creek Devon Avenue, Salt Creek Wolf Road, Salt Creek Brookfield Avenue, Salt Creek Brookfield Avenue, Salt Creek Elmhurst Road, Higgins Creek Wille Road, Higgins Creek Lake-Cook Road, Buffalo Creek Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River Belmont Avenue, Des Plaines River Roosevelt Road, Des Plaines River Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River Stephen Street, Des Plaines River Material Service Road, Des Plaines River Material Service Road, Des Plaines River Springinsguth Road, West Branch DuPage River	ND 0.000 0.004 0.000 0.001 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	ND 0.004 0.003 0.001 0.002 0.002 ND 0.001 0.000 0.000 0.000 0.000 0.000 0.001 0.000 0.001 0.000	0.002 0.002 0.002 0.001 ND 0.000 0.000 0.000 0.001 0.001 0.001 0.001	ND 0.004 0.003 0.000 0.002 0.003 0.003 ND 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001	ND 0.005 0.003 0.003 0.003 0.003 ND 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002	0.004 0.004 0.003 0.001 0.002 0.003 0.003 0.003 0.002 ND 0.002 0.001 0.002 0.001 0.002 0.002	0.008	0.002 0.008 0.006 0.004 0.008 0.005 0.005 ND 0.006 0.003 0.005 ND 0.005 0.005 0.004 0.004 0.004	555555555555555555555555555555555555555

TABLE AII-111: SOLUBLE CHROMIUM MEAN HISTORY 2000 THROUGH 2010

					Aı	nnual l	Means	(mg/	L)			
Sam	apling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chie	cago River System											
30 106	Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River	ND 0.000	ND 0.000	ND 0.000	ND 0.001	ND	ND 0.000	ND 0.001	ND 0.001	ND 0.000	ND 0.003	ND ND
103	Golf Road, West Fork North Branch Chicago River	0.000	0.000	0.000	100.0	0.000	0.000	0.001	0.001	0.001	0.002	ND
31 104	Lake-Cook Road, Middle Fork North Branch Glenview Road, North Branch Chicago River	0.000	0.000			0.000	0.000	0.000	0.001	0.001	$0.001 \\ 0.000$	ND ND
32	Lake-Cook Road, Skokie River	0.000	0.000	0.000			0.000		0.001	0.002	0.002	ND
105 34	Frontage Road, Skokie River		0.000				0.000	0.000	0.001	0.001 0.004	0.001 0.002	ND ND
96	Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River		0.000			0.000		0.000		0.002	0.000	ND
35	Central Street, North Shore Channel		0.000					0.000			0.001	ND ND
102 36	Oakton Street, North Shore Channel Touhy Avenue, North Shore Channel		0.000		0.000		0.000	0.001	0.001		0.001	ND
101	Foster Avenue, North Shore Channel		0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.003		ND ND
37 73	Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River		0.000				0.000	0.001	$0.001 \\ 0.001$		0.000	ND
46	Grand Avenue, North Branch Chicago River		0.000		0.001		0.001	0.001				ND ND
74 100	Lake Shore Drive, Chicago River Wells Street, Chicago River		0.000			0.000	0.000	0.001	0.001		0.000 0.002	ND
39	Madison Street, South Branch Chicago River		0.000			0.001	0.000	0.001	0.002	0.003	0.001	ND ND
108 99	Loomis Street, South Branch Chicago River Archer Avenue, South Fork South Branch Chicago River		0.000	0.000	0.001	0.001	0.000	0.001	0.001		0.000	ND
40	Damen Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.001	0.000	0.000	0.001	ND ND	ND	ND 0.001	ND ND
107 75	Western Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	ND 0.002	0.001	ND 0.000	0.000	0.000			0.000	ND
41	Harlem Avenue, Chicago Sanitary & Ship Canal		0.000		0.001	0.001	0.001	0.002	0.003	0.001	0.002	ND
42 48	Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	$0.001 \\ 0.001$	$0.001 \\ 0.001$	0.001	0.002	0.002	0.003	0.001	ND ND
82 92	Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND 0.000	ND	ND	ND 0.001	ND 0.001	ND 0.001	ND 0.002	ND 0.002	ND 0.002	ND ND
		0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.002	0.002	0.002	.,_
	met River System	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.001	MD
49 50	Ewing Avenue, Calumet River Burnham Avenue, Wolf Lake	0.001		0.000			0.000			0.001		ND ND
55	130th Street, Calumet River		0.000	0.000	0.000	0.000	0.000	0.000		0.006		ND
86 56	Burnham Avenue, Grand Calumet River Indiana Avenue, Little Calumet River		0.000				0.000	0.000		0.004		ND ND
76	Halsted Street, Little Calumet River		0.000				0.001	0.001				ND ND
52 54	Wentworth Avenue, Little Calumet River Joe Orr Road, Thorn Creek		0.000	0.000	0.000 0.000	0.000 0.000	0.000	$0.001 \\ 0.001$	0.001	0.003		ND
97 57	170th Street, Thorn Creek	0.000	0.000	0.000	0.001	0.000	0.001	0.000		0.003		ND
57 58	Ashland Avenue, Little Calumet River Ashland Avenue, Calumet-Sag Channel		0.000		0.001	0.000	0.000	0.001	$0.001 \\ 0.001$	0.007		ND ND
59	Cicero Avenue, Calumet-Sag Channel	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.005	0.003	ND
43	Route 83, Calumet-Sag Channel	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.005	0.001	ND
	Plaines River System		0.000					0.001	0.001	0.000	0.000	\ <i>T</i> D
90 63	Route 19, Poplar Creek Longmeadow Lane, West Branch DuPage River	0.000 ND	0.000 ND	0.000 ND	0.001 ND	0.000 ND	0.000 ND	0.001 ND	0.001	0.003 ND	0.002 0.002	ND ND
89	Walnut Lane, West Branch DuPage River	0.000	0.000	0.000	0.001	0.001	0.000	0.001	0.001	100.0	0.001	ND
64 79	Lake Street, West Branch DuPage River Higgins Road, Salt Creek		0.000						0.001	0.002		ND ND
80	Arlington Heights Road, Salt Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.002	100.0	ND
18 24	Devon Avenue, Salt Creek Wolf Road, Salt Creek	0.000	0.000	0.000	0.000	0.001 0.001	0.000	$0.001 \\ 0.001$	0.001	0.002	0.001	ND ND
109	Brookfield Avenue, Salt Creek			0.000			0.002	0.004	0.001		ND	ND
21 77	First Avenue, Salt Creek Elmhurst Road, Higgins Creek	ND	ND 0.001	ND 0.000	ND 0.001	ND 0.002	0.000	ND 0.001	0.001	0.000		ND ND
78	Wille Road, Higgins Creek		0.000				0.000	0.002	0.001	0.003		ND
12 13	Lake-Cook Road, Buffalo Creek Lake-Cook Road, Des Plaines River		0.001			0.001	0.000	ND	ND 0.001	ND 0002	ND 0.002	ND ND
17	Oakton Street, Des Plaines River			0.000	0.001		0.000	0.001	0.001	0.002		ND
19 20	Belmont Avenue, Des Plaines River	0.000	0.000	0.000	0.001	0.001	0.014	0.001	0.025	0.002	0.003	ND
22	Roosevelt Road, Des Plaines River Ogden Avenue, Des Plaines River		0.000						0.013			ND ND
23	Willow Springs Road, Des Plaines River	0.012	0.000	0.000	0.001	0.002	0.004	0.001	0.001	0.000	0.001	ND
29 91	Stephen Street, Des Plaines River Material Service Road, Des Plaines River		0.000			0.002 0.001	0.002	0.001	$0.001 \\ 0.001$	0.001		ND ND
110	Springinsguth Road, West Branch DuPage River		0.000						ND	ND	ND	ND
	Springinsguth Road, West Branch DuPage River No Data.	0.000	0.000	0.000	0.001	0.001	0.000	0.001	ND	ND	ND	NI.

ND = No Data.

TABLE AII-112: SOLUBLE IRON MEAN HISTORY 2000 THROUGH 2010

	**************************************				Aı	nnual l	Means	(mg/l	L)			
San	npling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chi	cago River System											
30 106 103 31 104 32 105 34 96 35 102 36 101 37 73 46 100 39 108	Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River Frontage Road, Skokie River Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River Central Street, North Shore Channel Oakton Street, North Shore Channel Touhy Avenue, North Shore Channel Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River Grand Avenue, North Branch Chicago River Lake Shore Drive, Chicago River Wells Street, Chicago River Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River	0.021 0.032 0.079 0.041 0.023 0.014 0.025 0.024 0.025 0.028 0.026 0.000 0.011 0.026	0.074 0.051 0.077 0.042 0.048 0.042 0.048 0.027 0.031 0.032 0.044 0.041 0.005 0.013 0.033	0.049 0.086 0.054 0.073 0.042 0.058 0.061 0.015 0.032 0.042 0.045 0.044 0.014 0.024	0.024 0.081 0.037 0.060 0.047 0.042 0.035 0.026 0.028 0.035 0.039 0.038 0.014 0.017 0.024	0.062 0.026 0.033 0.050 0.024 0.023 0.031 0.029 0.035 0.033 0.009 0.014	0.072 0.029 0.040 0.023 0.025 0.027 0.025 0.035 0.036 0.033 0.018 0.018 0.025 0.025	0.052 0.027 0.035 0.028 0.040 0.036 0.029 0.031 0.041 0.042 0.015 0.020 0.031	0.071 0.036 0.035 0.038 0.021 0.047 0.037 0.038 0.049 0.049 0.012 0.021 0.035	0.173 0.123 0.192 0.124 0.168 0.119 0.120 0.076 0.075 0.093 0.107 0.104 0.108 0.106 0.058 0.068 0.098	0.090 0.120 0.097 0.115 0.098 0.086 0.042 0.053 0.070 0.076 0.084 0.081 0.047 0.053	ND ND 0.185 ND 0.183 ND 0.108 0.092 0.072 ND 0.041 ND 0.055
40 107 75 41 42 48 82 92	Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal Harlem Avenue, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal	0.032 ND 0.026 0.033 0.049 0.025 ND	0.039 ND 0.032 0.037 0.037 0.043 ND	0.034 0.037 0.038 ND	0.024 ND 0.020 0.027 0.028 0.030 ND	0.021 ND 0.020 0.027 0.033 0.033 ND	0.023 ND 0.026 0.027 0.028 0.025 ND	0.034 ND 0.022 0.033 0.046 0.041 ND	0.028 0.030 ND 0.020 0.029 0.033 0.031 ND 0.030	ND 0.094 0.091 0.096 0.100 0.103 ND	ND 0.065 0.073 0.106 0.074 0.078 ND	0.061 ND 0.048 0.045 0.043 0.056 0.058
Cal ₁	ımet River System Ewing Avenue, Calumet River	0.000	0.000	0.000	0.006	0.004	0.004	0.005	0.006	0.044	0.032	0.038
50 55 86 56 76 52 54 97 57 58 59 43	Burnfiam Avenue, Wolf Lake 130th Street, Calumet River Burnham Avenue, Grand Calumet River Indiana Avenue, Little Calumet River Halsted Street, Little Calumet River Wentworth Avenue, Little Calumet River Joe Orr Road, Thorn Creek 170th Street, Thorn Creek Ashland Avenue, Little Calumet River Ashland Avenue, Calumet-Sag Channel Cicero Avenue, Calumet-Sag Channel Route 83, Calumet-Sag Channel	0.014 0.002 0.110 0.003 0.022 0.071 0.089 0.076 0.052 0.047 0.045	0.014 0.014 0.107 0.007 0.030 0.069 0.084 0.051 0.055 0.043	0.006 0.007 0.101 0.005 0.034 0.067 0.090 0.051 0.043 0.036	0.024 0.016 0.128 0.009 0.030 0.072 0.063 0.051 0.062 0.040 0.051	0.007 0.008 0.034 0.007 0.032 0.061 0.056 0.036 0.031 0.032 0.038	0.008 0.007 0.070 0.006 0.038 0.082 0.078 0.040 0.046 0.032 0.029	0.014 0.004 0.057 0.006 0.038 0.084 0.069 0.049 0.081 0.053 0.033	0.010 0.011 0.052 0.013 0.037 0.054 0.082 0.053 0.057 0.040	0.050 0.054 0.220 0.078 0.107 0.155 0.191 0.156 0.136 0.112 0.102	0.035 0.044 0.142 0.057 0.082 0.120 0.116	0.028 0.041 0.248 0.053 0.068 0.255 0.124 ND 0.110 0.088 0.065
<u>Des</u>	Plaines River System Route 19, Poplar Creek	0.058	0.080	0.084	0.054	0.050	0.055	0.042	0.057	0.151	0.109	0.127
63 89 64 79 80 188 24 109 21 77 78 12 13 17 19 20 22 23 29 91	Route 19, Poplar Creek Longmeadow Lane, West Branch DuPage River Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River Higgins Road, Salt Creek Arlington Heights Road, Salt Creek Devon Avenue, Salt Creek Brookfield Avenue, Salt Creek First Avenue, Salt Creek First Avenue, Salt Creek Eimhurst Road, Higgins Creek Wille Road, Higgins Creek Lake-Cook Road, Buffalo Creek Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River Roosevelt Road, Des Plaines River Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River Willow Springs Road, Des Plaines River Material Service Road, Des Plaines River Stephen Street, Des Plaines River Material Service Road, Des Plaines River Springinsguth Road, West Branch DuPage River No Data.	ND 0.033 0.045 0.039 0.056 0.030 ND 0.032 ND 0.035 0.032 0.037 0.036 0.046 0.031 0.035 0.031	ND 0.051 0.048 0.052 0.073 0.070 0.051 0.051 0.051 0.055 0.056 0.056 0.056 0.052 0.053 0.048 0.058	ND 0.065 0.051 0.051 0.056 0.056 0.049 0.070 0.071 0.048 0.048 0.045 0.045 0.045 0.046 0.036 0.036	ND 0.061 0.037 0.041 0.044 0.036 0.059 0.059 0.059 0.044 0.036 0.056 0.052	ND 0.050 0.037 0.027 0.039 0.038 0.032 0.034 ND 0.045 0.027 0.025 0.035 0.035 0.021 0.021	ND 0.054 0.042 0.043 0.044 0.037 0.051 0.039 ND 0.052 0.046 ND 0.027 0.028 0.033 0.033 0.035 0.037 0.029 0.019	ND 0.054 0.038 0.050 0.050 0.050 0.035 ND 0.060 0.051 ND 0.031 0.033 0.032 0.042 0.047 0.039	0.108 0.069 0.049 0.095 0.055 0.049 0.056 0.040 ND 0.037 0.032 0.034 0.044 0.046	ND 0.119 0.108 0.125 0.152 0.136 0.127 0.084 0.123 0.134 ND 0.127 0.124 0.123 0.127 0.121 0.112	0.185 0.096 0.095 0.107 0.111 0.094 ND 0.096 0.108 ND 0.100 0.112 0.098 0.096 0.1098 0.096	0.249 0.088 0.148 0.183 0.116 0.133 0.099 ND 0.116 0.147 0.057 ND 0.149 0.126 0.126 0.121 0.121

TABLE AII-113: SOLUBLE LEAD MEAN HISTORY 2000 THROUGH 2010

					A	nnual	Means	s (mg/	L)			
Sam	pling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chic	cago River System											
30 106	Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River	ND	ND 0.007	ND 0.006	ND 0.004		ND 0.002	ND 0.004		ND 0.000	ND 0.000	ND ND
103	Golf Road, West Fork North Branch Chicago River	0.000	0.000	0.002	0.002	0.003	0.001	0.004	0.002	0.001	0.000	ND
31 104	Lake-Cook Road, Middle Fork North Branch Glenview Road, North Branch Chicago River		0.000 0.007	0.002 0.006							0.001 0.000	ND ND
32	Lake-Cook Road, Skokie River	0.000	0.000	0.005	0.001	0.004	0.001	0.005	0.001	0.001	0.000	ND
105 34	Frontage Road, Skokie River Dempster Street, North Branch Chicago River		0.006 0.007				0.001	0.003 0.004		0.001	0.000	ND ND
96	Albany Avenue, North Branch Chicago River	0.000	0.006	0.005	0.002	0.003	0.001	0.004	0.002	0.001	0.001	ND
35 102	Central Street, North Shore Channel Oakton Street, North Shore Channel		0.000				0.001	0.003			0.000 0.001	ND ND
36	Touhy Avenue, North Shore Channel	0.000	0.007	0.005	0.002	0.003	0.001	0.003	0.002	0.001	0.000	ND
101 37	Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River		0.006 0.006				0.001 0.001	0.003		0.001		ND ND
73	Diversey Parkway, North Branch Chicago River	0.000	0.007	0.005	0.002	0.003	0.001	0.003	0.002	0.001	0.000	ND
46 74	Grand Avenue, North Branch Chicago River Lake Shore Drive, Chicago River		0.006				0.001	0.003			0.000 0.002	ND ND
100 39	Wells Street, Chicago River		0.000				0.001	0.002			0.000	ND ND
108	Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River	0.000	0.000 0.005	0.006	0.002		0.001 0.001	0.003 0.003		0.001	0.000	ND
99 40	Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal		0.000				0.001		0.002 ND	0.001 ND	0.000 ND	ND ND
107	Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	0.001	0.000	ND
75 41	Cicero Avenue, Chicago Sanitary & Ship Canal Harlem Avenue, Chicago Sanitary & Ship Canal		0.005			0.003	0.001	0.003			0.000 0.001	ND ND
42	Route 83, Chicago Sanitary & Ship Canal	0.000	0.007	0.007	0.001	0.003	0.002	0.003	0.002	0.002	0.000	ND
48 82	Stephen Street, Chicago Sanitary & Ship Canal Lockport Trebler, Chicago Sanitary & Ship Canal	0.002 ND	0.007 ND	0.005 ND	0.001 ND		0.002 ND	0.003 ND	0.002 ND	0.001 ND	0.000 ND	ND ND
92	Lockport Forebay, Chicago Sanitary & Ship Canal					0.003		0.003		0.001		ND
	met River System											
49 50	Ewing Avenue, Calumet River Burnham Avenue, Wolf Lake	0.004	0.000	0.000	0.001	0.002	0.001	0.002 0.002		0.001	0.000	ND ND
55	130th Street, Calumet River	0.002	0.000	0.002	0.001	0.003	0.001	0.002	0.001	0.001	0.002	ND
86 56	Burnham Avenue, Grand Calumet River Indiana Avenue, Little Calumet River	0.000	0.000	0.003 0.002	0.002 0.001	0.003	0.002 0.002	0.003	0.001	0.001	0.000	ND ND
76	Halsted Street, Little Calumet River	0.000	0.006	0.006	0.001	0.003	0.002	0.003	0.002	0.001	0.000	ND
52 54	Wentworth Avenue, Little Calumet River Joe Orr Road, Thorn Creek		0.000		0.001	0.003	0.001		0.001 100.0	0.001		ND ND
97	170th Street, Thorn Creek	0.000	0.000	0.003	0.002	0.003	0.002	0.004	0.002	0.001	0.000	ND
57 58	Ashland Avenue, Little Calumet River Ashland Avenue, Calumet-Sag Channel	0.000	0.000	0.003	0.001	0.003	0.002	0.004	0.001	$0.001 \\ 0.001$	0.001	ND ND
59	Cicero Avenue, Calumet-Sag Channel	0.000	0.000	0.002	0.001	0.003	0.002	0.003	0.002	0.001	0.000	ND
43 Dec	Route 83, Calumet-Sag Channel	0.000	0.000	0.002	0.001	0.003	0.002	0.003	0.002	0.001	0.000	ND
90	Plaines River System Route 19, Poplar Creek	0.000	0.008	0.004	0.001	0.003	0.002	0.004	0.002	0.001	0.000	ND
63	Longmeadow Lane, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	0.001	ND	0.000	ND
89 64	Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River	0.000	0.007 0.009	0.003	0.002 0.002	0.003	0.001	0.004 0.003	$0.002 \\ 0.002$	0.001	0.000	ND ND
79	Higgins Road, Salt Creek	0.000	0.000			0.003	0.001		0.001	0.001	0.000	ND
80 18	Arlington Heights Road, Salt Creek Devon Avenue, Salt Creek		0.006	0.003		0.003			$0.002 \\ 0.002$			ND ND
24	Wolf Road, Salt Creek	0.000	0.007	0.004	0.001	0.003	0.002	0.004	0.002	0.001	0.000	ND
109 21	Brookfield Avenue, Salt Creek First Avenue, Salt Creek	0.002 ND	0.006 ND	0.003 ND	0.002 ND	0.003 ND	0.001 ND	0.005 ND	0.002 ND	0.003	ND 0.000	ND ND
77	Elmhurst Road, Higgins Creek	0.000	0.000	0.006	0.002	0.004	0.002	0.005	0.003	0.000	0.000	ND
78 12	Wille Road, Higgins Creek Lake-Cook Road, Buffalo Creek	0.005	0.006	0.003 0.004	0.001	0.003	0.002 ND	0.004 ND	0.002 ND	0.001 ND	0.000 ND	ND ND
13	Lake-Cook Road, Des Plaines River	0.002	0.006	0.003	0.002	0.004	0.002	0.005	0.002	0.001	0.000	ND
17 19	Oakton Street, Des Plaines River Belmont Avenue, Des Plaines River	0.000	0.006	0.003	0.001	0.004	0.002 0.002	0.004	0.001	$0.001 \\ 0.001$	0.000	ND ND
20	Roosevelt Road, Des Plaines River	0.000	0.006	0.003	0.001	0.003	0.002	0.004	0.001	0.001	0.000	ND
22 23	Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River			0.003	0.002 0.003		0.001	0.004 0.004	0.003	0.001	0.000	ND ND
29	Stephen Street, Des Plaines River	0.000	0.006	0.003	0.002	0.003	0.002	0.004	0.002	0.001	0.000	ND
91 110	Material Service Road, Des Plaines River Springinsguth Road, West Branch DuPage River		0.006		0.002	0.003 0.004	0.001	0.004	0.002 ND	0.001 ND	0.000 ND	ND ND
		5.500	J.000		3.002		0.002	0.003	.,,,,		ערי	
ND =	No Data.											

TABLE AII-114: SOLUBLE NICKEL MEAN HISTORY 2000 THROUGH 2010

Chic 30 106 103	pling Station (No. Name)	10	09									
30 106 103			09	08	07	06	05	04	03	02	01	00
106 103	ago River System											
103	Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River	ND 0.000	ND 0.000	ND 0.001	ND 0.001	ND 0.001	ND 0.000	ND 0.000	ND 0.000	ND 0.003	ND 0.002	NE NE
77.1	Golf Road, West Fork North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.003	0.002	NE NE
31 104	Lake-Cook Road, Middle Fork North Branch Glenview Road, North Branch Chicago River		0.000	0.000			0.000	0.000	0.000			NI
32	Lake-Cook Road, Skokie River	0.000	0.000	0.000	0.000	0.000	0.000	0.000				NI
105 34	Frontage Road, Skokie River Dempster Street, North Branch Chicago River		0.000	0.000			0.001	0.000	0.000	0.003	0.002 0.001	NI NI
96	Albany Avenue, North Branch Chicago River					0.001	0.001	0.001	100.0	0.002		NI
35 102	Central Street, North Shore Channel Oakton Street, North Shore Channel		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001		NI NI
36	Touhy Avenue, North Shore Channel	0.000	0.001	0.000	0.001	0.001	0.001	0.002	0.003	0.003	0.004	NI
101 37	Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River		0.001		$0.001 \\ 0.001$	0.001	0.002	0.002	0.003	0.004		NI NI
73	Diversey Parkway, North Branch Chicago River	0.000	0.001	0.000	0.001	0.001	0.002	0.002	0.003	0.004	0.004	NI
46 74	Grand Avenue, North Branch Chicago River Lake Shore Drive, Chicago River		0.002		0.002	0.002 0.002	0.003	0.003	0.005 0.001	0.006	0.004	NI NI
00	Wells Street, Chicago River	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.003	0.002	0.008	NI
3 9 108	Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River	0.001		0.000		0.001	0.002	0.003	0.004	0.005 0.004	0.006	NI NI
99	Archer Avenue, South Fork South Branch Chicago River	0.000	0.001	0.001	0.002	0.001	0.002	0.002	0.004	0.004	0.003	NI
40 107	Damen Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal	0.001 ND	0.001 ND	0.000 ND	0.001 ND	0.001 ND	0.003 ND	0.002 ND	ND ND	0.003	ND 0.003	NI NI
75	Cicero Avenue, Chicago Sanitary & Ship Canal	0.000	0.001	0.000	0.002	0.002	0.002	0.003	0.003	0.005	0.003	NI
41 42	Harlem Avenue, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal	0.001	0.001	0.001	0.003	0.004	0.004	0.004	0.004	0.005	0.003 0.004	NI NI
48	Stephen Street, Chicago Sanitary & Ship Canal	0.001	0.002	0.001	0.004	0.003	0.004	0.005	0.005	0.006	0.003	NI
82 92	Lockport Trebler, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal	ND 0.001	ND 0.002	ND 0.002	ND 0.004	ND 0.004	ND 0.004	ND 0.004	0.005	ND 0.005	ND 0.003	NI NI
	met River System	0.001	0.002	0.002	0.007	0.001	0.00.	3.00.				
	Ewing Avenue, Calumet River	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.001	NI
50	Burnham Avenue, Wolf Lake	0.000		0.000	0.000		0.000 0.000	0.000	0.000	0.001	0.000 0.002	NI NI
55 86	130th Street, Calumet River Burnham Avenue, Grand Calumet River	0.000		0.001	0.001	0.002	0.002	0.003		0.006		NI
	Indiana Avenue, Little Calumet River		0.000	0.000		0.000		0.001	0.001		0.001 0.001	NI NI
76 52	Halsted Street, Little Calumet River Wentworth Avenue, Little Calumet River		0.000	0.000		0.000		$0.001 \\ 0.001$	0.000	0.003		NI
54	Joe Orr Road, Thorn Creek	0.000	0.000	0.000		0.000	0.000	0.000			0.001	NI NI
97 57	170th Street, Thorn Creek Ashland Avenue, Little Calumet River		0.001	0.001	0.001		0.004 0.002	0.002	0.001	0.004	0.002 0.001	NI
58	Ashland Avenue, Calumet-Sag Channel	0.000	0.000	0.001	0.001	0.000	0.002	0.001	0.001	0.003		NI
59 43	Cicero Avenue, Calumet-Sag Channel Route 83, Calumet-Sag Channel	000.0 100.0	0.000	0.001	0.001	0.001	0.003 0.002	$0.002 \\ 0.002$	0.002 0.002	0.003 0.004	0.002	NE NE
es I	Plaines River System											
90	Route 19, Poplar Creek		0.000	0.001	0.000	0.000			0.000			NI
63 89	Longmeadow Lane, West Branch DuPage River Walnut Lane, West Branch DuPage River	0.001	0.003	ND 0.002	ND 0.002	0.001	ND 0.002	0.000	0.000		0.001 0.001	NI NI
64	Lake Street, West Branch DuPage River	0.000	0.004	0.001	0.002	0.002	0.002	0.000	0.000	0.002	0.002	NI
79 80	Higgins Road, Salt Creek Arlington Heights Road, Salt Creek	0.000	0.000		0.000	0.000	0.001	0.000	0.000	0.003		NI NI
18	Devon Avenue, Salt Creek	0.006	0.001	0.002	0.002 0.002	0.001	0.002	0.002	0.000	0.003	0.002	NI
	Wolf Road, Salt Creek Brookfield Avenue, Salt Creek		0.002 0.002	0.002 0.002	0.002 0.002	0.002 0.002	0.003 0.003	0.004	0.002 0.002	0.008	0.003 ND	NI NI
21	First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	0.002	0.004	NE
	Elmhurst Road, Higgins Creek Wille Road, Higgins Creek	0.000		0.000	0.001	0.000 0.007	0.001	0.001	0.001	0.003		ND ND
	Wille Road, Higgins Creek Lake-Cook Road, Buffalo Creek	0.000	0.001	0.000	0.000	0.001	ND	ND	ND	ND	ND	NE
	Lake-Cook Road, Des Plaines River Oakton Street, Des Plaines River			0.000		$0.001 \\ 0.000$	0.003 0.002	0.002 0.001	0.003	0.004 0.003	0.001	NE NE
19	Belmont Avenue, Des Plaines River	0.000	0.001	0.001	0.001	0.002	0.005	0.002	0.003	0.005	0.002	ND
	Roosevelt Road, Des Plaines River	0.000	0.001	0.001	0.001	0.001	0.004 0.003	0.002	0.002 0.003			NE NE
23	Ogden Avenue, Des Plaines River Willow Springs Road, Des Plaines River			0.001	$0.001 \\ 0.001$	0.002 0.002	0.003	0.002	0.003			ND
29	Stephen Street, Des Plaines River	0.000	0.000	0.001	0.002	0.001	0.003	0.002	0.002	0.005	0.002	ND
	Material Service Road, Des Plaines River Springinsguth Road, West Branch DuPage River		0.000	0.001	0.001		0.003	0.002	0.003 ND	0.006 ND	0.002 ND	ND ND

TABLE AII-115: SOLUBLE MANGANESE MEAN HISTORY 2000 THROUGH 2010

			· · · · · ·	Aı	nnual	Means	(mg/	L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
Jake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River Lake-Cook Road, Skokie River Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River Albany Avenue, North Shore Channel Contral Street, North Shore Channel Touhy Avenue, North Shore Channel Wilson Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River Universey Parkway, North Branch Chicago River Addison Avenue, North Branch Chicago River Addison Street, Chicago River Madison Street, Chicago River Madison Street, South Branch Chicago River Acher Avenue, South Fork South Branch Chicago River Archer Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal Alarlem Avenue, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal Lockport Trebler, Chicago Sanitary & Ship Canal	0.048 0.154 0.055 0.089 0.025 0.040 0.012 0.025 0.018 0.013 0.025 0.012 0.017 0.031 0.028 ver 0.029 0.026 ND 0.023 0.041 0.020 0.026 ND	0.058 0.063 0.059 0.032 0.043 0.011 0.014 0.019 0.018 0.025 0.027 0.013 0.021 0.023 ND 0.025 0.022 0.027	0.046 0.056 0.044 0.067 0.026 0.047 0.056 0.017 0.015 0.019 0.029	0.124 0.038 0.097 0.021 0.047 0.033 0.013 0.013 0.019 0.024 0.039 0.019 0.024 ND 0.020 0.020 0.021 ND	0.041 0.045 0.033 0.051 0.012 0.033 0.031 0.009 0.016 0.013 0.018 0.018 0.019 0.014 0.019 0.019 0.014 0.019 0.014 0.019	0.054 0.100 0.054 0.094 0.021 0.043 0.035 0.013 0.013 0.015 0.015 0.022 ND 0.028 0.028 0.028 0.017 0.013	0.071 0.035 0.109 0.020 0.036 0.010 0.018 0.013 0.016 0.020 0.021 0.021 ND 0.018 0.013 0.013 0.014 0.021 ND 0.018 0.013	0.034 0.025 0.010 0.019 0.015 0.021 0.024 0.007 0.016 0.022 0.020 0.020 ND	0.013 0.032 0.023 0.012 0.013 0.015 0.018 0.019 0.023 0.023 0.023 0.023 0.022 0.013 0.016 0.024 ND	0.040 0.050 0.028 0.073 0.027 0.030 0.013 0.012 0.019 0.029 0.026 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015	255555555555555555555555555555555555555
Calumet River System 49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake 55 130th Street, Calumet River 86 Burnham Avenue, Grand Calumet River 86 Indiana Avenue, Little Calumet River 87 Halsted Street, Little Calumet River 88 Wentworth Avenue, Little Calumet River 89 Use Orr Road, Thorn Creek 80 170th Street, Thorn Creek 81 Ashland Avenue, Little Calumet River 82 Ashland Avenue, Calumet-Sag Channel 83 Cicero Avenue, Calumet-Sag Channel 84 Route 83, Calumet-Sag Channel	0.022 0.017 0.198 0.029 0.038 0.093 0.051 0.062 0.058 0.050	0.014	0.013 0.036 0.157 0.021 0.033 0.105 0.058	0.008 0.013 0.131 0.019 0.035 0.096 0.057	0.005 0.011 0.132 0.009 0.025 0.084 0.042 0.051 0.065 0.037 0.040	0.008 0.012 0.067 0.012 0.029	0.009 0.027 0.114 0.059 0.064 0.083 0.036	0.004 0.005 0.108 0.008 0.026 0.090 0.026	0.006 0.006 0.004 0.078 0.011 0.031 0.094 0.054 0.063 0.043 0.044 0.034	0.004 0.007 0.057 0.009 0.040 0.089 0.038 0.043 0.058 0.039	
Des Plaines River System 90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River 65 Higgins Road, Salt Creek 66 Arlington Heights Road, Salt Creek 67 Arlington Heights Road, Salt Creek 68 Devon Avenue, Salt Creek 69 Brookfield Avenue, Salt Creek 60 Brookfield Avenue, Salt Creek 61 Elmhurst Road, Higgins Creek 61 Elmhurst Road, Higgins Creek 62 Lake-Cook Road, Buffalo Creek 63 Wille Road, Higgins Creek 64 Lake-Cook Road, Des Plaines River 65 Belmont Avenue, Des Plaines River 66 Roosevelt Road, Des Plaines River 67 Ogden Avenue, Des Plaines River 68 Willow Springs Road, Des Plaines River 69 Stephen Street, Des Plaines River 69 Material Service Road, Des Plaines River 60 Rosevelt Road, Des Plaines River 61 Material Service Road, Des Plaines River 62 Stephen Street, Des Plaines River 63 No Data.	0.025 0.032 0.042 0.034 0.041 ND 0.027 0.022 0.056 0.038 0.038 0.030 0.026 0.027 0.023	0.022 0.023 0.030 0.034 0.038 ND 0.069 0.026 0.032 0.026 0.029 0.025 0.020 0.018 0.016 0.014	0.035 0.039 0.051 0.040 0.040 ND 0.077 0.051 0.065 0.035 0.034 0.034 0.033 0.039 0.039	0.035 0.033 0.031 0.030 0.032 0.036 ND 0.067 0.027 0.030 0.030 0.032 0.028 0.028	0.037 0.021 0.014 0.017 0.027 0.031 ND 0.057 0.023 0.045 0.032 0.032 0.034 0.026 0.030 0.024	0.036 0.024 0.026 0.031 0.035 ND 0.072 0.016 ND 0.036 0.039 0.045 0.039 0.029	0.042 0.044 0.030 0.031 0.035 0.034 ND 0.091 0.018 ND 0.033 0.028 0.028 0.027	0.029 0.026 ND 0.074 0.019 ND 0.030 0.025 0.029 0.021 0.033	0.036 0.034 0.018 0.020 0.035 0.023 0.037 0.073 0.022 ND 0.029 0.034 0.052 0.050 0.027	0.041 0.021 0.027 0.034 ND 0.035 0.099 0.018 ND 0.024 0.021 0.032 0.025 0.021 0.021	999999999999999999999999999999999999999

TABLE AII-116: SOLUBLE MERCURY MEAN HISTORY 2000 THROUGH 2010

				A	nnual	Means	s (μg/I	L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch 106 Dundee Road, West Fork North Branch Chicago River 103 Golf Road, West Fork North Branch Chicago River 31 Lake-Cook Road, Middle Fork North Branch 104 Glenview Road, North Branch Chicago River 32 Lake-Cook Road, Skokie River	ND N	95555	55555	95555 95555	888888 8888888	ND ND	ND 0.093 0.080 0.030 0.000 0.000	0.020 0.075 ND	0.000 0.008 0.010 0.000 0.013	0.000	888888 888888
105 Frontage Road, Skokie River 34 Dempster Street, North Branch Chicago River 96 Albany Avenue, North Branch Chicago River 35 Central Street, North Shore Channel	ND ND ND ND	ND ND ND ND	8 8 8 8 8 8 8 8 8	8888 8888 8888	55 55 55 55 55 55 55 55 55 55 55 55 55	0.045 0.000 0.000 0.000	0.014 0.018 0.000 ND	0.000 0.075 0.075 0.000	0.032 0.012 0.058 0.008	0.000 ND 0.000 0.000	ND ND ND ND
 Oakton Street, North Shore Channel Touhy Avenue, North Shore Channel Foster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River Diversey Parkway, North Branch Chicago River Grand Avenue, North Branch Chicago River 	99999	95555	25555 25555	25 25 25 25 25 25 25 25 25 25 25 25 25 2	25555 25555 25555	0.000 0.000 0.000 0.080 ND 0.000	0.023 0.015 0.000	$0.000 \\ 0.000 \\ 0.000$	0.038 0.030 0.008 0.000 0.027	0.000 0.000 0.000	888888
100 Wells Street, Chicago River 100 Wells Street, Chicago River 108 Loomis Street, South Branch Chicago River 108 Loomis Street, South Branch Chicago River 108 Archer Avenue, South Fork South Branch Chicago River	22222	ND N	38888	55 55 55 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 5	88888 88888	0.000 0.000 ND ND ND	0.167 0.083 0.050 0.000 0.000	0.015 0.000 0.075 0.000	0.023 0.090 0.030 0.030 0.020 0.023	ND 0.000 ND 0.060	22225
40 Damen Avenue, Chicago Sanitary & Ship Canal 107 Western Avenue, Chicago Sanitary & Ship Canal 75 Cicero Avenue, Chicago Sanitary & Ship Canal 41 Harlem Avenue, Chicago Sanitary & Ship Canal 42 Route 83, Chicago Sanitary & Ship Canal 48 Stephen Street, Chicago Sanitary & Ship Canal 40 Lockport Trebler, Chicago Sanitary & Ship Canal 41 Stephen Street, Chicago Sanitary & Ship Canal 42 Lockport Trebler, Chicago Sanitary & Ship Canal	255555	255555		555555	555555	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	0.000 ND 0.000 0.000 0.030 0.016 ND	ND ND 0.000 0.007 0.000 0.087 ND	ND 0.010 0.000 0.033 0.000 0.000 ND	ND 0.000 ND 0.017	8888888
92 Lockport Forebay, Chicago Sanitary & Ship Canal Calumet River System	ND	ND	ND	ND	ND	0.000	0.025	0.002	0.013	0.016	ND
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake 130th Street, Calumet River 86 Burnham Avenue, Grand Calumet River 86 Indiana Avenue, Little Calumet River 87 Halsted Street, Little Calumet River 88 Burnham Avenue, Little Calumet River 89 Joe Orr Road, Thorn Creek 89 170th Street, Thorn Creek 89 Ashland Avenue, Little Calumet River 80 Ashland Avenue, Calumet-Sag Channel 81 Cicero Avenue, Calumet-Sag Channel 82 Route 83, Calumet-Sag Channel					ND 0.000 0.040 0.000 0.000 0.000 ND ND 0.000 0.050 0.000	ND ND ND 0.085 ND 0.000 ND ND 0.000 ND ND ND 0.000	0.090 0.000 0.000 0.020 ND 0.000 ND ND ND ND 0.000 0.000 0.043 ND	0.000 ND 0.022 0.000 0.000 0.000 0.070 0.000 0.070	0.020 0.026 0.020 0.019 0.020 0.020 0.000 0.018 0.023 0.022	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	
Des Plaines River System 90 Route 19, Poplar Creek 63 Longmeadow Lane, West Branch DuPage River 89 Walnut Lane, West Branch DuPage River 64 Lake Street, West Branch DuPage River 79 Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek 18 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek 199 Brookfield Avenue, Salt Creek 21 First Avenue, Salt Creek 77 Elmhurst Road, Higgins Creek 78 Wille Road, Higgins Creek		999999999999	99999999999	922222222 9222222222222222222222222222	98888888888888888888888888888888888888	0.060 ND ND ND ND 0.000 0.000 ND ND ND ND ND ND	ND 0.000 0.043 0.080 0.000 0.027 0.030 0.050 ND	0.000	ND 0.007 0.003 0.000 0.020 0.000 0.004 0.005 ND	ND 0.025 0.020 0.000 ND 0.020 0.000 ND 0.020	99999999999
12 Lake-Cook Road, Buffalo Creek 13 Lake-Cook Road, Des Plaines River 17 Oakton Street, Des Plaines River 19 Belmont Avenue, Des Plaines River 20 Roosevelt Road, Des Plaines River 22 Ogden Avenue, Des Plaines River 23 Willow Springs Road, Des Plaines River 29 Stephen Street, Des Plaines River 91 Material Service Road, Des Plaines River 110 Springinsguth Road, West Branch DuPage River	99999999999999999999999999999999999999	25555555555555555555555555555555555555	255555555	555555555555555555555555555555555555555	ND 0.080 0.080 ND DD ND ND NO ND	ND 0.000 0.080 ND ND ND ND 0.000 ND	ND 0.063 0.070 0.030 0.000 0.025 0.000 0.000 0.100	ND 0.045 0.033 0.000 0.000 0.090 0.000 0.005	ND 0.048 0.020 0.003 0.015 0.004 0.018	0.017 ND 0.000 0.025 0.015 0.010	255555555

ND = No Data.

TABLE AII-117: SOLUBLE ZINC MEAN HISTORY 2000 THROUGH 2010

				Aı	nual	Means	(mg/l	L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
30 Lake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River Lake-Cook Road, Skokie River Dempster Street, North Branch Chicago River Albany Avenue, North Branch Chicago River Central Street, North Shore Channel Coukton Street, North Shore Channel Touhy Avenue, North Shore Channel Wilson Avenue, North Shore Channel Diversey Parkway, North Branch Chicago River Diversey Parkway, North Branch Chicago River Lake Shore Drive, Chicago River Madison Street, South Branch Chicago River Madison Street, South Branch Chicago River Madison Street, South Branch Chicago River Loomis Street, South Branch Chicago River Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal Lockport Trebler, Chicago Sanitary & Ship Canal	0.005 0.000 0.007 0.000 0.013 0.000 0.012 0.024 0.018 0.018 0.019 0.003 0.009 0.012 0.011 0.012 ND 0.011 0.022 0.021	0.003 0.011 0.004 0.014 0.003 0.002 0.010 0.023 0.027 0.017 0.017 0.015 0.015 0.015 0.011 0.011 0.011 0.011 0.011 0.011	0.003 0.000 0.010 0.011 0.004 0.007 0.003 0.009 0.026 0.020 0.019 0.017 0.017 0.016 ND 0.022 0.019 0.020	0.016 0.011 0.017 0.011 0.019 0.016 0.010 0.022 0.037 0.032 0.031 0.029 0.016 0.021 0.025 0.021 0.025 0.021 0.029 0.030	0.014 0.012 0.019 0.015 0.022 0.016 0.021 0.034 0.028 0.027 0.021 0.021 0.023 0.024 ND 0.024 ND	0.011 0.005 0.018 0.011 0.023 0.014 0.015 0.004 0.018 0.029 0.028 0.031 0.024 0.028	0.012 0.007 0.019 0.019 0.015 0.006 0.015 0.025 0.025 0.023 0.021 0.027 0.022 0.022 ND 0.022 0.022 0.022 ND	0.004 0.013 0.006 0.022 0.014 0.012 0.006 0.015 0.029 0.024 0.024 0.023 0.023 0.023 0.023 0.023 0.023 0.020 ND ND ND 0.019 0.024 0.018 0.029 0.029 0.020 0.018 0.020 0.018 0.020 0.018 0.020 0.018 0.020 0.020 0.020 0.020 0.020 0.020 0.021 0.024 0.024 0.025 0.025 0.026 0.026 0.026 0.026 0.027 0.027 0.027 0.027 0.027 0.028 0.029 0.020 0.020 0.020 0.020 0.020 0.020 0.020 0.020 0.020 0.020 0.020 0.0	0.012 0.007 0.017 0.009 0.021 0.017 0.007 0.020 0.025 0.025 0.028 0.013 0.014 0.023 0.023 0.021 0.022 0.022 0.022 0.022 0.023	0.011 0.005 0.014 0.007 0.012 0.011 0.004 0.029 0.027 0.024 0.021 0.015 0.016 0.013 ND 0.022 0.022 0.022 0.022 0.022 0.022 0.022	
Calumet River System 49 Ewing Avenue, Calumet River	0.000	0.002	0.001	0.009	0.008	0.005	0.011	0.005	0.004	0.004	ND
50 Burnham Avenue, Wolf Lake 130th Street, Calumet River 86 Burnham Avenue, Grand Calumet River 86 Indiana Avenue, Little Calumet River 87 Indiana Avenue, Little Calumet River 88 Eventworth Avenue, Little Calumet River 99 Joe Orr Road, Thorn Creek 90 170th Street, Thorn Creek 91 Ashland Avenue, Little Calumet River 92 Ashland Avenue, Calumet-Sag Channel 93 Cicero Avenue, Calumet-Sag Channel 94 Route 83, Calumet-Sag Channel	0.000 0.003 0.000 0.004 0.017 0.005 0.024 0.005 0.005 0.009	0.001 0.000 0.026 0.001 0.016 0.007 0.034 0.013	0.001 0.002 0.008 0.003 0.022 0.010 0.041 0.019 0.014 0.028	0.010 0.012 0.019 0.017 0.029 0.013 0.041 0.019 0.016	0.007 0.017 0.031 0.013 0.026 0.014 0.044 0.021 0.016 0.030	0.004 0.008 0.020 0.009 0.026 0.013 0.032 0.020 0.019 0.036 0.023	0.004 0.008 0.021 0.010 0.024 0.014 0.039 0.024 0.016 0.029	0.001 0.003 0.021 0.009 0.031 0.012 0.021 0.023 0.024	0.004 0.007 0.031 0.015 0.032 0.018 0.036 0.030 0.014 0.024 0.025	0.003 0.005 0.024 0.008 0.023 0.010 0.028 0.013 0.010 0.024	
	0.000	0.001	0.005	0.010	0.007	0.005	0.004		0.007		ND
63 Longmeadow Lane, West Branch DuPage River Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River Higgins Road, Salt Creek 80 Arlington Heights Road, Salt Creek 10 Devon Avenue, Salt Creek 24 Wolf Road, Salt Creek 109 Brookfield Avenue, Salt Creek 25 First Avenue, Salt Creek 26 Elmhurst Road, Higgins Creek 17 Elmhurst Road, Higgins Creek 18 Wille Road, Higgins Creek 19 Lake-Cook Road, Des Plaines River 10 Oakton Street, Des Plaines River 11 Rosevelt Road, Des Plaines River 12 Ogden Avenue, Des Plaines River 13 Willow Springs Road, Des Plaines River 14 Willow Springs Road, Des Plaines River 15 Stephen Street, Des Plaines River 16 Willow Springs Road, Des Plaines River 17 Willow Springs Road, Des Plaines River 18 Willow Springs Road, Des Plaines River 19 Waterial Service Road, Des Plaines River	ND 0.030 0.014 0.000 0.015 0.015 0.013 ND 0.002 0.002 0.009 0.011 0.013 0.010 0.007	ND 0.032 0.022 0.005 0.018 0.016 0.013 ND 0.007 0.032 0.001 0.007 0.001 0.008 0.008 0.008 0.006 0.007	ND 0.034 0.025 0.002 0.015 0.014 0.017 ND 0.017 0.041 0.002 0.011 0.009 0.014 0.013 0.014 0.013	ND 0.040 0.030 0.009 0.023 0.021 0.021 0.011 0.040 0.015 0.013 0.018 0.019 0.021	ND 0.034 0.029 0.007 0.022 0.018 0.023 ND 0.020 0.047 0.008 0.016 0.017 0.022 0.022 0.023 0.021 0.022	ND 0.036 0.027 0.004 0.021 0.028 0.029 0.026 ND 0.017 0.062 ND 0.021	ND 0.043 0.032 0.007 0.025 0.025 ND 0.021 0.057 ND 0.019 0.018 0.021 0.021 0.021 0.021	0.009 0.032 0.025 0.018 0.018 0.016 0.049 ND 0.018 0.014 0.025 0.017 0.019	0.036 0.026 0.003 0.019 0.029 0.025 0.028 0.013 0.048 ND 0.017 0.016 0.024 0.023 0.022	0.027 0.002 0.020 0.016 0.019 ND 0.020 0.012 0.043 ND 0.013 0.009 0.014 0.011 0.015 0.012	8888888888888888888888888888888888888

TABLE AII-118: SOLUBLE SELENIUM MEAN HISTORY 2000 THROUGH 2010

				Aı	nnual l	Means	(mg/	L)			
Sampling Station (No. Name)	10	09	08	07	06	05	04	03	02	01	00
Chicago River System											
Jake-Cook Road, West Fork North Branch Dundee Road, West Fork North Branch Chicago River Golf Road, West Fork North Branch Chicago River Lake-Cook Road, Middle Fork North Branch Glenview Road, North Branch Chicago River Lake-Cook Road, Skokie River Lake-Cook Road, Skokie River Entral Street, North Branch Chicago River Lake-Cook Road, Skokie River Dempster Street, North Branch Chicago River Central Street, North Branch Chicago River Central Street, North Shore Channel Coakton Street, North Shore Channel Touhy Avenue, North Shore Channel Touhy Avenue, North Shore Channel Foster Avenue, North Shore Channel Coster Avenue, North Shore Channel Wilson Avenue, North Branch Chicago River Universey Parkway, North Branch Chicago River Kels Street, Chicago River Madison Street, South Branch Chicago River Madison Street, South Branch Chicago River Comis Street, South Branch Chicago River Archer Avenue, South Fork South Branch Chicago River Damen Avenue, Chicago Sanitary & Ship Canal Western Avenue, Chicago Sanitary & Ship Canal Harlem Avenue, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal Route 83, Chicago Sanitary & Ship Canal Cicero Avenue, Chicago Sanitary & Ship Canal Stephen Street, Chicago Sanitary & Ship Canal Lockport Forebay, Chicago Sanitary & Ship Canal	0.000 0.000	0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.002 0.002 0.002 0.000	0.002 0.002 0.004 0.003 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.007 0.005 0.006 0.005 0.007 0.007 0.005 0.006 0.007 0.005 0.006 0.007 0.005 0.006 0.007 0.006 0.006 0.006 0.006 0.006 0.006	ND 0.006 0.008 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.006 0.005 0.007 0.005 0.007 0.005 0.005 0.006 0.005 0.007 0.005 0.006 0.005 0.006 0.005 0.006 0.005 0.006 0.005 0.006 0.005 0.006 0.005 0.006 0.0	0.005 0.002 0.002 0.004 0.006 0.003 0.003 0.001 0.004 0.005 0.005 0.005 0.004 ND ND 0.004 0.004 0.004	0.004 0.005 0.001 0.005 0.006 0.005 0.003 0.005 0.004 0.004 0.002 0.002 0.002 ND 0.004 0.001 0.001 0.001	0.002 0.002 0.000	
Calumet River System				•							
49 Ewing Avenue, Calumet River 50 Burnham Avenue, Wolf Lake 51 30th Street, Calumet River 63 Burnham Avenue, Grand Calumet River 64 Indiana Avenue, Little Calumet River 65 Halsted Street, Little Calumet River 66 Wentworth Avenue, Little Calumet River 67 Joe Orr Road, Thorn Creek 67 170th Street, Thorn Creek 68 Ashland Avenue, Little Calumet River 69 Ashland Avenue, Calumet-Sag Channel 69 Cicero Avenue, Calumet-Sag Channel 69 Route 83, Calumet-Sag Channel	0.000 0.005 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000	0.004 0.003 0.002 0.003 0.002 0.003 0.002 0.003 0.002 0.003	0.006 0.003 0.004 0.005 0.004 0.004 0.005 0.004	0.004 0.005 0.008 0.005 0.005 0.005 0.005	0.003 0.003 0.002	0.005 0.003 0.003 0.000 0.006 0.005 0.001 0.005	0.000 0.000 0.002 0.000 0.005 0.005 0.004 0.002 0.000 0.004	
Des Plaines River System											
90 Route 19, Poplar Creek Longmeadow Lane, West Branch DuPage River Walnut Lane, West Branch DuPage River Lake Street, West Branch DuPage River Higgins Road, Salt Creek Prington Heights Road, Salt Creek User Wolf Road, Salt Creek Wolf Road, Salt Creek Hope Brookfield Avenue, Salt Creek First Avenue, Salt Creek Higlins Creek Higlins Creek Kille Road, Higgins Creek Lake-Cook Road, Buffalo Creek Lake-Cook Road, Des Plaines River Roosevelt Road, Des Plaines River Willow Springs Road, Des Plaines River	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 ND 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.000 0.000 ND 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.002 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	ND 0.000 0.000 0.001 0.001 0.001 0.000 ND 0.000 0.000 0.001 0.000 0.001 0.001 0.001	0.007 0.005 0.007 0.008 0.006 0.005 ND 0.006 0.005 0.006 0.005 0.006 0.005 0.006 0.005	0.006 0.006 ND 0.006 0.005 0.005 0.006 0.006 0.007 0.005 0.006 0.006	0.000 0.004 0.005 0.001 0.003 0.003 0.003 0.004 ND 0.005 0.003 0.004 0.003 0.004 0.003	0.003 0.005 0.006 0.004 0.002 0.008 0.011 0.005 0.006 ND 0.010 0.006 0.006 0.006 0.005	0.000 0.000 0.000 0.000 0.000 0.000 0.000 ND 0.002 0.000 ND 0.002 0.000 0.000 0.000 0.000 0.000 0.000	999999999999999999999999999999999999999

APPENDIX AIII

STATISTICAL ANALYSIS OF UPSTREAM AND DOWNSTREAM LOCATIONS, SAMPLE MEANS, AND APPLICABLE SIGNIFICANCE PROBABILITY TESTS

TABLE AIII-1: SIGNIFICANCE PROBABILITIES DUE TO OR ASSOCIATED WITH TESTING FOR EQUALITY OF MEAN CONCENTRATIONS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS OF THE NORTH SIDE WATER RECLAMATION PLANT IN 2010

					$\frac{\text{ll Hypothesis}}{H_0: \mu_u = \mu_d}$	
Parameter (Unit)	(U)	(D)	F	Exact T	Approx T	WilCox T
DO (mg/L)	0.986	1.000	0.346	0.078		• • •
Temp (°C)	0.908	0.961	0.078	0.775	• • •	•••
pН	0.587	1.000	0.000	• • •	0.418	
Alk (mg/L)	0.937	1.000	0.259	0.082	•••	•••
Cl (mg/L)	0.426	0.824	0.000	•••	0.010	•••
Turb (NTU)	0.914	0.565	0.119	0.370	• • •	•••
TKN (mg/L)	0.170	0.974	0.034	• • •	0.001	•••
NH ₄ -N (mg/L)	0.669	0.998	0.021	• • •	•••	0.002
NH ₃ -N (mg/L)	0.271	0.715	0.060	0.013	•••	•••
ORG-N (mg/L)	0.181	0.698	0.020	• • •	0.005	•••
$NO_2 + NO_3 \text{ (mg/L)}$	0.283	0.983	0.000	0.000	• • •	• • •
TS (mg/L)	0.735	0.772	0.006	•••	0.003	•••
TSS (mg/L)	1.000	0.541	0.039	•••	0.958	
VSS (mg/L)	0.078	0.124	0.093	0.785		• • •
TDS (mg/L)	0.847	0.780	0.005	• • •	0.003	• • •
Phenol (µg/L)	-	-	-	-	-	-
NPS (μg/L)	-	-	-	-	-	-
SO ₄ (mg/L)	0.473	0.946	0.387	0.000	• • •	• • •
FOG (mg/L)	-	-	-	-	-	-
TP (mg/L)	0.672	0.999	0.000	0.000	•••	•••
CN (mg/L)	-	0.026	-	-	-	-
WAD-CN (mg/L)	-	0.130	-	-	-	-
F (mg/L)	1.000	1.000	0.000	0.000	• • •	• • •
TOC (mg/L)	0.691	0.996	0.010	• • •	0.206	•••
FC (cfu/100mL)	0.901	0.992	0.000	0.000	•••	•••
EColi (cfu/100mL)	1.000	1.000	0.007	•••	0.291	•••
Ca (mg/L)	0.738	0.998	0.143	0.006		•••
Mg (mg/L)	0.657	0.999	0.170	0.007	• • •	• • •

TABLE AIII-1 (Continued): SIGNIFICANCE PROBABILITIES DUE TO OR ASSOCIATED WITH TESTING FOR EQUALITY OF MEAN CONCENTRATIONS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS OF THE NORTH SIDE WATER RECLAMATION PLANT IN 2010

	¹ Significance Probabilities for Testing Null Hypothesis (H ₀)								
			H_0 : Normal $H_0: \sigma_u = \sigma_d$			$H_0: \mu_u = \mu_d$			
Parameter (Unit)	(U)	(D)	F	Exact T	Approx T	WilCox T			
Hard (mg/L)	0.687	0.999	0.151	0.006	•••				
G. Alpha (pCi/L)	1.000	0.936	0.132	0.146					
G. Beta (pCi/L)	0.981	0.999	0.014	•••	0.100				
Chlrphl (µg/L)	0.144	0.183	0.000	• • •	0.330	• • •			
Bnzn (μg/L)	-	-	-	-	-	-			
Ebnzn (µg/L)	-	-	-	-	-	-			
Toln (μg/L)	-	-	-	-	-	-			
Xyln (μg/L)	-	-	-	-	-	-			
Ag (mg/L)	-	-	-	-	-	-			
As (mg/L)	-	-	-	-	-	-			
Ba (mg/L)	1.000	1.000	0.365	0.625		• • •			
B (mg/L)	-	0.996	-	-	-	-			
Cd (mg/L)	-	-	-	-	-	-			
Cu (mg/L)	-	-	-	-	~	-			
Cr (mg/L)	0.078	0.012	0.203	• • •	•••	0.816			
$\operatorname{Cr}^{+6}(\mu g/L)$	-	-	-	-	•	-			
Fe (mg/L)	1.000	0.973	0.482	0.544	•••	•••			
Pb (mg/L)	-	-	-	-	-	-			
Ni (mg/L)	-	-	-	-	-	-			
Mn (mg/L)	0.774	0.114	0.207	0.542	•••	• • •			
Hg (μg/L)	-	-	-	-	-	-			
Hg-(ng/L)	0.918	-	-	-	-	-			
Zn (mg/L)	0.078	0.505	0.004	• • •	0.018	•••			
Se (mg/L)	-	-	-	-	-	-			
Sol. Ca (mg/L)	0.942	0.979	0.127	0.019	•••	•••			
Sol. Mg (mg/L)	0.946	0.995	0.100	0.018	•••	•••			
Sol. Ag (mg/L)	-	-	-	-	-	-			
Sol. As (mg/L)	-	-	-	-	-	-			

TABLE AIII-1 (Continued): SIGNIFICANCE PROBABILITIES DUE TO OR ASSOCIATED WITH TESTING FOR EQUALITY OF MEAN CONCENTRATIONS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS OF THE NORTH SIDE WATER RECLAMATION PLANT IN 2010

Parameter (Unit)	¹ Significance Probabilities for Testing Null Hypothesis (H ₀)							
	H ₀ :Normal (U)	H ₀ :Normal (D)	$H_0: \sigma_u = \sigma_d$ F	$H_0: \mu_u = \mu_d$ Exact T	$H_0: \mu_u = \mu_d$ Approx T	$H_0: \mu_u = \mu_d$ WilCox T		
Sol. Ba (mg/L)	0.997	1.000	0.065	0.458	• • •	• • •		
Sol. B (mg/L)	0.313	0.996	0.150	0.000		• • •		
Sol. Cd (mg/L)	-	-	-	-	-	-		
Sol. Cu (mg/L)	-	-	-	-	-	-		
Sol. Cr (mg/L)	-	-	-	-	-	-		
Sol. Fe (mg/L)	0.356	0.699	0.164	0.541		•••		
Sol. Pb (mg/L)	-	-	-	-	-	-		
Sol. Ni (mg/L)	- '	- "	-	-	-	-		
Sol. Mn (mg/L)	0.816	0.540	0.466	0.405	•••			
Sol. Zn (mg/L)	-	0.995	-	-	-	-		
Sol. Se (mg/L)	-	-	-	-	-	-		

¹Significance probabilities ≤ 0.05 indicates that upstream and downstream population means are not equal.

^{*}Test applies to population means if variances of log values are equal, otherwise applies to geometric means only.

⁻⁼ No test is done since standard deviation is either 0 or does not exist.

^{···=}Not appropriate test.

TABLE AIII-2: SIGNIFICANCE PROBABILITIES DUE TO OR ASSOCIATED WITH TESTING FOR EQUALITY OF MEAN CONCENTRATIONS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS OF THE STICKNEY WATER RECLAMATION PLANT IN 2010

	1	Significance	Probabilities:	for Testing Nu	ll Hypothesis	(\mathbf{H}_0)
				$H_0: \mu_u = \mu_d$		
Parameter (Unit)	(U)	(D)	F	Exact T	Approx T	WilCox T
DO (mg/L)	1.000	1.000	0.042	•••	0.005	
Temp (°C)	1.000	0.942	0.467	0.544	•••	•••
pН	1.000	0.990	0.374	0.053	• • •	
Alk (mg/L)	0.541	0.982	0.391	0.867	•••	•••
Cl (mg/L)	0.766	0.993	0.301	0.492		
Turb (NTU)	0.978	0.995	0.153	0.001	• • •	•••
TKN (mg/L)	0.951	0.970	0.449	0.688	• • •	• • •
NH ₄ -N (mg/L)	0.462	0.668	0.289	0.770	•••	•••
NH ₃ -N (mg/L)	1.000	1.000	0.419	0.618	•••	•••
ORG-N (mg/L)	0.991	1.000	0.267	0.395		
$NO_2 + NO_3 $ (mg/L)	0.992	1.000	0.086	0.021	• • •	• • •
TS (mg/L)	0.845	0.990	0.395	0.341	•••	•••
TSS (mg/L)	0.915	1.000	0.052			0.002
VSS (mg/L)	0.297	0.099	0.376	0.252		
TDS (mg/L)	0.843	0.987	0.392	0.308	• • •	
Phenol (μg/L)	-	0.042	-	-	-	-
NPS (μg/L)	-	-	-	-	-	-
SO ₄ (mg/L)	0.960	0.999	0.063	0.000	• • •	
FOG (mg/L)	-	-	-	-	-	-
TP (mg/L)	0.859	0.668	0.280	0.528	•••	•••
CN (mg/L)	0.006	0.091	0.055	•••	• • •	0.381
WAD-CN (mg/L)	0.013	0.042	0.239	• • •		0.726
F (mg/L)	1.000	0.856	0.475	0.217	• • •	• • •
TOC (mg/L)	0.975	0.928	0.239	0.029	•••	• • •
FC (cfu/100mL)	1.000	0.983	0.166	0.000	•••	
EColi (cfu/100mL)	0.994	1.000	0.125	0.037		
Ca (mg/L)	0.999	0.973	0.449	0.273		• • •
Mg (mg/L)	1.000	0.972	0.411	0.426	•••	•••

TABLE AIII-2 (Continued): SIGNIFICANCE PROBABILITIES DUE TO OR ASSOCIATED WITH TESTING FOR EQUALITY OF MEAN CONCENTRATIONS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS OF THE STICKNEY WATER RECLAMATION PLANT IN 2010

	Significance Probabilities for Testing Null Hypothesis (H ₀) $H_0: Normal \ H_0: Normal \ H_0: \sigma_u = \sigma_d \ H_0: \mu_u = \mu_d \ H_0: \mu_u = \mu_d$ $H_0: \mu_u = \mu_d$							
.						$H_0: \mu_u = \mu_c$		
Parameter (Unit)	(U)	(D)	F	Exact T	Approx T	WilCox T		
Hard (mg/L)	1.000	0.971	0.436	0.326	•••	•••		
G. Alpha (pCi/L)	0.995	0.969	0.399	0.548	•••	• • •		
G. Beta (pCi/L)	1.000	1.000	0.227	0.097		• • •		
Chlrphl (µg/L)	0.677	0.448	0.336	0.604	•••	•••		
Bnzn (µg/L)	-	-	-	-	-	-		
Ebnzn (µg/L)	-	-	-	-	-	-		
Toln (μg/L)	-	-	-	-	-	-		
Xyln (μg/L)	-	-	-	-	-	-		
Ag (mg/L)	-	-	-	-	-	-		
As (mg/L)	-	-	-	-	-	-		
Ba (mg/L)	0.998	0.995	0.478	0.111	•••	• • •		
B (mg/L)	0.956	0.961	0.227	0.006	•••	• • •		
Cd (mg/L)	-	. -	-	-	~	-		
Cu (mg/L)	-	-	-	-	~	-		
Cr (mg/L)	0.019	0.042	0.003	• • •	•••	0.683		
$Cr^{+6} (\mu g/L)$	-	-	-	-	•	-		
Fe (mg/L)	0.914	0.981	0.395	0.000	•••	•••		
Pb (mg/L)	0.006	-	-	-	-	-		
Ni (mg/L)	-	0.042	-	-	~	-		
Mn (mg/L)	0.997	0.150	0.000	•••	0.717	•••		
Hg (μg/L)	-	-	-	-	-	-		
Hg-(ng/L)	-	-	-	-	-	-		
Zn (mg/L)	0.347	0.941	0.471	0.459	• • •	•••		
Se (mg/L)	-	•	-	-	-	-		
Sol. Ca (mg/L)	0.828	0.990	0.474	0.278	•••	• • •		
Sol. Mg (mg/L)	0.745	0.990	0.399	0.390	• • •	• • •		
Sol. Ag (mg/L)	-	-	-	-	-	-		
Sol. As (mg/L)	-	-	-	-	-	-		

TABLE AIII-2 (Continued): SIGNIFICANCE PROBABILITIES DUE TO OR ASSOCIATED WITH TESTING FOR EQUALITY OF MEAN CONCENTRATIONS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS OF THE STICKNEY WATER RECLAMATION PLANT IN 2010

	H ₀ :Normal	H ₀ :Normal	$H_0: \sigma_u = \sigma_d$	$H_0: \mu_u = \mu_d$	$H_0: \mu_u = \mu_d$	$H_0: \mu_u = \mu_d$
Parameter (Unit)	(U)	(D)	F	Exact T	Approx T	WilCox T
Sol. Ba (mg/L)	0.951	0.983	0.368	0.584	• • •	
Sol. B (mg/L)	0.993	0.983	0.220	0.008		• • •
Sol. Cd (mg/L)	· -	-	-	-	-	-
Sol. Cu (mg/L)	-	-	•	-	-	- ,
Sol. Cr (mg/L)	0.012	-	-	-	-	-
Sol. Fe (mg/L)	0.584	0.844	0.272	0.518	•••	• • •
Sol. Pb (mg/L)	-	-	-	-	-	-
Sol. Ni (mg/L)	0.012	0.371	0.318	•••	•••	0.224
Sol. Mn (mg/L)	1.000	0.360	0.000	•••	0.489	
Sol. Zn (mg/L)	0.458	0.897	0.372	0.054	•••	• • •
Sol. Se (mg/L)	-	-	_	-	_	-

¹Significance probabilities ≤ 0.05 indicates that upstream and downstream population means are not equal.

^{*}Test applies to population means if variances of log values are equal, otherwise applies to geometric means only.

⁻⁼ No test is done since standard deviation is either 0 or does not exist.

^{···=}Not appropriate test.

TABLE AIII-3: SIGNIFICANCE PROBABILITIES DUE TO OR ASSOCIATED WITH TESTING FOR EQUALITY OF MEAN CONCENTRATIONS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS OF THE CALUMET WATER RECLAMATION PLANT IN 2010

	1	Significance	Probabilities	for Testing Nu	Il Hypothesis	(\mathbf{H}_0)
				$H_0: \mu_u = \mu_d$		
Parameter (Unit)	(U)	(D)	F	Exact T	Approx T	WilCox T
DO (mg/L)	1.000	1.000	0.294	0.007	•••	•••
Temp (°C)	1.000	1.000	0.266	0.784		
pН	0.995	0.999	0.000	• • •	0.069	
Alk (mg/L)	0.960	0.998	0.227	0.004	•••	•••
Cl (mg/L)	0.681	0.999	0.247	0.171		
Turb (NTU)	1.000	0.690	0.040	• • •	0.018	
TKN (mg/L)	0.975	1.000	0.494	0.007	• • •	•••
NH ₄ -N (mg/L)	0.448	0.997	0.411	0.088	• • • •	•••
NH ₃ -N (mg/L)	0.996	1.000	0.213	0.391	•••	•••
ORG-N (mg/L)	0.987	0.953	0.428	0.008	•••	• • •
$NO_2 + NO_3 $ (mg/L)	0.706	1.000	0.011			0.001
TS (mg/L)	0.780	1.000	0.462	0.056	• • •	•••
TSS (mg/L)	0.508	0.694	0.379	0.005	•••	•••
VSS (mg/L)	0.054	0.022	0.033			0.543
TDS (mg/L)	0.859	1.000	0.453	0.051		
Phenol (µg/L)	-	-	-	-	-	•
NPS (μg/L)	-	-	-	-	-	~
SO ₄ (mg/L)	0.944	0.818	0.083	0.302	• • •	• • •
FOG (mg/L)	-	-	-	-	-	~
TP (mg/L)	0.296	0.992	0.008	•••	0.003	•••
CN (mg/L)	-	0.048	-	-	-	•
WAD-CN (mg/L)	0.022	0.120	0.093		• • •	0.330
F (mg/L)	0.983	1.000	0.091	0.001	•••	• • •
TOC (mg/L)	0.919	1.000	0.258	0.013	•••	•••
FC (cfu/100mL)	1.000	0.999	0.068	0.000	•••	•••
EColi (cfu/100mL)	1.000	1.000	0.084	0.012		• • •
Ca (mg/L)	0.949	0.994	0.401	0.051	• • •	•••
Mg (mg/L)	0.741	1.000	0.392	0.041	•••	•••

TABLE AIII-3 (Continued): SIGNIFICANCE PROBABILITIES DUE TO OR ASSOCIATED WITH TESTING FOR EQUALITY OF MEAN CONCENTRATIONS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS OF THE CALUMET WATER RECLAMATION PLANT IN 2010

				$\frac{\text{s for Testing N}}{H_0: \mu_u = \mu_d}$	$H_0: \mu_u = \mu_d$	$H_0: \mu_u = \mu_d$
Parameter (Unit)	(U)	(D)	F	Exact T	Approx T	WilCox T
Hard (mg/L)	0.891	0.999	0.400	0.047	•••	
G. Alpha (pCi/L)	0.600	0.988	0.387	0.278		
G. Beta (pCi/L)	0.996	0.638	0.478	0.591	• • •	
Chirphi (µg/L)	0.572	0.839	0.000	• • •	0.147	•••
Bnzn (μg/L)	-	-	-	-	-	*
Ebnzn (µg/L)	-	-	-	-	-	-
Toln (µg/L)	-	-	-	-	-	-
Xyln (μg/L)	-	-	-	-	-	-
Ag (mg/L)	-	-	-	-	-	-
As (mg/L)	-	-	-	-	-	-
Ba (mg/L)	0.920	0.992	0.169	0.002	•••	• • •
B (mg/L)	0.960	0.680	0.114	0.059	***	•••
Cd (mg/L)	-	-	-	-	-	-
Cu (mg/L)	-	-	-	-	-	-
Cr (mg/L)	-	-	-	-	-	-
$\operatorname{Cr}^{+6}(\mu g/L)$	-	-	-	-	-	-
Fe (mg/L)	0.999	0.997	0.438	0.298	•••	
Pb (mg/L)	0.022	-	-	-	-	-
Ni (mg/L)	-	-	-	-	-	-
Mn (mg/L)	0.294	0.205	0.001	•••	0.421	•••
Hg (μg/L)	-	-	-	-	-	-
Hg-(ng/L)	-	-	-	· -	-	-
Zn (mg/L)	0.057	0.339	0.099	0.321	• • •	•••
Se (mg/L)	-	-	~	-	~	-
Sol. Ca (mg/L)	0.948	1.000	0.458	0.042	•••	
Sol. Mg (mg/L)	0.874	1.000	0.447	0.043	• • •	• • •
Sol. Ag (mg/L)	-	-	-	-	-	-
Sol. As (mg/L)	-	-	-	-	-	-

TABLE AIII-3 (Continued): SIGNIFICANCE PROBABILITIES DUE TO OR ASSOCIATED WITH TESTING FOR EQUALITY OF MEAN CONCENTRATIONS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS OF THE CALUMET WATER RECLAMATION PLANT IN 2010

	¹ Significance Probabilities for Testing Null Hypothesis (H ₀)							
	H ₀ :Normal	H ₀ :Normal	$H_0: \sigma_u = \sigma_d$	$H_0: \mu_u = \mu_d$	$H_0: \mu_u = \mu_d$	$H_0: \mu_u = \mu_d$		
Parameter (Unit)	(U)	(D)	F	Exact T	Approx T	WilCox T		
Sol. Ba (mg/L)	0.990	0.973	0.184	0.003	•••	•••		
Sol. B (mg/L)	0.978	0.973	0.066	0.076	•••			
Sol. Cd (mg/L)	-	0.042	-	-	-	-		
Sol. Cu (mg/L)	-	-	-	-	•	-		
Sol. Cr (mg/L)	-	-	-	<u></u> .	-	-		
Sol. Fe (mg/L)	0.042	0.401	0.001	•••	• • •	0.094		
Sol. Pb (mg/L)	-	-	-	-	-			
Sol. Ni (mg/L)	0.042	-	-	-	-	-		
Sol. Mn (mg/L)	0.977	0.875	0.214	0.526	•••			
Sol. Zn (mg/L)	0.042	0.983	0.499	•••		0.026		
Sol. Se (mg/L)	-	-	-	-	-	-		

¹Significance probabilities ≤ 0.05 indicates that upstream and downstream population means are not equal.

^{*}Test applies to population means if variances of log values are equal, otherwise applies to geometric means only.

⁻⁼ No test is done since standard deviation is either 0 or does not exist.

^{···=}Not appropriate test.

TABLE AIII-4: SIGNIFICANCE PROBABILITIES DUE TO OR ASSOCIATED WITH TESTING FOR EQUALITY OF MEAN CONCENTRATIONS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS OF THE JOHN E. EGAN WATER RECLAMATION PLANT IN 2010

	1	Significance	Probabilities:	for Testing Nu	ll Hypothesis	(H ₀)
					$H_0: \mu_u = \mu_d$	
Parameter (Unit)	(U)	(D)	F	Exact T	Approx T	WilCox T
DO (mg/L)	0.993	0.703	0.319	0.040	• • •	
Temp (°C)	1.000	1.000	0.393	0.224	•••	• • •
pН	1.000	1.000	0.384	0.941	• • •	•••
Alk (mg/L)	0.855	0.496	0.066	0.281	•••	•••
Cl (mg/L)	0.999	0.622	0.040		0.712	
Turb (NTU)	1.000	0.990	0.000	• • •	0.001	
TKN (mg/L)	0.999	0.820	0.044	• • •	0.988	
NH ₄ -N (mg/L)	0.758	0.535	0.005	•••	0.339	• • •
NH ₃ -N (mg/L)	0.828	0.512	0.393	0.587	•••	• • •
ORG-N (mg/L)	0.898	0.946	0.415	0.371		
$NO_2 + NO_3 $ (mg/L)	0.932	0.999	0.000	0.000	• • •	
TS (mg/L)	0.992	0.896	0.050	0.593	•••	
TSS (mg/L)	0.946	1.000	0.002	•••	0.001	•••
VSS (mg/L)	0.738	0.522	0.246	0.000		• • •
TDS (mg/L)	0.965	0.885	0.049	• • •	0.429	
Phenol (µg/L)	-	-	-	-	-	-
NPS (μg/L)	-	~	-	-	-	-
SO ₄ (mg/L)	1.000	0.942	0.029	0.000		
.FOG (mg/L)	-	-	-	-	-	-
TP (mg/L)	0.695	0.950	0.000		•••	0.000
CN (mg/L)	0.078	0.192	0.114	0.210	•••	•••
WAD-CN (mg/L)	0.384	0.394	0.019		0.119	
F (mg/L)	1.000	0.826	0.000	0.001	• • •	
TOC (mg/L)	1.000	0.963	0.208	0.014	• • •	•••
FC (cfu/100mL)	1.000	0.990	0.190	0.441		•••
EColi (cfu/100mL)	1.000	0.997	0.238	0.812	• • •	• • •
Ca (mg/L)	0.987	0.965	0.028		0.020	
Mg (mg/L)	0.993	0.953	0.051	0.152	•••	• • •

TABLE AIII-4 (Continued): SIGNIFICANCE PROBABILITIES DUE TO OR ASSOCIATED WITH TESTING FOR EQUALITY OF MEAN CONCENTRATIONS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS OF THE JOHN E. EGAN WATER RECLAMATION PLANT IN 2010

	Significance Probabilities for Testing Null Hypothesis (H ₀) $H_0: Normal \ H_0: Normal \ H_0: \sigma_u = \sigma_d \ H_0: \mu_u = \mu_d \ H_0: \mu_u = \mu_d \ H_0: \mu_u = \mu_d$								
Parameter (Unit)	(U)	(D)	\mathbf{F}	$H_0: \mu_u = \mu_d$ Exact T	$ \begin{array}{c} \mathbf{H}_0: \mu_u = \mu_d \\ \mathbf{Approx} \ \mathbf{T} \end{array} $	$H_0: \mu_u = \mu_c$ WilCox T			
Hard (mg/L)	0.890	0.945	0.031		0.039				
G. Alpha (pCi/L)	1.000	0.893	0.449	0.915					
G. Beta (pCi/L)	1.000	0.998	0.091	0.029					
Chlrphl (μg/L)	0.656	0.489	0.181	0.123	•••	•••			
Bnzn (µg/L)	-	-	-	-	-	-			
Ebnzn (µg/L)	-	-	-	-	-	-			
Toln (µg/L)	_	-	-	-	-	-			
Xyln (μg/L)	-	-	-	-	-	-			
Ag (mg/L)	-	-	-	<u>.</u> .	-	-			
As (mg/L)	-	-	-	-	-	-			
Ba (mg/L)	0.696	0.998	0.017	• • •	0.152	• • •			
B (mg/L)	0.635	0.993	0.034	• • •	•••	0.000			
Cd (mg/L)	-	-	-	<u>-</u>	-	-			
Cu (mg/L)	-	•	-	-	-	-			
Cr (mg/L)	0.183	-	-	-	-	-			
$\operatorname{Cr}^{+6}(\mu g/L)$	-	-	-	-	-	-			
Fe (mg/L)	0.999	0.994	0.000		0.002	•••			
Pb (mg/L)	-	-	-	-	-	-			
Ni (mg/L)	-	0.036	-	-	-	-			
Mn (mg/L)	1.000	0.972	0.300	0.001	•••	•••			
Hg (μg/L)	-	-	-	-	-	-			
Hg-(ng/L)	0.596	0.406	0.451	0.467	• • •	• • •			
Zn (mg/L)	0.078	0.073	0.201	0.337	• • •	• • •			
Se (mg/L)	-	-	-	-	-	-			
Sol. Ca (mg/L)	0.915	0.856	0.006	• • •	0.007	•••			
Sol. Mg (mg/L)	0.988	0.999	0.048	• • •	0.031	•••			
Sol. Ag (mg/L)	-	-	-	-	-	~			
Sol. As (mg/L)	-	-	-	-	-	~			

TABLE AIII-4 (Continued): SIGNIFICANCE PROBABILITIES DUE TO OR ASSOCIATED WITH TESTING FOR EQUALITY OF MEAN CONCENTRATIONS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS OF THE JOHN E. EGAN WATER RECLAMATION PLANT IN 2010

	H ₀ :Normal	H ₀ :Normal	$\overline{\mathbf{H}_0:\sigma_u=\sigma_d}$	$H_0: \mu_u = \mu_d$	$H_0: \mu_u = \mu_d$	$H_0: \mu_u = \mu_d$
Parameter (Unit)	(U)	(D)	F	Exact T	Approx T	WilCox T
Sol. Ba (mg/L)	1.000	0.939	0.004		0.387	•••
Sol. B (mg/L)	1.000	0.967	0.000	0.001		• • •
Sol. Cd (mg/L)	-	-	-	-	-	-
Sol. Cu (mg/L)	-	0.006	-	-	-	-
Sol. Cr (mg/L)	-	-	-	-	-	-
Sol. Fe (mg/L)	0.871	0.859	0.095	0.456	• • •	• • •
Sol. Pb (mg/L)	-	0.006	-	-	-	-
Sol. Ni (mg/L)	-	0.512	-	-	-	-
Sol. Mn (mg/L)	0.926	0.667	0.321	0.604		
Sol. Zn (mg/L)	-	0.397	-	-	-	-
Sol. Se (mg/L)	-	0.006	-	-	-	-

¹Significance probabilities ≤ 0.05 indicates that upstream and downstream population means are not equal.

^{*}Test applies to population means if variances of log values are equal, otherwise applies to geometric means only.

⁻⁼ No test is done since standard deviation is either 0 or does not exist.

^{···=}Not appropriate test.

TABLE AIII-5: SIGNIFICANCE PROBABILITIES DUE TO OR ASSOCIATED WITH TESTING FOR EQUALITY OF MEAN CONCENTRATIONS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS OF THE JAMES C. KIRIE WATER RECLAMATION PLANT IN 2010

					ll Hypothesis	
Parameter (Unit)	H ₀ :Normal		$H_0: \sigma_u = \sigma_d$	$H_0: \mu_u = \mu_d$	$\mathbf{H}_0: \mu_u = \mu_d$	$H_0: \mu_u = \mu_d$
	(U)	(D)	F	Exact T	Approx T	WilCox T
DO (mg/L)	-	0.812	-	_	_	-
Temp (°C)	-	0.999	-	· _	-	-
рН	=	0.983	-	-	-	-
Alk (mg/L)	-	1.000	-	-	-	-
Cl (mg/L)	-	0.990	-	-	-	-
Turb (NTU)	-	0.486	-	-	-	-
TKN (mg/L)	-	0.999	-	-	-	~
NH ₄ -N (mg/L)	-	0.913	-	-	-	•
NH ₃ -N (mg/L)	-	0.960	-	-	-	~
ORG-N (mg/L)	-	0.994	-	-	-	~
$NO_2 + NO_3 $ (mg/L)	-	1.000	-	-	-	~
TS (mg/L)	-	0.816	-	-	-	-
TSS (mg/L)	-	0.320	-	-	-	-
VSS (mg/L)	-	0.107	-	-	-	-
TDS (mg/L)	-	0.839	-	-	-	-
Phenol (µg/L)	-	0.042	-	-	-	-
NPS (μg/L)	-	-	-	-	-	-
SO_4 (mg/L)	-	0.851	-	-	-	-
FOG (mg/L)	_	-	-	-	-	-
TP (mg/L)	-	0.853	-	-	-	-
CN (mg/L)	-	0.396	-	-	-	-
WAD-CN (mg/L)	-	0.459	-	-	-	-
F (mg/L)	-	1.000	-	-	-	-
TOC (mg/L)	-	0.549	-	-	-	-
FC (cfu/100mL)	-	0.885	-	-	-	-
EColi (cfu/100mL)	-	1.000	-	-	-	-
Ca (mg/L)	-	1.000	-		-	-
Mg (mg/L)	-	0.992	-	-	-	-

TABLE AIII-5 (Continued): SIGNIFICANCE PROBABILITIES DUE TO OR ASSOCIATED WITH TESTING FOR EQUALITY OF MEAN CONCENTRATIONS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS OF THE JAMES C. KIRIE WATER RECLAMATION PLANT IN 2010

Parameter (Unit)	H ₀ :Normal	H ₀ :Normal (D)	$H_0: \sigma_u = \sigma_d$ F	$H_0: \mu_u = \mu_d$ Exact T	$H_0: \mu_u = \mu_d$ Approx T	$\frac{G(H_0)}{H_0: \mu_u = \mu_d}$ WilCox T
	(U)					
Hard (mg/L)	-	0.998	-	-	-	-
G. Alpha (pCi/L)	-	0.931	_	-	-	-
G. Beta (pCi/L)	-	0.986	-	-	_	-
Chlrphl (µg/L)	-	0.978	-	-	-	-
Bnzn (µg/L)	-	-	-	-	-	-
Ebnzn (µg/L)	-	-	-	-	-	-
Toln (μg/L)	-	-	-	-	-	-
Xyln (μg/L)		-	-	-	-	-
Ag (mg/L)	-	-	_	-	-	-
As (mg/L)	-	-	-	-	-	-
Ba (mg/L)	-	1.000	-	-	· -	-
B (mg/L)	-	1.000	-	-	-	-
Cd (mg/L)	-	-	-	-	-	-
Cu (mg/L)	-	-	-	-	-	-
Cr (mg/L)	- •	-	-	-	-	-
$Cr^{+6} (\mu g/L)$	-	-	-	-	-	-
Fe (mg/L)	-	0.812	-	-	-	-
Pb (mg/L)	-	-	-	-	-	-
Ni (mg/L)	-	0.095	-	-	-	-
Mn (mg/L)	-	0.206	-	-	-	-
Hg (μg/L)	-	-	-	-	-	-
Hg- (ng/L)	-	1.000	-	-	-	-
Zn (mg/L)	-	0.985	-	-	-	-
Se (mg/L)	-	-	-	-	-	-
Sol. Ca (mg/L)	-	1.000	-	-	-	-
Sol. Mg (mg/L)	-	0.994	-	-	-	-
Sol. Ag (mg/L)	-	-	-	-	-	-
Sol. As (mg/L)	-	•	-	-	-	-

TABLE AIII-5 (Continued): SIGNIFICANCE PROBABILITIES DUE TO OR ASSOCIATED WITH TESTING FOR EQUALITY OF MEAN CONCENTRATIONS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS OF THE JAMES C. KIRIE WATER RECLAMATION PLANT IN 2010

Parameter (Unit)	Significance Probabilities for Testing Null Hypothesis (H ₀) $H_0: Normal \ H_0: Normal \ H_0: \sigma_u = \sigma_d \ H_0: \mu_u = \mu_d \ H_0: \mu_u = \mu_d$ $H_0: \mu_u = \mu_d$							
	H ₀ :Normal (U)	H ₀ :Normal (D)	$H_0: \sigma_u = \sigma_d$ F	$H_0: \mu_u = \mu_d$ Exact T	$H_0: \mu_u = \mu_d$ Approx T	$H_0: \mu_u = \mu_d$ WilCox T		
							Sol. Ba (mg/L)	-
Sol. B (mg/L)	-	1.000	-	-	-	-		
Sol. Cd (mg/L)	-	0.042	-	-	-	-		
Sol. Cu (mg/L)	-	0.042	-	-	-	-		
Sol. Cr (mg/L)	-	-	-	-	-	-		
Sol. Fe (mg/L)	-	0.461	-	-	-	-		
Sol. Pb (mg/L)	-	0.090	-	-	-	-		
Sol. Ni (mg/L)	-	0.783	-	-	-	-		
Sol. Mn (mg/L)	-	0.994	-	-	-	-		
Sol. Zn (mg/L)	-	1.000	-	-	-	-		
Sol. Se (mg/L)	_	_	-	-	-	-		

¹Significance probabilities ≤ 0.05 indicates that upstream and downstream population means are not equal.

^{*}Test applies to population means if variances of log values are equal, otherwise applies to geometric means only.

⁻⁼ No test is done since standard deviation is either 0 or does not exist.

^{···=}Not appropriate test.