

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 13-40

2012 ANNUAL SUMMARY REPORT

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

NOVEMBER 2013

Metropolitan Water Reclamation District of Greater Chicago
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2012 ANNUAL SUMMARY REPORT
WATER QUALITY WITHIN THE WATERWAYS SYSTEM OF
THE METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

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TABLE OF CONTENTS

	<u>Page</u>
LIST OF TABLES	IV
TABLE LOCATOR BY PARAMETER IN APPENDIX AII	XIII
LIST OF FIGURES	XVI
ACKNOWLEDGEMENTS	XVII
DISCLAIMER	XVII
SUMMARY AND CONCLUSIONS	1
Compliance with Water Quality Standards During 2012	1
General Use Waters	1
Secondary Contact and Indigenous Aquatic Life Waters	2
INTRODUCTION	3
WATER QUALITY NETWORK	4
Description of Waterways	4
Water Use Designations	4
Scope of Waterways Data	4
Water Sampling	6
Water Assays and Water Quality Criteria	8
Special Interpretation of Certain Water Quality Standards	8
COMPLIANCE WITH WATER QUALITY STANDARDS IN GENERAL USE WATERS	15
Sampling Locations and Frequencies	15
River System Compliance Data	15

TABLE OF CONTENTS (Continued)

	<u>Page</u>
Chicago River System	28
Calumet River System	28
Des Plaines River System	28
COMPLIANCE WITH WATER QUALITY STANDARDS IN SECONDARY CONTACT WATERS	34
Sampling Locations and Frequencies	34
River System Compliance Data	34
Chicago River System	34
Calumet River System	42
COMPLIANCE WITH RECEIVING WATER QUALITY STANDARDS UPSTREAM AND DOWNSTREAM OF THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO OUTFALLS	44
Surface Water Sample Locations and Sample Frequencies	44
Annual Summary Results for Water Quality Upstream and Downstream of the Metropolitan Water Reclamation District of Greater Chicago Outfalls	46
Terrence J. O'Brien Water Reclamation Plant	65
Stickney Water Reclamation Plant	65
Calumet Water Reclamation Plant	66
John E. Egan Water Reclamation Plant	66
James C. Kirie Water Reclamation Plant	67
Hanover Park Water Reclamation Plant	67
REFERENCES	69

TABLE OF CONTENTS (Continued)

	<u>Page</u>
APPENDICES	
Directory of Water Quality Parameters Assayed and Sampling Locations	AI
Water Quality Results: Annual Mean, Standard Compliance Violation History, and Mean History	AII
Statistical Analysis of Upstream and Downstream Locations, Sample Means, and Applicable Significance Probability Tests	AIII

LIST OF TABLES

<u>Table No.</u>		<u>Page</u>
1	Total Number of Waterways Samples Collected Monthly at Bridge Run Locations During 2012	7
2	Water Sample Assays Performed and Corresponding Water Quality Standards in 2012	9
3	Illinois Pollution Control Board Water Quality Standards and Corresponding Metropolitan Water Reclamation District of Greater Chicago Interpretations for 2012	13
4	Locations Sampled and Annual Sampling Frequencies of General Use Waters in 2012	16
5	Water Quality Parameters Not in Total Compliance in General Use Waters of All River Systems in 2012	18
6	Number of Parameter Concentration Violations of General Use Limits in the General Use Waters of the Chicago River System in 2012	29
7	Number of Parameter Concentration Violations of General Use Limits in the General Use Waters of the Calumet River System in 2012	31
8	Number of Parameter Concentration Violations of General Use Limits in the General Use Waters of the Des Plaines River System in 2012	32
9	Locations Sampled and Annual Sampling Frequencies of Secondary Contact Waters in 2012	35
10	Water Quality Parameters Not in Total Compliance in Secondary Contact Waters of All River Systems in 2012	40
11	Number of Parameter Concentration Violations of Secondary Contact Limits in the Secondary Contact Waters of the Chicago River System in 2012	41
12	Number of Parameter Concentration Violations of Secondary Contact Limits in the Secondary Contact Waters of the Calumet River System in 2012	43
13	Annual Sampling Frequencies at Upstream and Downstream Locations of the Water Reclamation Plants in 2012	45

LIST OF TABLES (Continued)

<u>Table No.</u>		<u>Page</u>
14	Comparison of Levels of 67 Water Quality Parameters Assayed at Upstream and Downstream Locations for the Terrence J. O'Brien Water Reclamation Plant in 2012	47
15	Comparison of Levels of 67 Water Quality Parameters Assayed at Upstream and Downstream Locations for the Stickney Water Reclamation Plant in 2012	50
16	Comparison of Levels of 67 Water Quality Parameters Assayed at Upstream and Downstream Locations for the Calumet Water Reclamation Plant in 2012	53
17	Comparison of Levels of 67 Water Quality Parameters Assayed at Upstream and Downstream Locations for the John E. Egan Water Reclamation Plant in 2012	56
18	Comparison of Levels of 67 Water Quality Parameters Assayed at Upstream and Downstream Locations for the James C. Kirie Water Reclamation Plant in 2012	59
19	Comparison of Levels of 67 Water Quality Parameters Assayed at Upstream and Downstream Locations for the Hanover Park Water Reclamation Plant in 2012	62
AI-1	Directory of Water Quality Parameters Assayed in 2012	AI-1
AI-2	Directory of Sampling Stations in Water Quality Network	AI-4
AII-1	Waterways Sample Means in 2012	AII-1
AII-2	Dissolved Oxygen Violation History 2005 Through 2012	AII-17
AII-3	Temperature Violation History 2005 Through 2012	AII-18
AII-4	pH Violation History 2005 Through 2012	AII-19
AII-5	Chloride Violation History 2005 Through 2012	AII-20
AII-6	Ammonium Nitrogen Violation History 2005 Through 2012	AII-21
AII-7	Un-Ionized Ammonia Violation History 2005 Through 2012	AII-22

LIST OF TABLES (Continued)

<u>Table No.</u>		<u>Page</u>
AII-8	Total Dissolved Solids Violation History 2005 Through 2012	AII-23
AII-9	Phenols Violation History 2005 Through 2012	AII-24
AII-10	Sulfate Violation History 2005 Through 2012	AII-25
AII-11	Fats, Oils, and Greases Violation History 2005 Through 2012	AII-26
AII-12	Total Cyanide Violation History 2005 Through 2012	AII-27
AII-13	Weak Acid Dissociable Cyanide Violation History 2005 Through 2012	AII-28
AII-14	Fluoride Violation History 2005 Through 2012	AII-29
AII-15	Fecal Coliform Violation History 2005 Through 2012	AII-30
AII-16	Gross Beta Radioactivity Violation History 2005 Through 2012	AII-31
AII-17	Benzene Violation History 2005 Through 2012 (Human Health Standard)	AII-32
AII-18	Benzene Violation History 2005 Through 2012 (General Use Standard)	AII-33
AII-19	Ethylbenzene Violation History 2005 Through 2012	AII-34
AII-20	Toluene Violation History 2005 Through 2012	AII-35
AII-21	Xylene Violation History 2005 Through 2012	AII-36
AII-22	Total Silver Violation History 2005 Through 2012	AII-37
AII-23	Total Arsenic Violation History 2005 Through 2012	AII-38
AII-24	Total Barium Violation History 2005 Through 2012	AII-39
AII-25	Total Boron Violation History 2005 Through 2012	AII-40
AII-26	Total Cadmium Violation History 2005 Through 2012	AII-41
AII-27	Total Copper Violation History 2005 Through 2012	AII-42

LIST OF TABLES (Continued)

<u>Table No.</u>		<u>Page</u>
AII-28	Total Hexavalent Chromium Violation History 2005 Through 2012	AII-43
AII-29	Total Iron Violation History 2005 Through 2012	AII-44
AII-30	Total Lead Violation History 2005 Through 2012	AII-45
AII-31	Total Nickel Violation History 2005 Through 2012	AII-46
AII-32	Total Manganese Violation History 2005 Through 2012	AII-47
AII-33	Total Mercury Violation History 2005 Through 2012 (Human Health Standard)	AII-48
AII-34	Total Mercury Violation History 2005 Through 2012 (Secondary Contact Standard)	AII-49
AII-35	Total Zinc Violation History 2005 Through 2012	AII-50
AII-36	Total Selenium Violation History 2005 Through 2012	AII-51
AII-37	Soluble Arsenic Violation History 2005 Through 2012	AII-52
AII-38	Soluble Cadmium Violation History 2005 Through 2012	AII-53
AII-39	Soluble Copper Violation History 2005 Through 2012	AII-54
AII-40	Soluble Chromium Violation History 2005 Through 2012	AII-55
AII-41	Soluble Iron Violation History 2005 Through 2012	AII-56
AII-42	Soluble Lead Violation History 2005 Through 2012	AII-57
AII-43	Soluble Nickel Violation History 2005 Through 2012	AII-58
AII-44	Soluble Mercury Violation History 2005 Through 2012	AII-59
AII-45	Soluble Zinc Violation History 2005 Through 2012	AII-60
AII-46	Biochemical Oxygen Demand Mean History 2002 Through 2012	AII-61
AII-47	Carbonaceous Biochemical Oxygen Demand Mean History 2002 Through 2012	AII-62

LIST OF TABLES (Continued)

<u>Table No.</u>		<u>Page</u>
AII-48	Dissolved Oxygen Mean History 2002 Through 2012	AII-63
AII-49	Temperature Mean History 2002 Through 2012	AII-64
AII-50	pH Mean History 2002 Through 2012	AII-65
AII-51	Total Alkalinity Mean History 2002 Through 2012	AII-66
AII-52	Chloride Mean History 2002 Through 2012	AII-67
AII-53	Turbidity Mean History 2002 Through 2012	AII-68
AII-54	Total Kjeldahl Nitrogen Mean History 2002 Through 2012	AII-69
AII-55	Ammonium Nitrogen Mean History 2002 Through 2012	AII-70
AII-56	Un-Ionized Ammonia Mean History 2002 Through 2012	AII-71
AII-57	Organic Nitrogen Mean History 2002 Through 2012	AII-72
AII-58	Nitrite Plus Nitrate Nitrogen Mean History 2002 Through 2012	AII-73
AII-59	Total Solids Mean History 2002 Through 2012	AII-74
AII-60	Total Suspended Solids Mean History 2002 Through 2012	AII-75
AII-61	Volatile Suspended Solids Mean History 2002 Through 2012	AII-76
AII-62	Total Dissolved Solids Mean History 2002 Through 2012	AII-77
AII-63	Phenols Mean History 2002 Through 2012	AII-78
AII-64	Total Nonylphenols Mean History 2002 Through 2012	AII-79
AII-65	Bisphenol <i>a</i> Mean History 2002 Through 2012	AII-80
AII-66	Sulfate Mean History 2002 Through 2012	AII-81
AII-67	Fats, Oils, and Greases Mean History 2002 Through 2012	AII-82

LIST OF TABLES (Continued)

<u>Table No.</u>		<u>Page</u>
AII-68	Total Phosphorus Mean History 2002 Through 2012	AII-83
AII-69	Total Cyanide Mean History 2002 Through 2012	AII-84
AII-70	Weak Acid Dissociable Cyanide Mean History 2002 Through 2012	AII-85
AII-71	Fluoride Mean History 2002 Through 2012	AII-86
AII-72	Total Organic Carbon Mean History 2002 Through 2012	AII-87
AII-73	Fecal Coliform Mean History 2002 Through 2012	AII-88
AII-74	Escherichia Coli Mean History 2002 Through 2012	AII-89
AII-75	Total Calcium Mean History 2002 Through 2012	AII-90
AII-76	Total Magnesium Mean History 2002 Through 2012	AII-91
AII-77	Hardness Mean History 2002 Through 2012	AII-92
AII-78	Gross Alpha Radioactivity Mean History 2002 Through 2012	AII-93
AII-79	Gross Beta Radioactivity Mean History 2002 Through 2012	AII-94
AII-80	Chlorophyll <i>a</i> Mean History 2002 Through 2012	AII-95
AII-81	Benzene Mean History 2002 Through 2012	AII-96
AII-82	Ethylbenzene Mean History 2002 Through 2012	AII-97
AII-83	Toluene Mean History 2002 Through 2012	AII-98
AII-84	Xylene Mean History 2002 Through 2012	AII-99
AII-85	Meta and/or Para Xylenes Mean History 2002 Through 2012	AII-100
AII-86	Ortho Xylene Mean History 2002 Through 2012	AII-101
AII-87	Total Silver Mean History 2002 Through 2012	AII-102

LIST OF TABLES (Continued)

<u>Table No.</u>		<u>Page</u>
AII-88	Total Arsenic Mean History 2002 Through 2012	AII-103
AII-89	Total Barium Mean History 2002 Through 2012	AII-104
AII-90	Total Boron Mean History 2002 Through 2012	AII-105
AII-91	Total Cadmium Mean History 2002 Through 2012	AII-106
AII-92	Total Copper Mean History 2002 Through 2012	AII-107
AII-93	Total Chromium Mean History 2002 Through 2012	AII-108
AII-94	Total Hexavalent Chromium Mean History 2002 Through 2012	AII-109
AII-95	Total Iron Mean History 2002 Through 2012	AII-110
AII-96	Total Lead Mean History 2002 Through 2012	AII-111
AII-97	Total Nickel Mean History 2002 Through 2012	AII-112
AII-98	Total Manganese Mean History 2002 Through 2012	AII-113
AII-99	Total Mercury Mean History 2002 Through 2012	AII-114
AII-100	Low Level Mercury Mean History 2002 Through 2012	AII-115
AII-101	Total Zinc Mean History 2002 Through 2012	AII-116
AII-102	Total Selenium Mean History 2002 Through 2012	AII-117
AII-103	Soluble Calcium Mean History 2002 Through 2012	AII-118
AII-104	Soluble Magnesium Mean History 2002 Through 2012	AII-119
AII-105	Soluble Silver Mean History 2002 Through 2012	AII-120
AII-106	Soluble Arsenic Mean History 2002 Through 2012	AII-121
AII-107	Soluble Barium Mean History 2002 Through 2012	AII-122

LIST OF TABLES (Continued)

Table <u>No.</u>		<u>Page</u>
AII-108	Soluble Boron Mean History 2002 Through 2012	AII-123
AII-109	Soluble Cadmium Mean History 2002 Through 2012	AII-124
AII-110	Soluble Copper Mean History 2002 Through 2012	AII-125
AII-111	Soluble Chromium Mean History 2002 Through 2012	AII-126
AII-112	Soluble Iron Mean History 2002 Through 2012	AII-127
AII-113	Soluble Lead Mean History 2002 Through 2012	AII-128
AII-114	Soluble Nickel Mean History 2002 Through 2012	AII-129
AII-115	Soluble Manganese Mean History 2002 Through 2012	AII-130
AII-116	Soluble Mercury Mean History 2002 Through 2012	AII-131
AII-117	Soluble Zinc Mean History 2002 Through 2012	AII-132
AII-118	Soluble Selenium Mean History 2002 Through 2012	AII-133
AIII-1	Significance Probabilities Due to or Associated with Testing for Equality of Mean Concentrations of 67 Water Quality Parameters Assayed at Upstream and Downstream Locations of the Terrence J. O'Brien Water Reclamation Plant in 2012	AIII-1
AIII-2	Significance Probabilities Due to or Associated with Testing for Equality of Mean Concentrations of 67 Water Quality Parameters Assayed at Upstream and Downstream Locations of the Stickney Water Reclamation Plant in 2012	AIII-4
AIII-3	Significance Probabilities Due to or Associated with Testing for Equality of Mean Concentrations of 67 Water Quality Parameters Assayed at Upstream and Downstream Locations of the Calumet Water Reclamation Plant in 2012	AIII-7
AIII-4	Significance Probabilities Due to or Associated with Testing for Equality of Mean Concentrations of 67 Water Quality Parameters Assayed at Upstream and Downstream Locations of the John E. Egan Water Reclamation Plant in 2012	AIII-10

LIST OF TABLES (Continued)

Table <u>No.</u>		<u>Page</u>
AIII-5	Significance Probabilities Due to or Associated with Testing for Equality of Mean Concentrations of 67 Water Quality Parameters Assayed at Upstream and Downstream Locations of the James C. Kirie Water Reclamation Plant in 2012	AIII-13
AIII-6	Significance Probabilities Due to or Associated with Testing for Equality of Mean Concentrations of 67 Water Quality Parameters Assayed at Upstream and Downstream Locations of the Hanover Park Water Reclamation Plant in 2012	AIII-16

TABLE LOCATOR BY PARAMETER IN APPENDIX AII

	Sample Mean During 2012	Violation History Through 2012	Mean History Through 2012
Parameter	Page	Page	Page
Biochemical Oxygen Demand			AII-61
Carbonaceous Biochemical Oxygen Demand			AII-62
Dissolved Oxygen	AII-1	AII-17	AII-63
Temperature	AII-1	AII-18	AII-64
pH	AII-1	AII-19	AII-65
Total Alkalinity	AII-1		AII-66
Chloride	AII-1	AII-20	AII-67
Turbidity	AII-2		AII-68
Total Kjeldahl Nitrogen	AII-2		AII-69
Ammonium Nitrogen	AII-2	AII-21	AII-70
Un-Ionized Ammonia	AII-2	AII-22	AII-71
Organic Nitrogen	AII-2		AII-72
Nitrite Plus Nitrate Nitrogen	AII-3		AII-73
Total Solids	AII-3		AII-74
Total Suspended Solids	AII-3		AII-75
Volatile Suspended Solids	AII-3		AII-76
Total Dissolved Solids	AII-3	AII-23	AII-77
Phenols	AII-4	AII-24	AII-78
Total Nonylphenols			AII-79
Bisphenol <i>a</i>			AII-80
Sulfate	AII-4	AII-25	AII-81
Fats, Oils, and Greases	AII-4	AII-26	AII-82
Total Phosphorus	AII-4		AII-83
Total Cyanide	AII-5	AII-27	AII-84
Weak Acid Dissociable Cyanide	AII-5	AII-28	AII-85
Fluoride	AII-5	AII-29	AII-86

TABLE LOCATOR BY PARAMETER IN APPENDIX AII (Continued)

Parameter	Sample Mean During 2012	Violation History Through 2012	Mean History Through 2012
	Page	Page	Page
Total Organic Carbon	AII-5		AII-87
Fecal Coliform	AII-6	AII-30	AII-88
Escherichia Coli			AII-89
Total Calcium	AII-6		AII-90
Total Magnesium	AII-6		AII-91
Hardness	AII-6		AII-92
Gross Alpha Radioactivity	AII-7		AII-93
Gross Beta Radioactivity	AII-7	AII-31	AII-94
Chlorophyll <i>a</i>	AII-7		AII-95
Benzene (Human Health Standard)		AII-32	
Benzene (General Use Standard)	AII-7	AII-33	AII-96
Ethylbenzene	AII-8	AII-34	AII-97
Toluene	AII-8	AII-35	AII-98
Xylene	AII-8	AII-36	AII-99
Meta and/or Para Xylenes	AII-8		AII-100
Ortho Xylene	AII-9		AII-101
Total Silver	AII-9	AII-37	AII-102
Total Arsenic	AII-9	AII-38	AII-103
Total Barium	AII-9	AII-39	AII-104
Total Boron	AII-10	AII-40	AII-105
Total Cadmium	AII-10	AII-41	AII-106
Total Copper	AII-10	AII-42	AII-107
Total Chromium	AII-10		AII-108
Total Hexavalent Chromium	AII-11	AII-43	AII-109
Total Iron	AII-11	AII-44	AII-110
Total Lead	AII-11	AII-45	AII-111

TABLE LOCATOR BY PARAMETER IN APPENDIX AII (Continued)

Parameter	Sample Mean During 2012	Violation History Through 2012	Mean History Through 2012
	Page	Page	Page
Total Nickel	AII-11	AII-46	AII-112
Total Manganese	AII-12	AII-47	AII-113
Total Mercury (Human Health Standard)		AII-48	
Total Mercury (Secondary Contact Standard)	AII-12	AII-49	AII-114
Low Level Mercury	AII-12		AII-115
Total Zinc	AII-12	AII-50	AII-116
Total Selenium	AII-13	AII-51	AII-117
Soluble Calcium	AII-13		AII-118
Soluble Magnesium	AII-13		AII-119
Soluble Silver	AII-13		AII-120
Soluble Arsenic	AII-14	AII-52	AII-121
Soluble Barium	AII-14		AII-122
Soluble Boron	AII-14		AII-123
Soluble Cadmium	AII-14	AII-53	AII-124
Soluble Copper	AII-15	AII-54	AII-125
Soluble Chromium	AII-15	AII-55	AII-126
Soluble Iron	AII-15	AII-56	AII-127
Soluble Lead	AII-15	AII-57	AII-128
Soluble Nickel	AII-16	AII-58	AII-129
Soluble Manganese	AII-16		AII-130
Soluble Mercury		AII-59	AII-131
Soluble Zinc	AII-16	AII-60	AII-132
Soluble Selenium	AII-16		AII-133

LIST OF FIGURES

<u>Figure No.</u>		<u>Page</u>
1	Waterways Service Area and Sampling Location Points	5
2	Compliance Rates with Water Quality Standards for the General Use Water Section of the Chicago River in 2011 and 2012	19
3	Compliance Rates with Water Quality Standards for the General Use Water Section of the Calumet River in 2011 and 2012	22
4	Compliance Rates with Water Quality Standards for the General Use Water Section of the Des Plaines River in 2011 and 2012	25
5	Compliance Rates with Water Quality Standards for the Secondary Contact Water Section of the Chicago River in 2011 and 2012	36
6	Compliance Rates with Water Quality Standards for the Secondary Contact Water Section of the Calumet River in 2011 and 2012	38

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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 2012. In addition, the District compared these data with data for 2011.

Compliance with Water Quality Standards During 2012

General Use Waters. Twenty-nine out of 67 water quality parameters assayed were subject to IPCB water quality standards. They were dissolved oxygen (DO), temperature, pH, chloride, ammonium nitrogen, 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). The sampling of the last two river systems is included in the sampling program of the Des Plaines River System, and so are the analyses in this report.

Twenty-one water quality parameters were in total compliance with the standards in all river systems. They were phenols, sulfate, weak acid dissociable cyanide, gross beta radioactivity, benzene, ethylbenzene, toluene, xylene, total silver, total barium, total boron, total manganese, total selenium, soluble arsenic, soluble cadmium, soluble copper, 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, temperature, chloride, ammonium nitrogen, fluoride, and total hexavalent chromium) had compliance rates greater than 89.0 percent in all River Systems. pH compliance rates were 89.8, 88.1, and 99.6 percent, respectively, in the Chicago, Calumet, and Des Plaines River Systems. Fecal coliform was for the lowest compliance rate ranging from 52.0 to 58.7 percent in all river systems.

A comparison of 2012 data with 2011 data indicated that there was no significant difference between 2012 and 2011 compliance rates with water quality standards, except for pH, chloride, sulfate, and fecal coliform. In the Chicago River System, the compliance rate for pH significantly decreased from 99.2 percent in 2011 to 89.8 percent in 2012. In the Calumet River System, the compliance rate for sulfate significantly increased from 93.1 percent in 2011 to total compliance in 2012, and the compliance rate for fecal coliform significantly increased from 38.1 percent in 2011 to 58.7 percent in 2012. In the Des Plaines River System, the compliance rate for chloride significantly increased from 94.6 percent in 2011 to 98.7 percent in 2012. Comparison of data for Human Health Standards indicated that there was no significant difference between 2012 and 2011 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 2012 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.

Nineteen parameters were in total compliance with the IPCB standards in the Chicago and Calumet River Systems in 2012. They were temperature, pH, total dissolved solids, phenols, 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, and total selenium.

The remaining four parameters (DO; un-ionized ammonia; fats, oils, and greases; and soluble iron) had compliance rates greater than 86.0 percent in both river systems.

A comparison of 2012 data with 2011 data indicated that there was no significant difference between 2012 and 2011 compliance rates with water quality standards except for total iron. In the Chicago River System, the compliance rate for total iron significantly increased from 97.9 percent in 2011 to total compliance in 2012. In the Calumet River System, the compliance rate for total iron significantly increased from 93.9 percent in 2011 to total compliance in 2012.

INTRODUCTION

The District is responsible for monitoring 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 2011. Complete tabulations of waterway surveillance data collected by the District are available for the years 1970 through 2012.

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 formatted as 'stand-alone' 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 man-made and natural waterways. Principal man-made water courses are: the North Shore Channel, connecting Lake Michigan at Wilmette to the North Branch of the Chicago River; the Chicago Sanitary and Ship Canal (Main Channel), extending from Damen Avenue to the Lockport Powerhouse; and the 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.

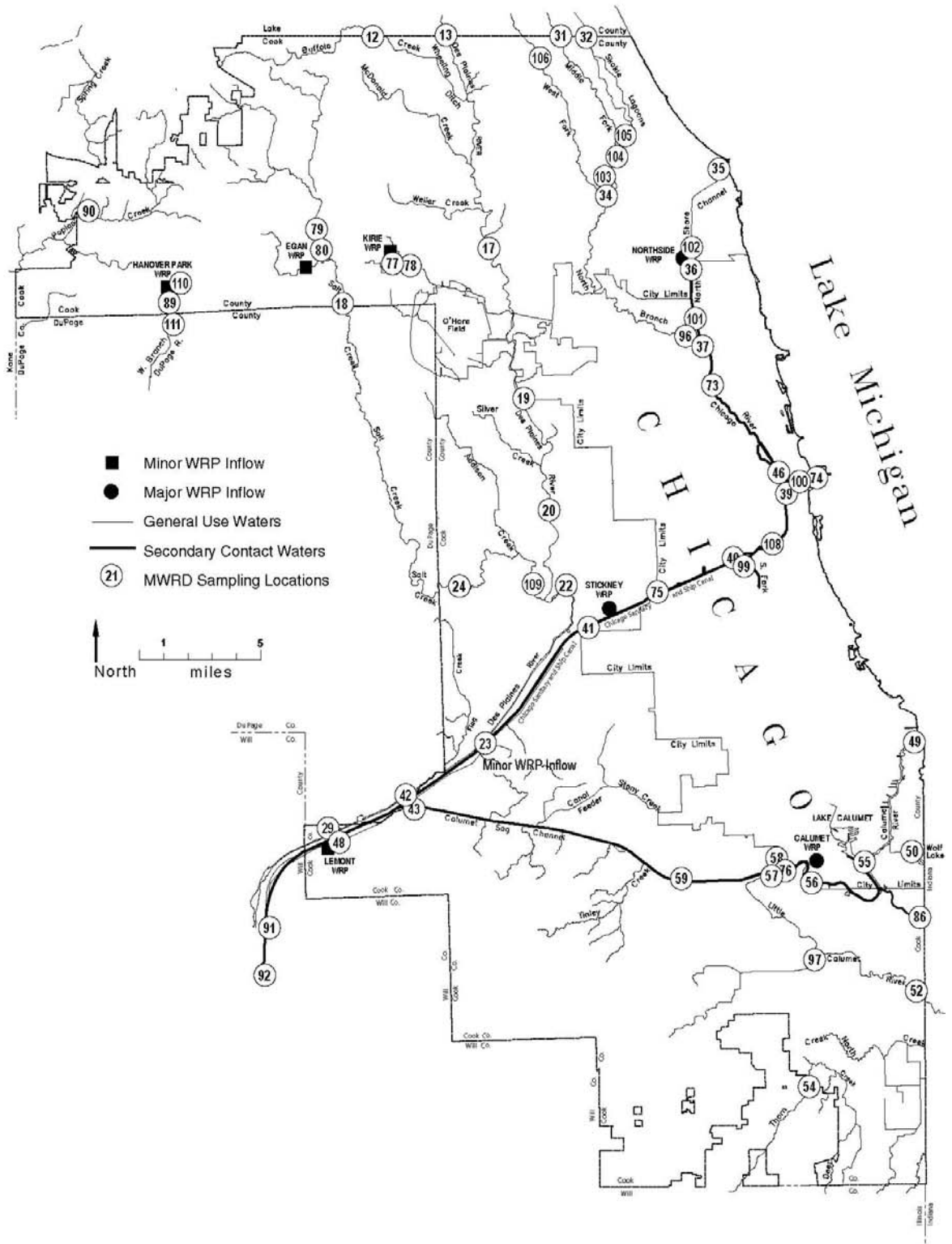
Water Use Designations. IPCB Regulations, Section 303.201, specify that "except as otherwise specifically provided, all waters of the State must meet the General Use standards for Subpart B of Part 302." Section 303.441 delineates those waters which do not qualify for General Use but "... are designated 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 man-made 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's waterways. In addition to storage, retrieval, and updating 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



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

The major computations of data are presented in tables appearing in the main body of this report and in Appendices AII and AIII. The water quality parameter directory is shown in Appendix AI. Water quality parameters assayed in 2012 and sampling stations are listed in Tables AI-1 and AI-2, respectively.

Summary water quality results for 2012 are listed in Appendix AII. Annual mean values of all water quality parameters assayed at all stations sampled (grab samples only) are tabulated in Table AII-1. This table presents the values of the water quality parameters, which can be used to determine relationships between these parameters. The results of the violations of the standards are tabulated in Tables AII-2 through AII-45. Note that Tables AII-2 through AII-45 list the sampling locations where violations occurred during 2012 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 AII-46 through AII-118 (Appendix AII) were designed to present the mean values of various parameters for 2002 through 2012 for each parameter and all locations sampled.

Finally, Tables AIII-1 through AIII-6 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 60 locations during 2012. Their locations, as well as the locations of recently discontinued sampling stations, are as shown in Figure 1. 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 2012 is shown in Table 1. Note that samples taken in the West Branch of the DuPage River (upstream and downstream of the Hanover Park WRP outfall), and in the Fox River System (Poplar Creek) are included with the Des Plaines River data. In addition, weekly grab samples were taken at the Lockport Powerhouse.

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 2012 are shown without an asterisk in Table AI-2 of Appendix AI. Twenty-seven 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 SAMPLES
COLLECTED MONTHLY AT BRIDGE RUN LOCATIONS DURING 2012

Month	River System		
	Chicago	Calumet	Des Plaines
January	27	13	17
February	26	12	20
March	28	12	20
April	29	13	20
May	26	13	20
June	27	12	20
July	30	12	18
August	14	6	9
September	14	6	11
October	15	6	10
November	14	6	11
December	14	NS	11

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 60 sampling locations in 2012 are a subset, is listed in Table AI-2, Appendix AI.

Water Assays and Water Quality Criteria

The District's laboratories performed 67 analyses on water samples collected for District waterways during 2012. A list of these analyses and additional parameters computed from these analyses are shown in Table 2. Table 2 shows the water quality standard for each parameter as defined by the IPCB in the State of Illinois Rules and Regulations, Title 35(2). The related IPCB rule section numbers are also included.

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. 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 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 September 2008, a new hardness-based sulfate standard was adopted and the TDS standard was eliminated in General Use Waters. The General Use Water Quality Standard for DO was revised effective December 2008. Boron, fluoride, and manganese General use Water Quality Standards were revised in December 2012, and will be reflected in the 2013 report.

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 due to the 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, as 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.

TABLE 2: WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING
WATER QUALITY STANDARDS IN 2012¹

Parameter	Water Use Designations			
	General Use ²		Secondary Contact ³	
	Standard	Section ⁴	Standard	Section ⁴
Dissolved Oxygen	5 mg/L ⁵	302.206	4 mg/L 3 mg/L ⁶	302.405 302.405
Temperature	32 °C ⁷ (Apr-Nov)	302.211	≤34.0 °C 95% of the time	302.408
Temperature	16 °C ⁷ (Dec-Mar)	302.211	≤37.8 °C 100% of the time	302.408
pH	6.5-9.0	302.204	6.0-9.0	302.404
Total Alkalinity	NAS		NAS	
Chloride	500 mg/L	302.208	NAS	
Turbidity	NAS		NAS	
Total Kjeldahl Nitrogen	NAS		NAS	
Ammonium Nitrogen	mg/L ⁸	302.212	NAS	
Un-Ionized Ammonia	NAS		0.1 mg/L	302.407
Organic Nitrogen	NAS		NAS	
Nitrite Plus Nitrate Nitrogen	NAS		NAS	
Total Solids	NAS		NAS	
Total Suspended Solids	NAS		NAS	
Volatile Suspended Solids	NAS		NAS	
Total Dissolved Solids	NAS		1500 mg/L	302.407
Phenols	100 µg/L	302.208	300 µg/L	302.407
Sulfate	mg/L ⁹	302.208	NAS	
Fats, Oils, and Greases	NAS		15 mg/L	302.407
Total Phosphorus	NAS		NAS	
Total Cyanide	NAS		0.1 mg/L	302.407

TABLE 2 (Continued): WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING WATER QUALITY STANDARDS IN 2012¹

Parameter	Water Use Designations			
	General Use ²		Secondary Contact ³	
	Standard	Section ⁴	Standard	Section ⁴
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	
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 <i>a</i>	NAS		NAS	
Benzene*	310 µg/L	302.658	NAS	
Benzene	4200 µg/L	302.208	NAS	
Ethylbenzene	150 µg/L	302.208	NAS	
Toluene	2000 µg/L	302.208	NAS	
Xylene	920 µg/L	302.208	NAS	
Meta and/or Para Xylenes	NAS		NAS	
Ortho Xylene	NAS		NAS	
Total Silver	0.005 mg/L	302.208	1.1 mg/L	302.407
Total Arsenic	NAS		1 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 2012¹

Parameter	Water Use Designations			
	General Use ²		Secondary Contact ³	
	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*	310 µg/L	302.208	NAS	
Total Mercury	NAS		0.5 µg/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 ¹⁰	302.208	NAS	
Soluble Copper	mg/L ¹¹	302.208	NAS	
Soluble Chromium	mg/L ¹²	302.208	NAS	
Soluble Iron	1 mg/L	302.208	0.5 mg/L	302.407
Soluble Lead	mg/L ¹³	302.208	NAS	
Soluble Nickel	mg/L ¹⁴	302.208	NAS	
Soluble Manganese	NAS		NAS	
Soluble Zinc	mg/L ¹⁵	302.208	NAS	

TABLE 2 (Continued): WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING WATER QUALITY STANDARDS IN 2012¹

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

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

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

⁹General use standard depends on hardness and chloride value of certain range.

¹⁰ $\text{Min}[(1.138672 - 0.041838 \ln(\text{Hard})) * e^{-2.918+1.128 \ln(\text{Hard})} * 0.001, 0.05]$

¹¹ $e^{-1.464+0.9422 \ln(\text{Hard})} * 0.000960$

¹² $e^{3.688+0.819 \ln(\text{Hard})} * 0.000316$

¹³ $[1.46203 - 0.145712 \ln(\text{Hard})] * e^{-1.301+1.273 \ln(\text{Hard})} * 0.001$

¹⁴ $e^{0.5173+0.846 \ln(\text{Hard})} * 0.000998$

¹⁵ $e^{0.9035+0.8473 \ln(\text{Hard})} * 0.000978$

NAS = No Applicable Standard.

*Human Health Standard.

TABLE 3: ILLINOIS POLLUTION CONTROL BOARD WATER QUALITY
STANDARDS AND CORRESPONDING METROPOLITAN WATER RECLAMATION
DISTRICT OF GREATER CHICAGO INTERPRETATIONS FOR 2012

Parameter	Water Use Designation	IPCB Standard	District Interpreted Standard
1. Dissolved Oxygen	General Use Waters	≥ 6.0 mg/L at least 16 hours/day	≥ 5.0 mg/L anytime
	Secondary Contact Waters	≥ 5.0 mg/L at least 16 hours/day	≥ 4.0 mg/L anytime
	Secondary Contact Waters	≥ 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	≤ 34.0 °C, 95% of the time	≤ 37.8 °C anytime
		≤ 37.8 °C, 100% of the time	
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

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

COMPLIANCE WITH WATER QUALITY STANDARDS IN GENERAL USE WATERS

Sampling Locations and Frequencies

By definition, all sampling locations not in waters classified as Secondary Contact Waters are within General Use Waters. The delineation of these two water use classifications is shown in [Figure 1](#). A tabulation of locations sampled in General Use Waters during 2012 is shown in [Table 4](#). Of the five river systems sampled during 2012, three (Des Plaines, DuPage, and Fox) lie entirely within the General Use classification. The General Use Waters in the Chicago and Calumet River Systems consist mostly of the streams that are tributary to the principal man-made channels and modified river sections.

The frequency of sampling during 2012 was once per month at most locations. [Table 4](#) shows the frequency of sampling at all General Use locations in 2012.

River System Compliance Data

In the General Use Waters, 67 parameters were analyzed in 2012, of which 29 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 21 parameters which were in 100 percent compliance in all river systems were phenols, sulfate, weak acid dissociable cyanide, gross beta radioactivity, benzene, ethylbenzene, toluene, xylene, total silver, total barium, total boron, 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 in total compliance with respect to the Human Health Standard in all river systems.

The eight water quality parameters which were not in total compliance in 2012 are shown in [Table 5](#). The percent compliance for these parameters in each river system is also presented.

Soluble mercury was not assayed in 2011 and 2012 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 2012

Map No. ¹	Station Name	Annual No. of Samples
<u>Chicago River System</u>		
106	Dundee Road, West Fork North Branch Chicago River	5
103	Golf Road, West Fork North Branch Chicago River	7
31	Lake-Cook Road, Middle Fork North Branch	4
104	Glenview Road, North Branch Chicago River	7
32	Lake-Cook Road, Skokie River	6
105	Frontage Road, Skokie River	7
34	Dempster Street, North Branch Chicago River	7
96	Albany Avenue, North Branch Chicago River	12
35	Central Street, North Shore Channel	5
112	Dempster Street, North Shore Channel	5
102	Oakton Street, North Shore Channel	7
74	Lake Shore Drive, Chicago River	6
100	Wells Street, Chicago River	<u>11</u>
		89
<u>Calumet River System</u>		
49	Ewing Avenue, Calumet River	6
50	Burnham Avenue, Wolf Lake	7
55	130th Street, Calumet River	7
52	Wentworth Avenue, Little Calumet River	7
54	Joe Orr Road, Thorn Creek	7
97	170th Street, Thorn Creek	6
57	Ashland Avenue, Little Calumet River	<u>11</u>
		51
<u>Des Plaines River System</u>		
79	Higgins Road, Salt Creek	11
80	Arlington Heights Road, Salt Creek	7
18	Devon Avenue, Salt Creek	12
24	Wolf Road, Salt Creek	7
109	Brookfield Avenue, Salt Creek	12
77	Elmhurst Road, Higgins Creek	8
78	Wille Road, Higgins Creek	11
12	Lake-Cook Road, Buffalo Creek	6
13	Lake-Cook Road, Des Plaines River	7

TABLE 4 (Continued): LOCATIONS SAMPLED AND ANNUAL SAMPLING FREQUENCIES OF GENERAL USE WATERS IN 2012

Map No. ¹	Station Name	Annual No. of Samples
<u>Des Plaines River System (Continued)</u>		
17	Oakton Street, Des Plaines River	7
19	Belmont Avenue, Des Plaines River	12
20	Roosevelt Road, Des Plaines River	7
22	Ogden Avenue, Des Plaines River	12
23	Willow Springs Road, Des Plaines River	12
29	Stephen Street, Des Plaines River	7
91	Material Service Road, Des Plaines River	<u>12</u>
		150
<u>Du Page River System</u>		
110	Springinguth Road, West Branch DuPage River	11
89	Walnut Lane, West Branch DuPage River	7
111	Arlington Drive, West Branch DuPage River	<u>12</u>
		30
<u>Fox River System</u>		
90	Route 19, Poplar Creek	<u>7</u>
		7

¹Refer to Figure 1.

TABLE 5: WATER QUALITY PARAMETERS NOT IN TOTAL COMPLIANCE
IN GENERAL USE WATERS OF ALL RIVER SYSTEMS IN 2012

Parameter	Estimated Percent Compliance ¹		
	Chicago	Calumet	Des Plaines
Dissolved Oxygen	89.0	91.8	94.8
Temperature	96.5	100.0	98.5
pH	89.8	88.1	99.6
Chloride	93.1	100.0	98.7
Ammonium Nitrogen	100.0	97.2	100.0
Fluoride	100.0	98.5	100.0
Fecal Coliform	52.0	58.7	57.0
Total Hexavalent Chromium	100.0	100.0	98.5

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 THE GENERAL USE WATER SECTION OF THE CHICAGO RIVER IN 2011 AND 2012

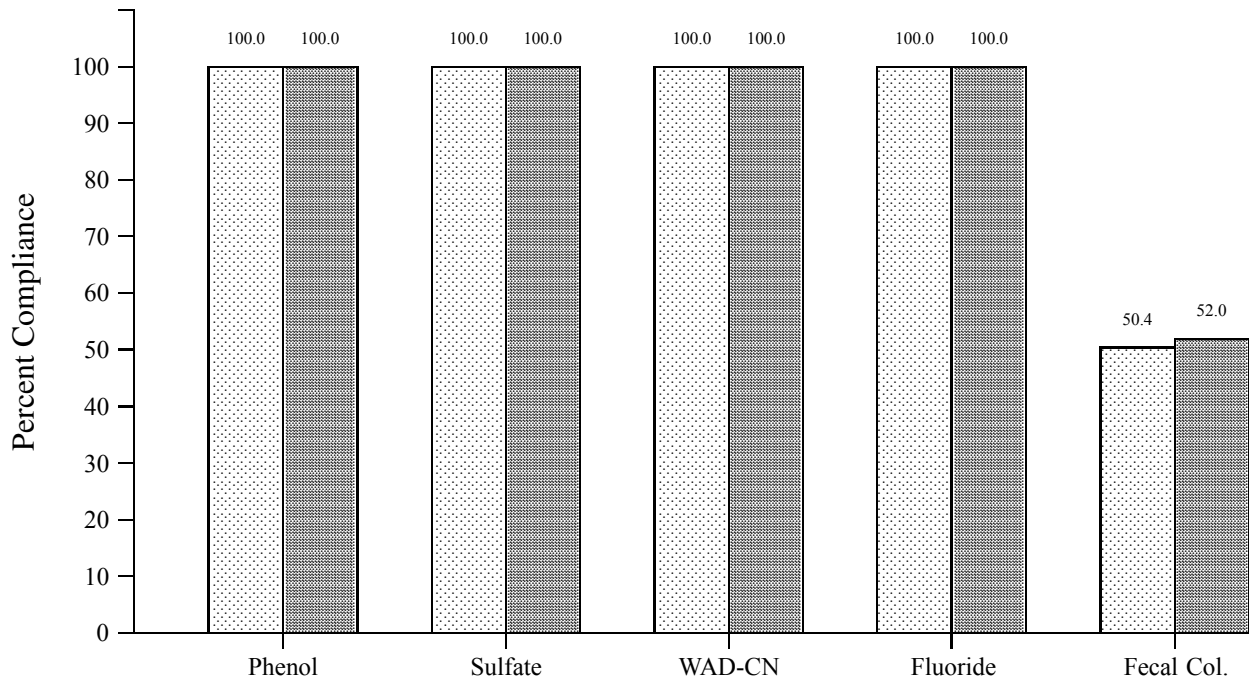
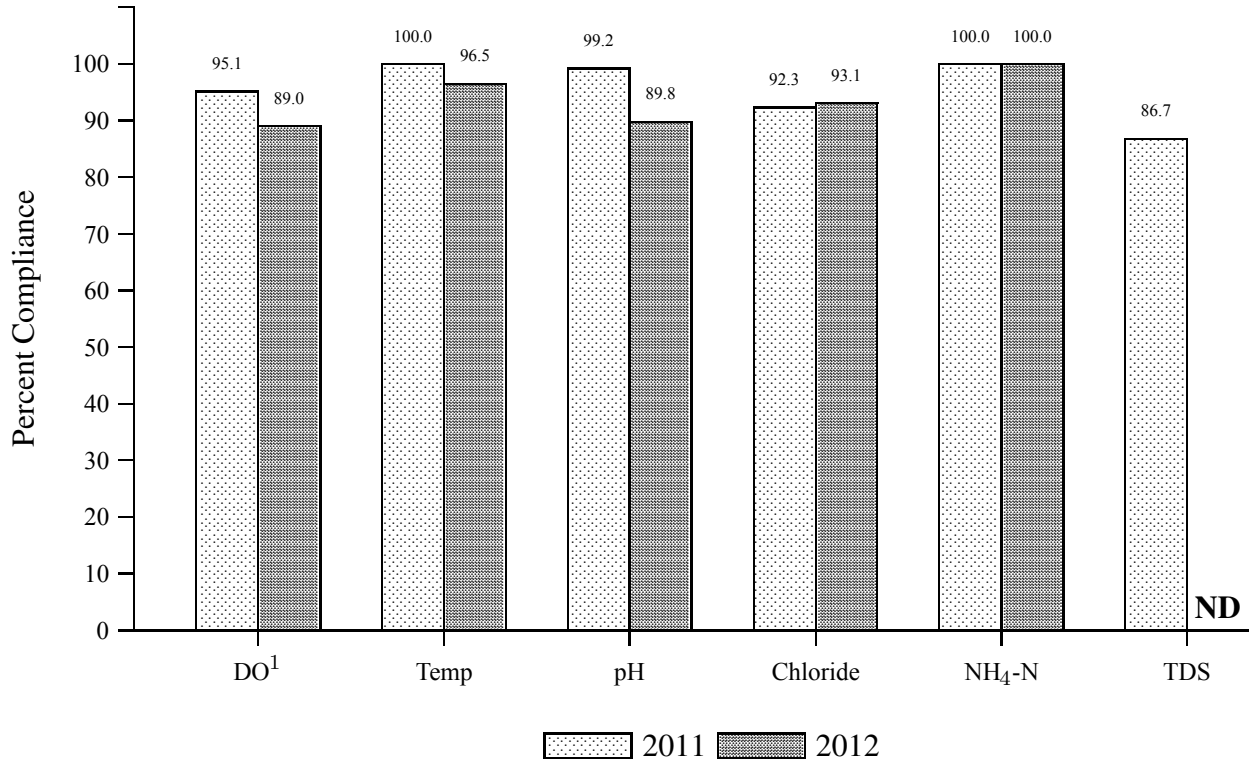


FIGURE 2 (Continued): COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR THE GENERAL USE WATER SECTION OF THE CHICAGO RIVER IN 2011 AND 2012

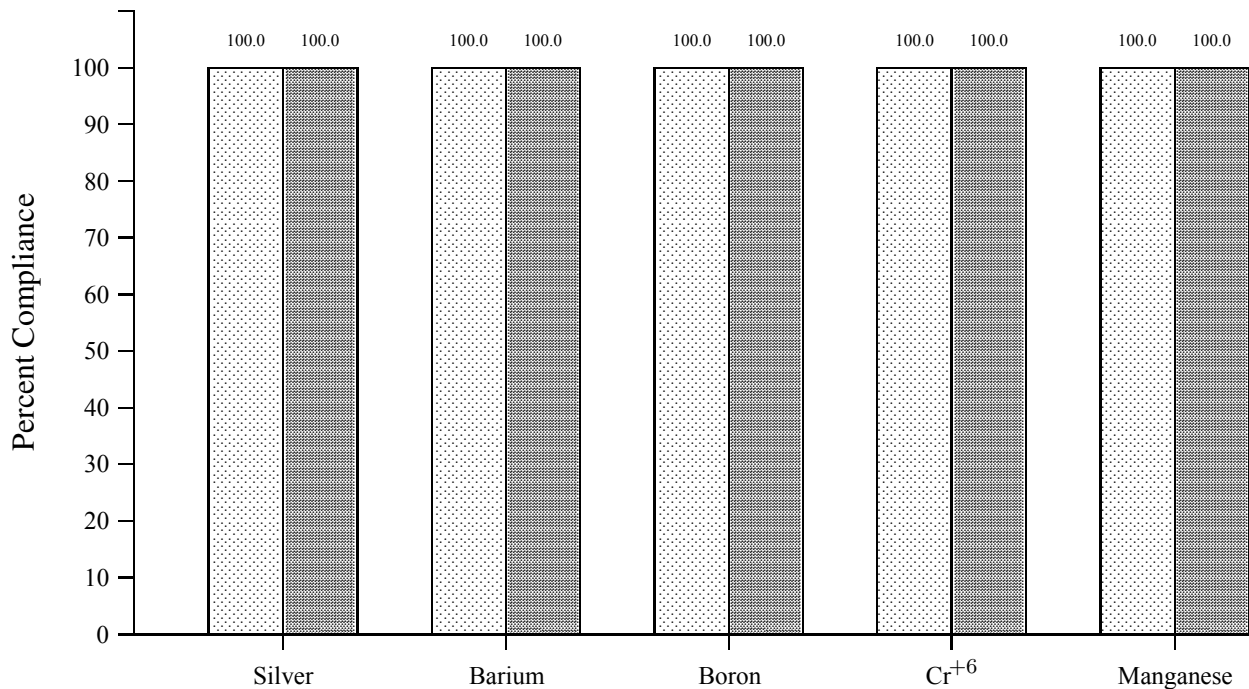
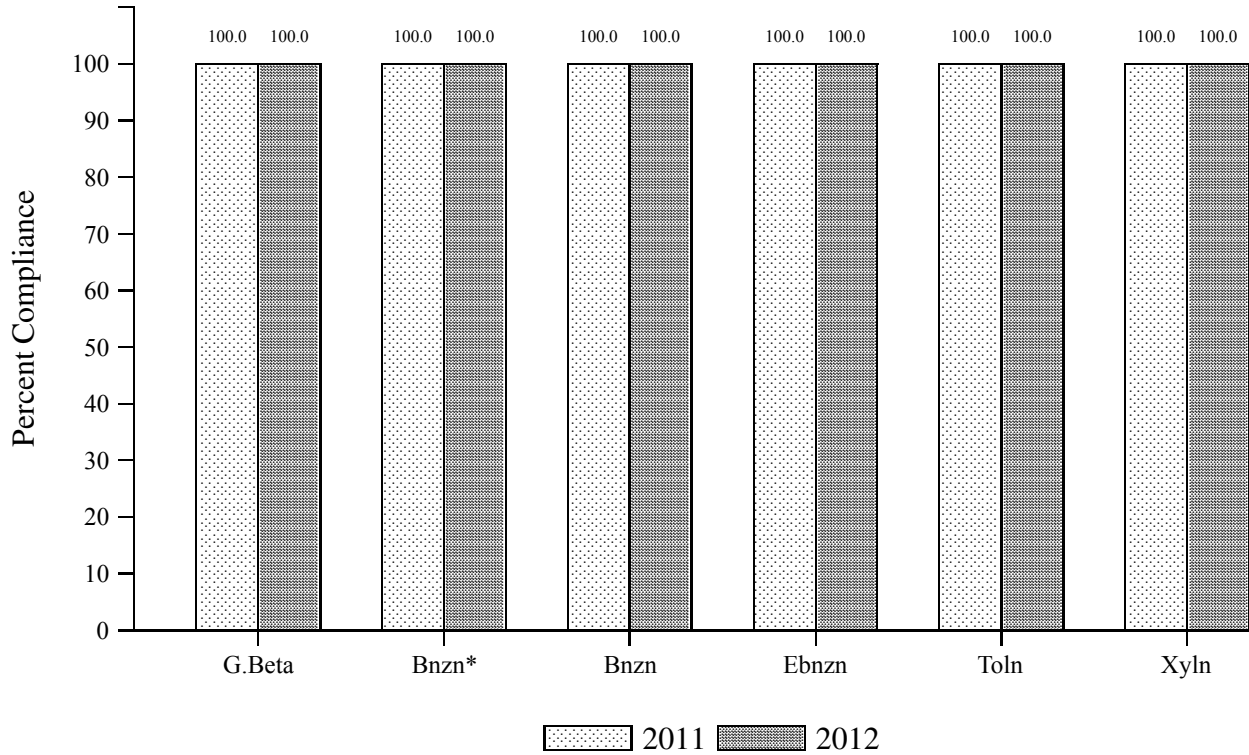
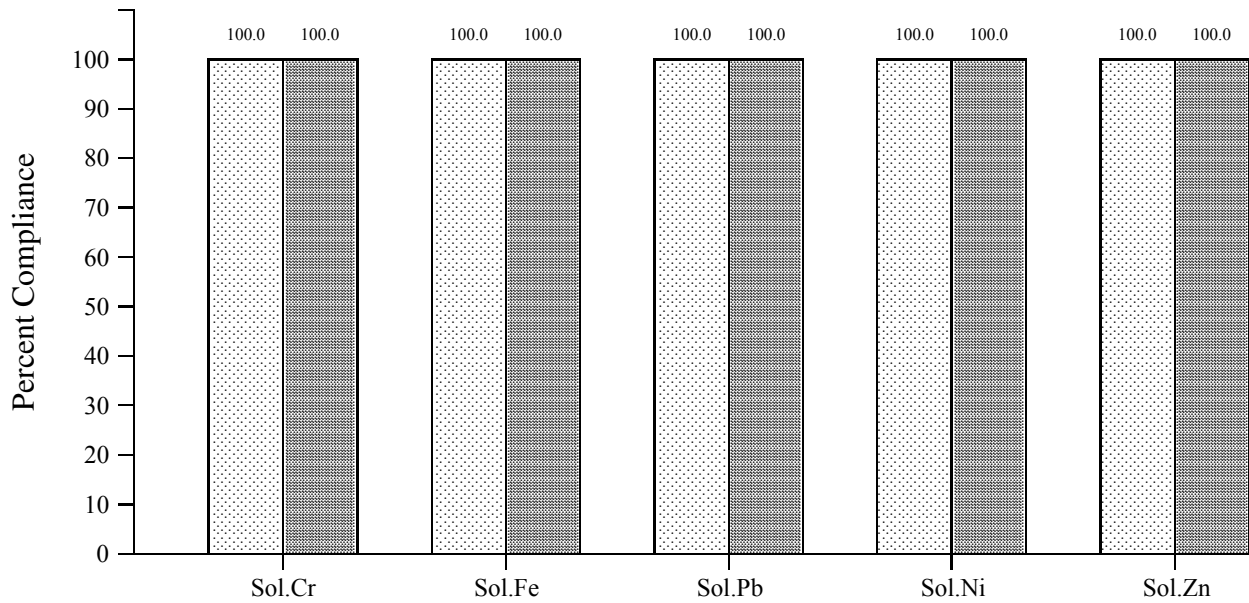
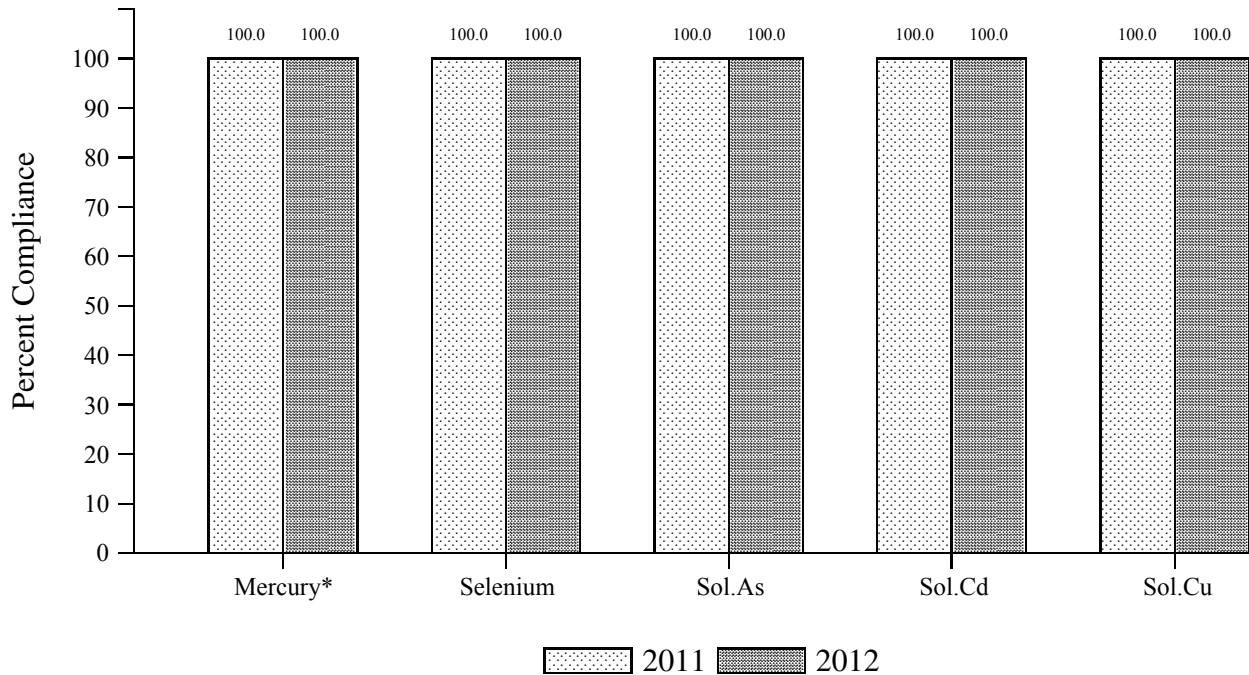


FIGURE 2 (Continued): COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR THE GENERAL USE WATER SECTION OF THE CHICAGO RIVER IN 2011 AND 2012



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.

ND = No data or standard exists.

FIGURE 3: COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR THE GENERAL USE WATER SECTION OF THE CALUMET RIVER IN 2011 AND 2012

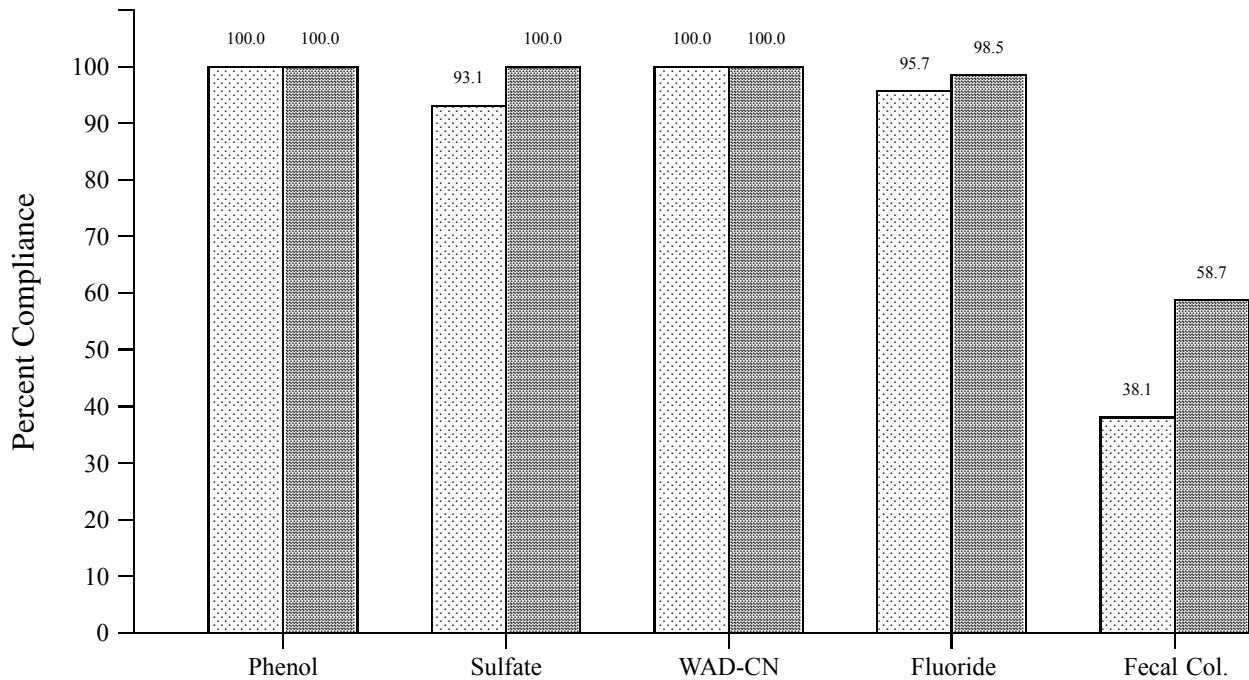
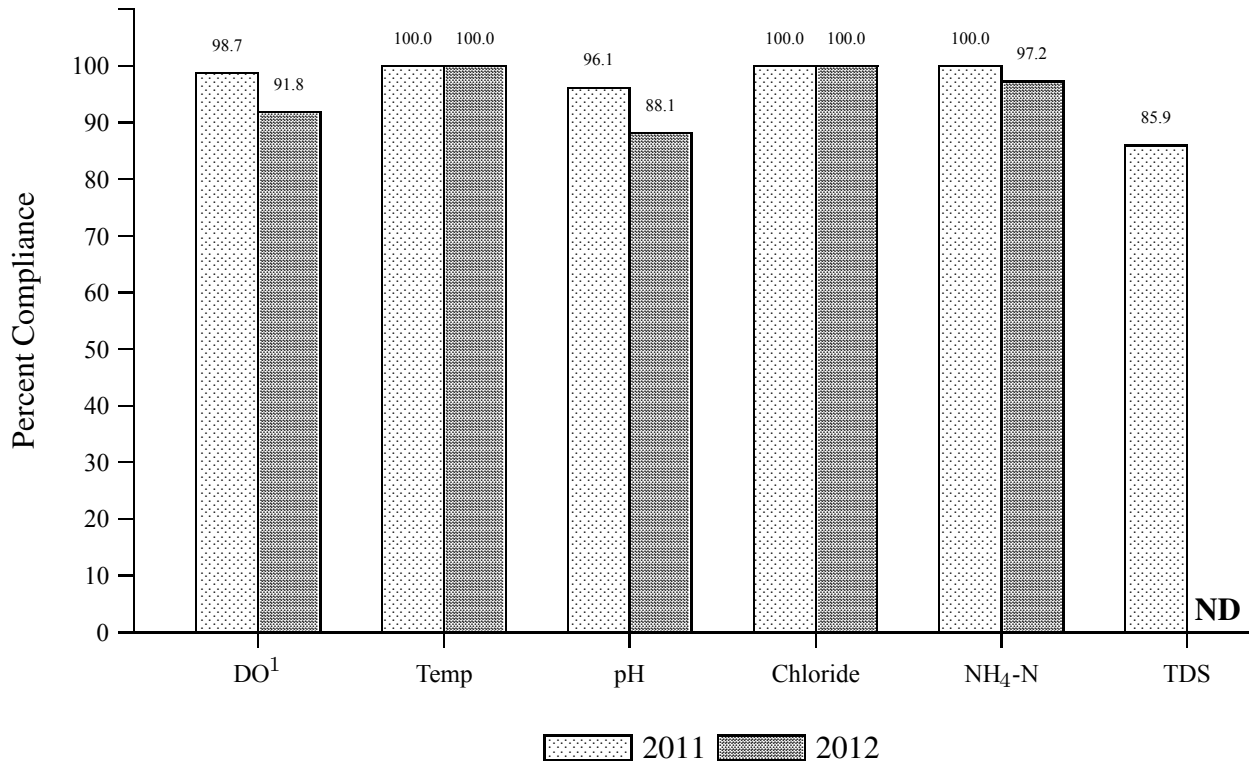


FIGURE 3 (Continued): COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR THE GENERAL USE WATER SECTION OF THE CALUMET RIVER IN 2011 AND 2012

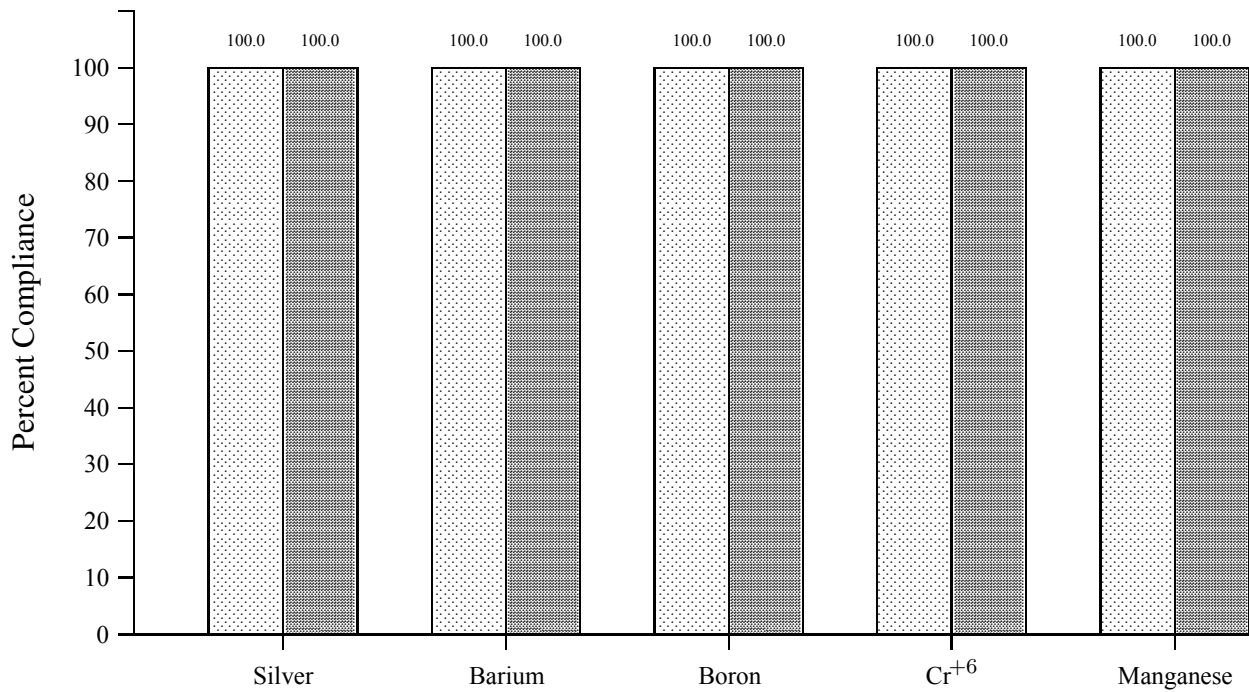
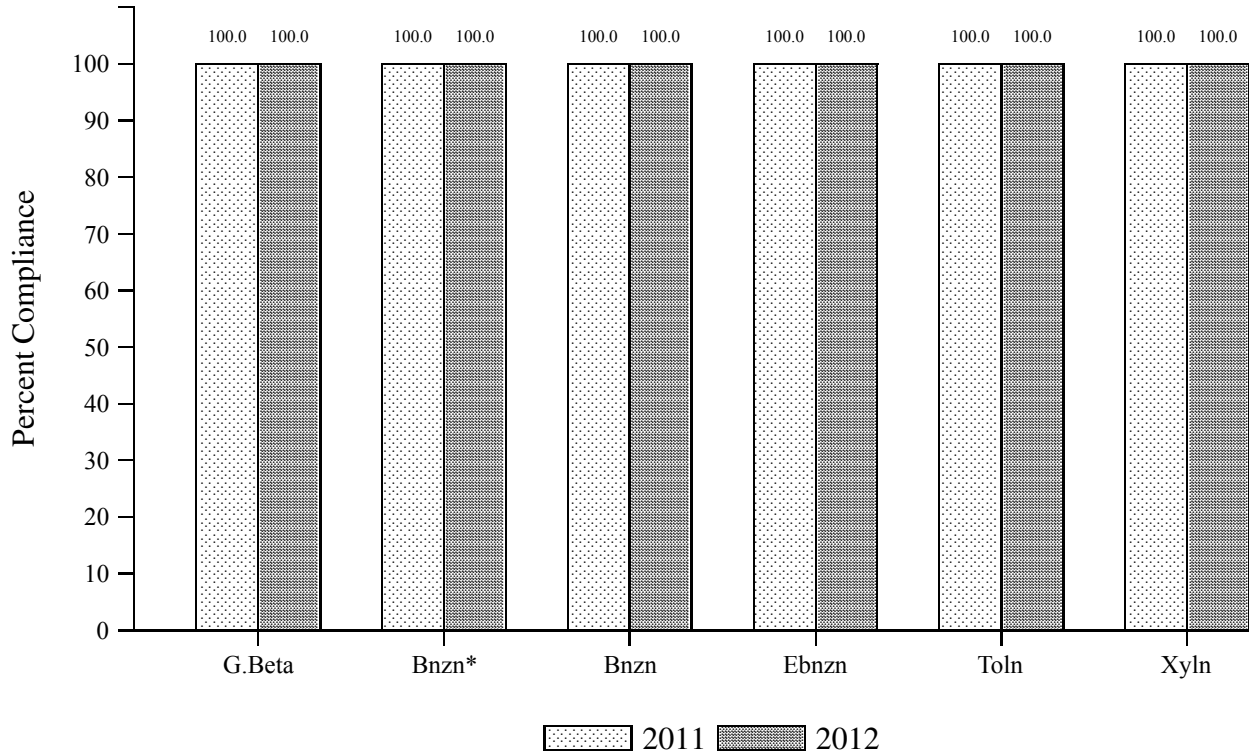
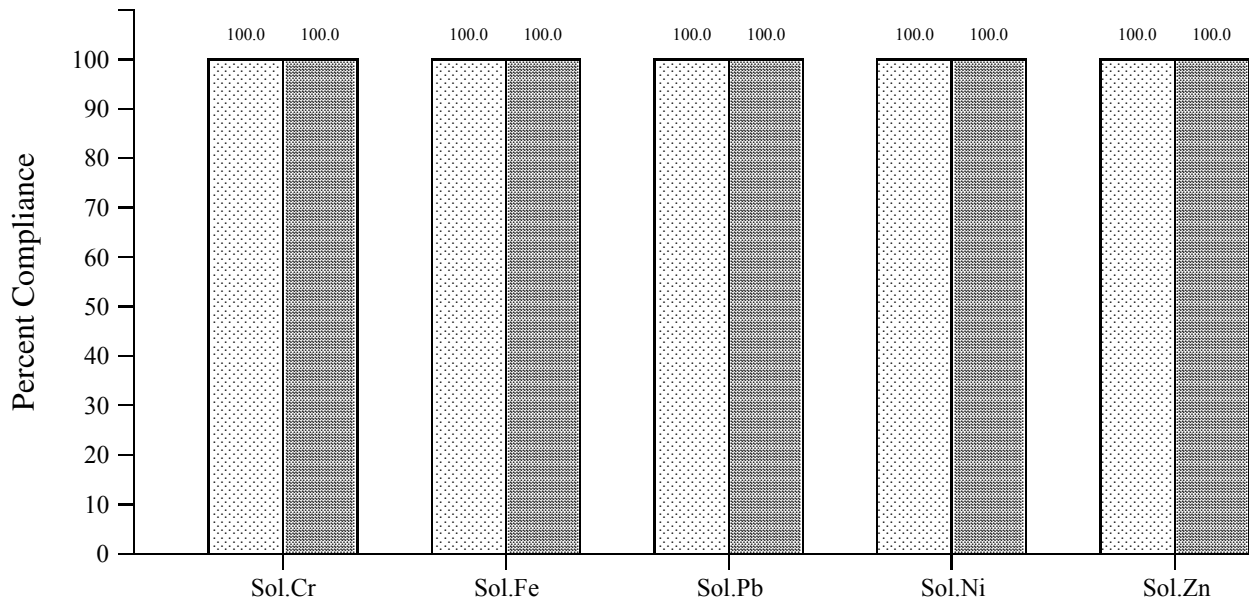
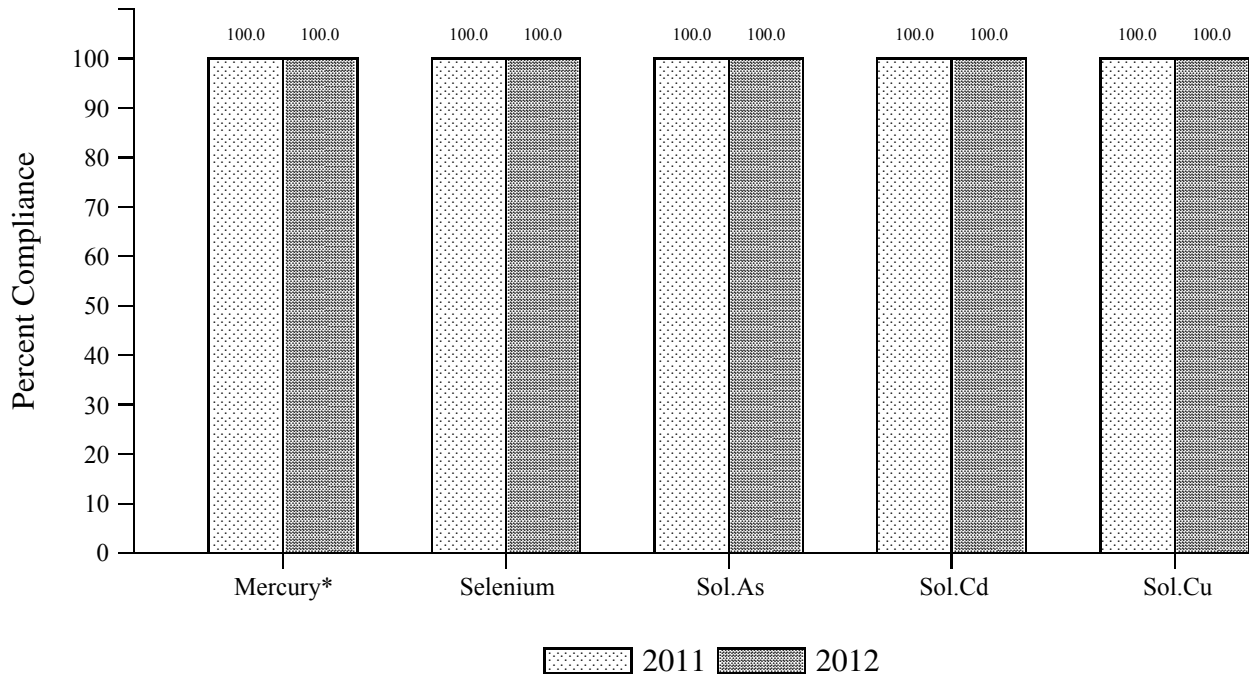


FIGURE 3 (Continued): COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR THE GENERAL USE WATER SECTION OF THE CALUMET RIVER IN 2011 AND 2012



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.

ND = No data or standard exists.

FIGURE 4: COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR THE GENERAL USE WATER SECTION OF THE DES PLAINES RIVER IN 2011 AND 2012

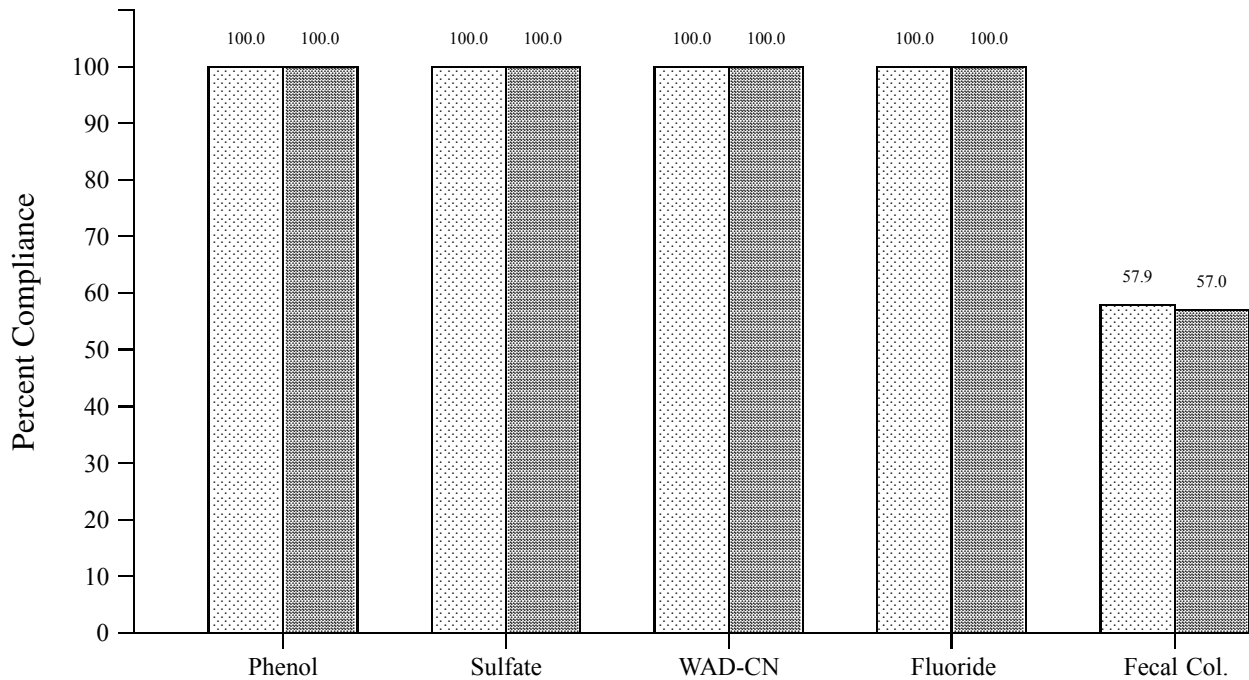
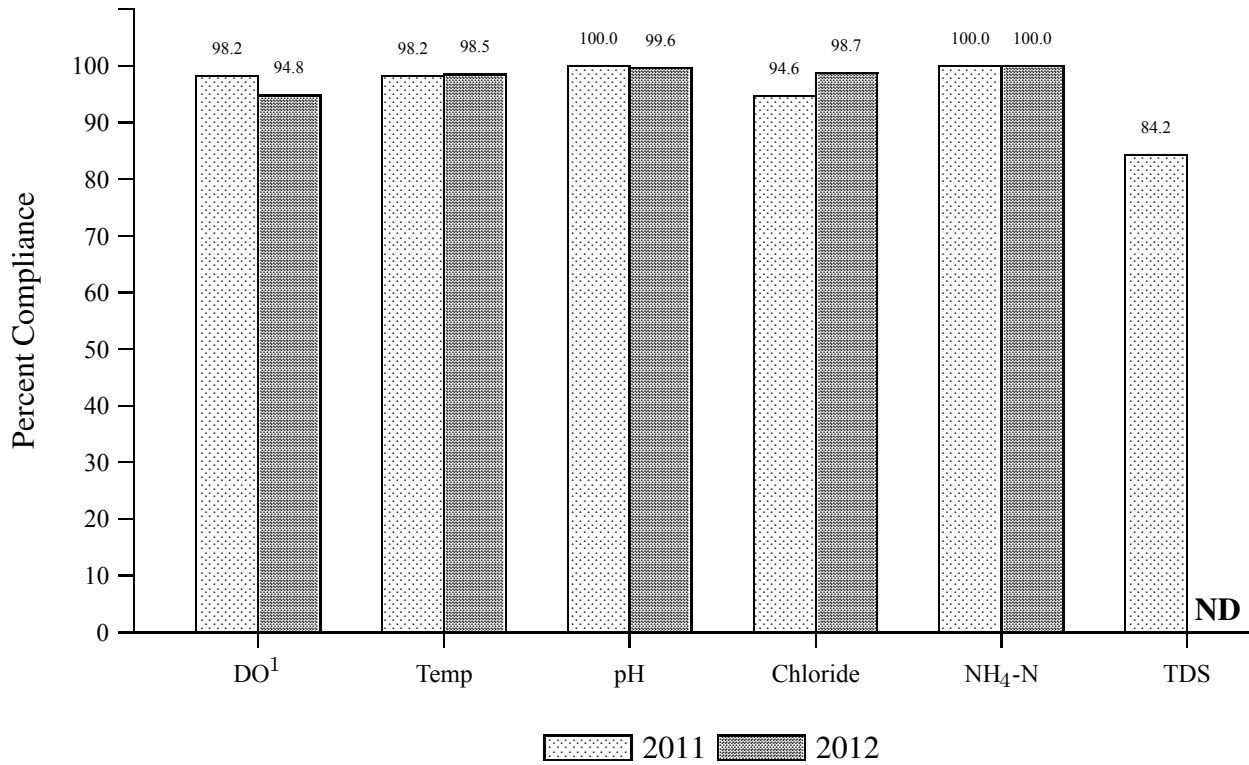


FIGURE 4 (Continued): COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR THE GENERAL USE WATER SECTION OF THE DES PLAINES RIVER IN 2011 AND 2012

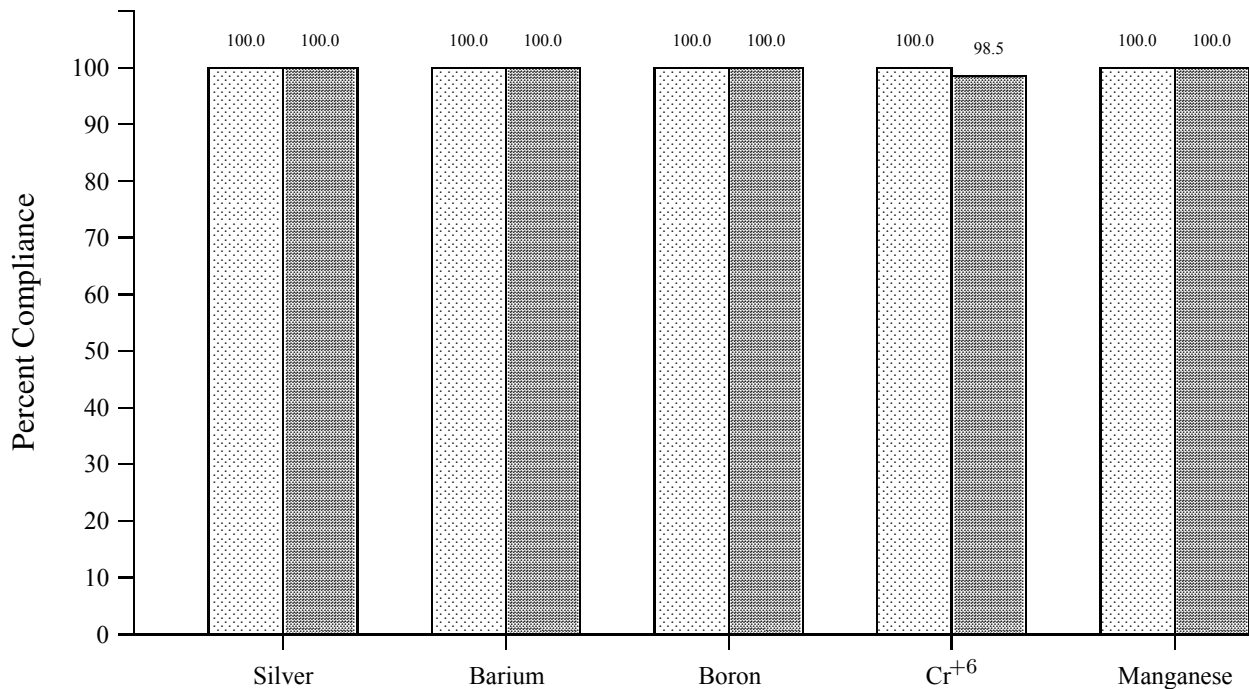
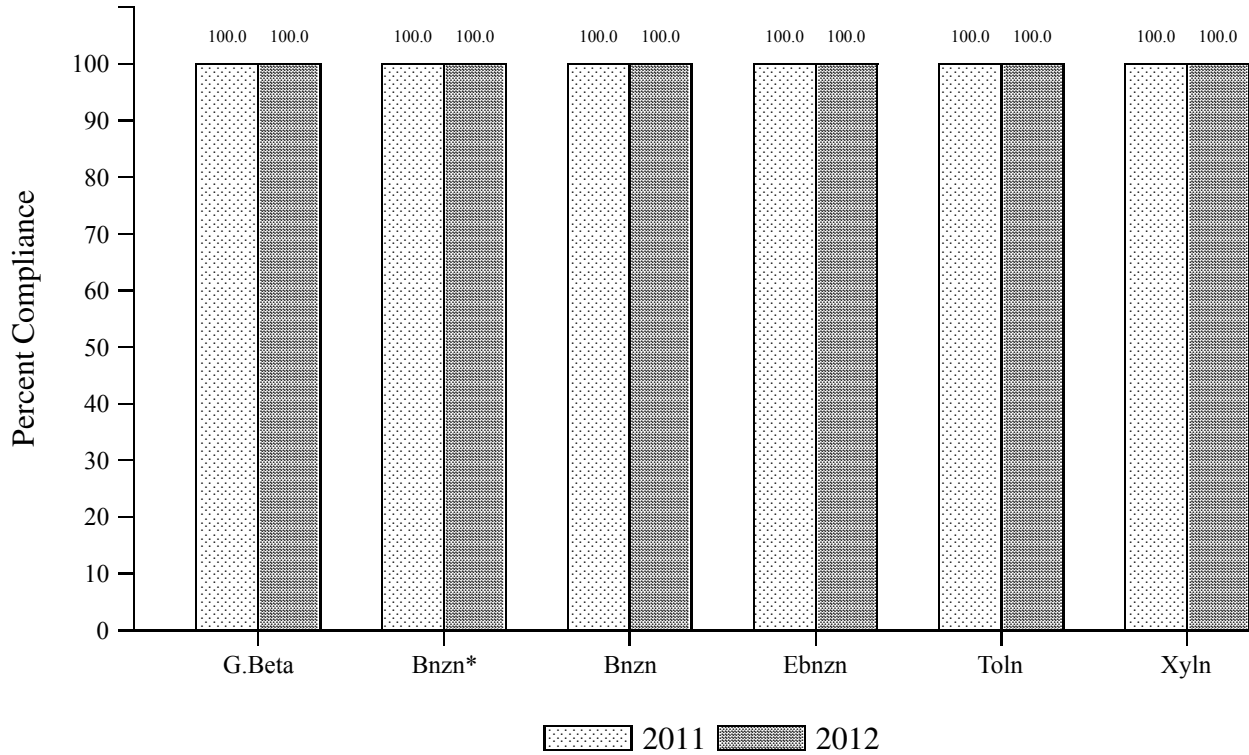
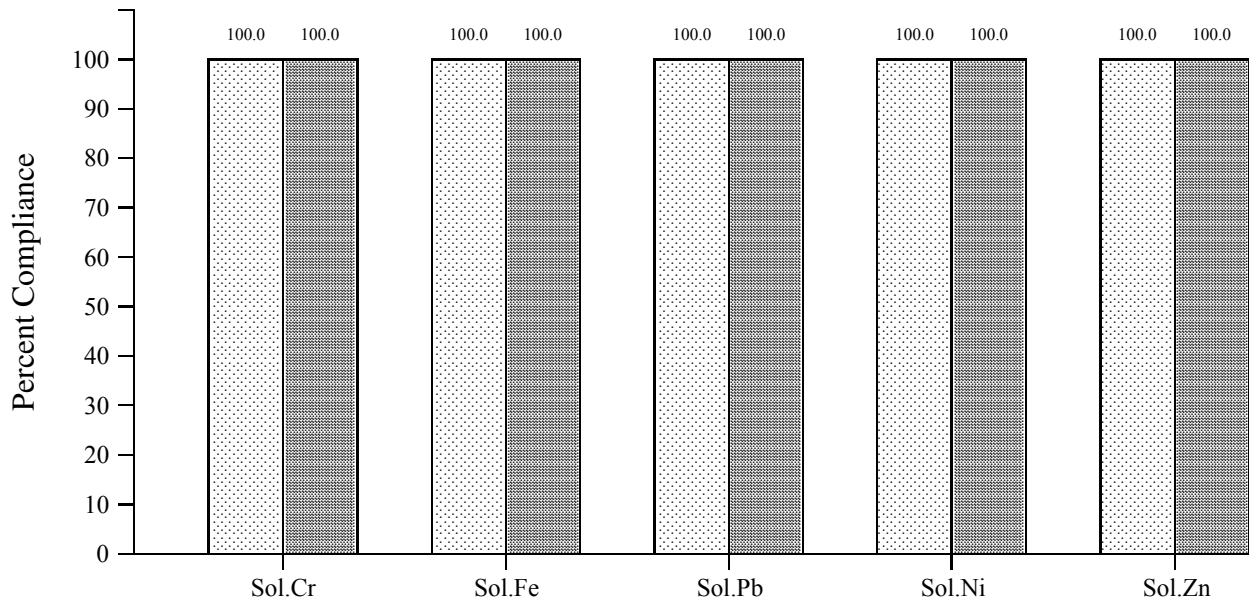
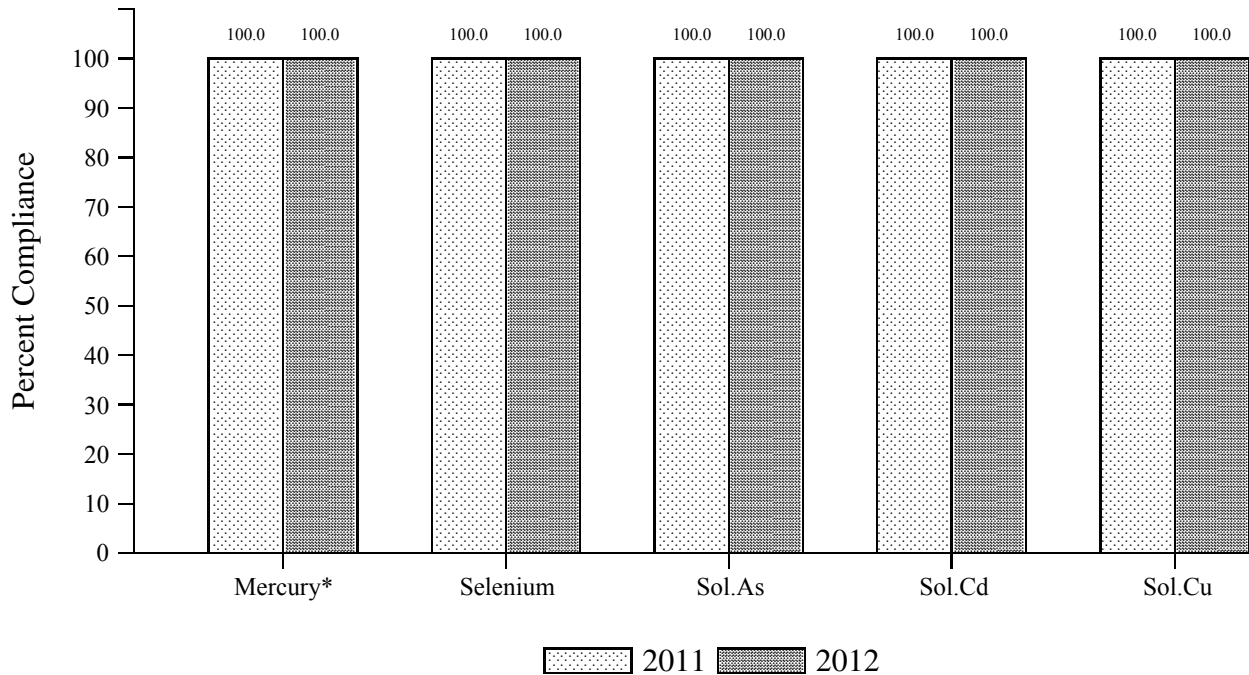


FIGURE 4 (Continued): COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR THE GENERAL USE WATER SECTION OF THE DES PLAINES RIVER IN 2011 AND 2012



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.

ND = No data or standard exists.

Chicago River System. There are 13 sampling locations (106, 103, 31, 104, 32, 105, 34, 96, 35, 112, 102, 74, and 100) in the General Use section of the river system.

In addition to the 21 parameters listed above, ammonium nitrogen, fluoride, and total hexavalent chromium were also in total compliance. Violations of the pertinent General Use Standards for the remaining five parameters (DO, temperature, pH, chloride, and fecal coliform) occurred in at least one of the locations sampled. There was no violation with respect to Human Health Standard. Detailed violation records for the noncompliant parameters are shown in [Table 6](#).

A comparison of 2012 data with 2011 data indicated that there was no significant difference between 2012 and 2011 compliance rates except for pH. In the Chicago River System, the compliance rate for pH significantly decreased from 99.2 percent in 2011 to 89.8 percent in 2012.

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 21 parameters listed above, temperature, chloride, and total hexavalent chromium were also in total compliance. Detailed violation records for the noncompliant parameters are shown in [Table 7](#).

A comparison of 2012 data with 2011 data indicated that there was no significant difference between 2012 and 2011 compliance rates except for sulfate and fecal coliform. In the Calumet River System, the compliance rate for sulfate significantly increased from 93.1 percent in 2011 to total compliance in 2012, and the compliance rate for fecal coliform significantly increased from 38.1 percent in 2011 to 58.7 percent in 2012.

Des Plaines River System. All 20 sampling locations (90, 110, 89, 111, 79, 80, 18, 24, 109, 77, 78, 12, 13, 17, 19, 20, 22, 23, 29, and 91) of the river system are in General Use Waters. Three sampling locations (110, 89, and 111) on the DuPage River and one sampling location (90) on Poplar Creek are included in this sampling program. In addition to the 21 parameters listed above, ammonium nitrogen and fluoride were also in total compliance. Detailed violation records for the noncompliant parameters are shown in [Table 8](#).

A comparison of 2012 data with 2011 data indicated that there was no significant difference between 2012 and 2011 compliance rates except for chloride. In the Des Plaines River System, the compliance rate for chloride significantly increased from 94.6 percent in 2011 to 98.7 percent in 2012.

TABLE 6: NUMBER OF PARAMETER CONCENTRATION VIOLATIONS OF
GENERAL USE LIMITS IN THE GENERAL USE WATERS OF
THE CHICAGO RIVER SYSTEM IN 2012

Parameter	Location No.	Total Violations	Months (No. of Violations) ¹
DO	106	1	Jul
	103	1	Jul
	31	2	Apr and Jul
	104	2	Jun and Jul
	32	2	Jun and Jul
	105	1	Jun
	34	2	Jun and Jul
	96	1	Aug
			12	Total violations of Dissolved Oxygen (DO)
Temp	103	1	Jul
	35	1	Mar
	102	1	Mar
	74	1	Mar
	100	1	Mar
		5	Total violations of Temperature (Temp)
pH	112	2	Nov and Dec
	74	1	Feb
	100	2	Feb and Dec
		5	Total violations of pH (pH)
Cl	106	2	Jan and Feb
	103	2	Jan and Feb
	104	1	Jan
	32	1	Jan
	34	1	Jan
	96	1	Jan
		8	Total violations of Chloride (Cl)
FC	106	4	Jan, Feb, Mar, and Jul
	103	5	Jan, Feb, Mar, Apr, and Jul
	31	2	Mar and Apr
	104	2	Jan and Mar
	32	5	Jan, Mar, Apr, May, and Jun

TABLE 6 (Continued): NUMBER OF PARAMETER CONCENTRATION VIOLATIONS OF
 GENERAL USE LIMITS IN THE GENERAL USE WATERS OF
 THE CHICAGO RIVER SYSTEM IN 2012

Parameter	Location No.	Total Violations	Months (No. of Violations) ¹
FC (Continued)	105	1	Jul
	34	3	Jan, Mar, and Jul
	96	5	Jan, Aug, Sep, Nov, and Dec
	112	3	Aug, Oct, and Dec
	102	6	Jan, Feb, Mar, Apr, May, and Jul
	74	1	Apr
	100	4	Jan, Feb, Apr, and Oct
		<u>41</u>	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 2012

Parameter	Location No.	Total Violations	Months (No. of Violations) ¹
DO	50	2	Jun and Jul
	52	3	May, Jun, and Jul
	97	1	May
		<u>6</u>	Total violations of Dissolved Oxygen (DO)
pH	50	1	Jun
	55	1	Jan
	57	1	Nov
		<u>3</u>	Total violations of pH (pH)
NH ₄ -N	50	2	Jun and Jul
		<u>2</u>	Total violations of Ammonium Nitrogen (NH₄-N)
F	52	1	Jun
		<u>1</u>	Total violations of Fluoride (F)
FC	52	6	Jan, Feb, Mar, Apr, Jun, and Jul
	54	4	Jan, Feb, Mar, and Apr
	97	4	Jan, Feb, Mar, and Jul
	57	5	Jan, Feb, Mar, Aug, and Nov
		<u>19</u>	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 2012

Parameter	Location No.	Total Violations	Months (No. of Violations) ¹
DO	110	5	Jun, Jul, Aug, Oct, and Nov
	79	1	Jul
	24	1	Jul
	17	1	Jul
	19	1	Jul
		<u>9</u>	Total violations of Dissolved Oxygen (DO)
Temp	18	1	Dec
	78	1	Dec
		<u>2</u>	Total violations of Temperature (Temp)
pH	24	1	Mar
		<u>1</u>	Total violations of pH (pH)
Cl	79	1	Jul
	109	1	Mar
	77	1	Feb
		<u>3</u>	Total violations of Chloride (Cl)
FC	90	1	May
	110	11	Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, and Dec
	89	5	Jan, Feb, Mar, Apr, and May
	111	9	Jan, Feb, May, Jul, Aug, Sep, Oct, Nov, and Dec
	79	2	May and Sep
	80	5	Jan, Feb, Mar, Apr, and Jun
	18	8	Jan, Feb, Mar, Apr, Aug, Sep, Nov, and Dec
	24	4	Jan, Mar, Apr, and May
	109	6	Jan, Mar, Apr, May, Aug, and Sep
	77	2	May and Sep
	78	4	May, Sep, Nov, and Dec
	12	1	May
	13	1	Apr
	17	1	May
	19	4	Jan, May, Aug, and Sep
20	3	Jan, Mar, and May	

TABLE 8 (Continued): NUMBER OF PARAMETER CONCENTRATION VIOLATIONS OF GENERAL USE LIMITS IN THE GENERAL USE WATERS OF THE DES PLAINES RIVER SYSTEM IN 2012

Parameter	Location No.	Total Violations	Months (No. of Violations) ¹
FC (Continued)	22	6	Mar, Apr, May, Jun, Aug, and Sep
	23	3	Apr, May, and Aug
	29	1	May
		<u>77</u>	Total violations of Fecal Coliform (FC)
Cr ⁺⁶	19	1	Sep
	22	1	Sep
		<u>2</u>	Total violations of Total Hexavalent Chromium (Cr⁺⁶)

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

COMPLIANCE WITH WATER QUALITY STANDARDS IN SECONDARY CONTACT WATERS

Sampling Locations and Frequencies

As shown in Figure 1, the waters designated as Secondary Contact Waters include the principal man-made canals in the Chicago and Calumet River Systems. The sampling locations used during 2012 and the annual frequencies of sampling are shown in Table 9. Also, Tables AII-2 through AII-45 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 2012.

River System Compliance Data

In the Secondary Contact Waters, 67 parameters were analyzed in 2012, of which 23 parameters were subject to IPCB Water Quality 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. 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 2012 in both the Chicago and Calumet River Systems. Nineteen water quality parameters were in complete compliance in both of these river systems. They were temperature, pH, total dissolved solids, phenols, 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, and total selenium.

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

The four water quality parameters that 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 two parameters (DO and fats, oils, and greases) occurred in at least one of the locations sampled. The compliance rates of these two parameters ranged from 93.9 to 99.5 percent. Detailed violation records for the noncompliant parameters are shown in Table 11.

A comparison of 2012 data with 2011 data indicated that there was no significant difference between 2012 and 2011 compliance rates, except for total iron. In the Chicago River System, the compliance rate for total iron significantly increased from 97.9 percent in 2011 to total compliance in 2012.

TABLE 9: LOCATIONS SAMPLED AND ANNUAL SAMPLING FREQUENCIES OF SECONDARY CONTACT WATERS IN 2012

Map No. ¹	Station Name	Annual No. of Samples
<u>Chicago River System</u>		
36	Touhy Avenue, North Shore Channel	12
101	Foster Avenue, North Shore Channel	7
37	Wilson Avenue, North Branch Chicago River	6
73	Diversey Parkway, North Branch Chicago River	12
46	Grand Avenue, North Branch Chicago River	7
39	Madison Street, South Branch Chicago River	6
108	Loomis Street, South Branch Chicago River	12
99	Archer Avenue, South Fork South Branch Chicago River	12
40	Damen Avenue, Chicago Sanitary & Ship Canal	7
75	Cicero Avenue, Chicago Sanitary & Ship Canal	12
41	Harlem Avenue, Chicago Sanitary & Ship Canal	12
42	Route 83, Chicago Sanitary & Ship Canal	7
48	Stephen Street, Chicago Sanitary & Ship Canal	12
92	Lockport Forebay, Chicago Sanitary & Ship Canal	<u>5!</u>
		175
<u>Calumet River System</u>		
86	Burnham Avenue, Grand Calumet River	11
56	Indiana Avenue, Little Calumet River	10
76	Halsted Street, Little Calumet River	11
58	Ashland Avenue, Calumet-Sag Channel	7
59	Cicero Avenue, Calumet-Sag Channel	10
43	Route 83, Calumet-Sag Channel	<u>1!</u>
		60

¹Refer to Figure 1.

FIGURE 5: COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR THE SECONDARY CONTACT WATER SECTION OF THE CHICAGO RIVER IN 2011 AND 2012

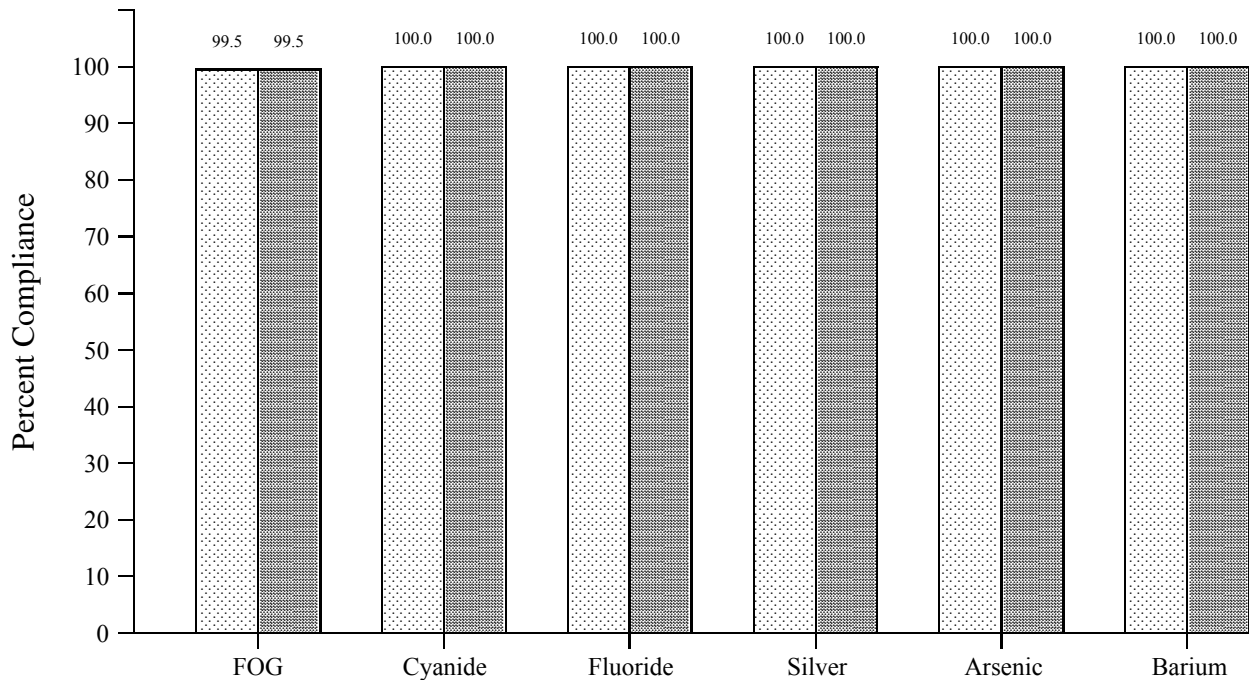
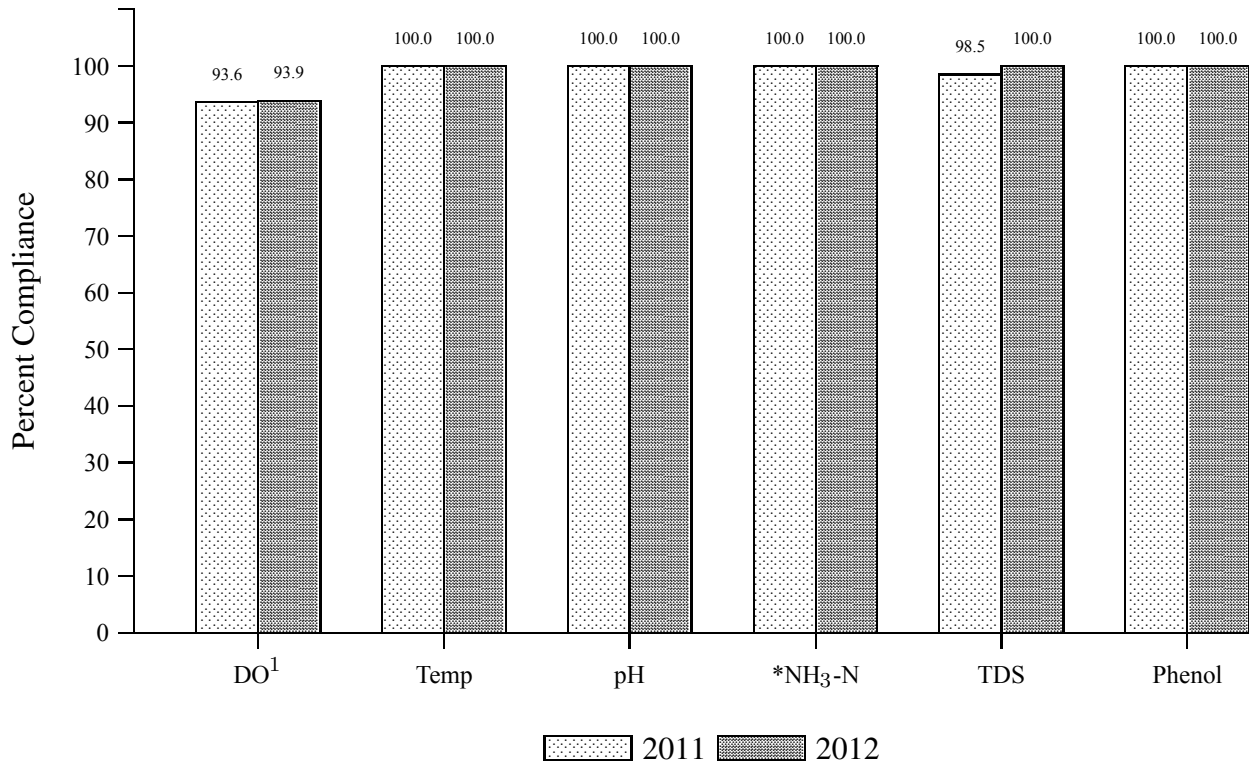
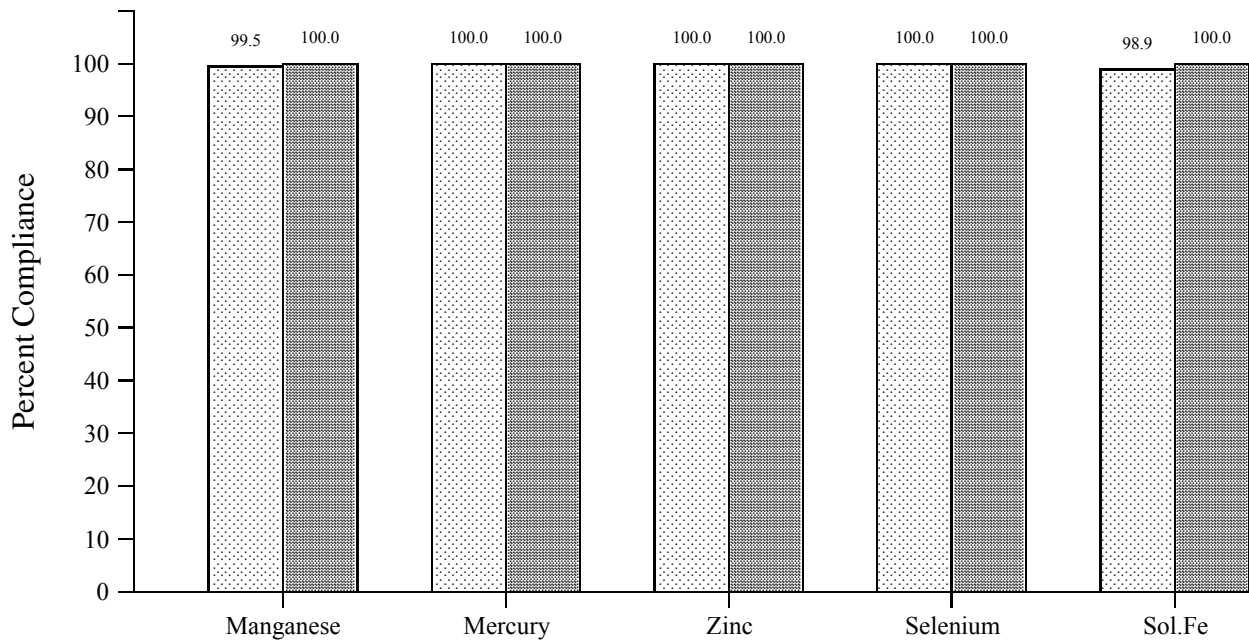
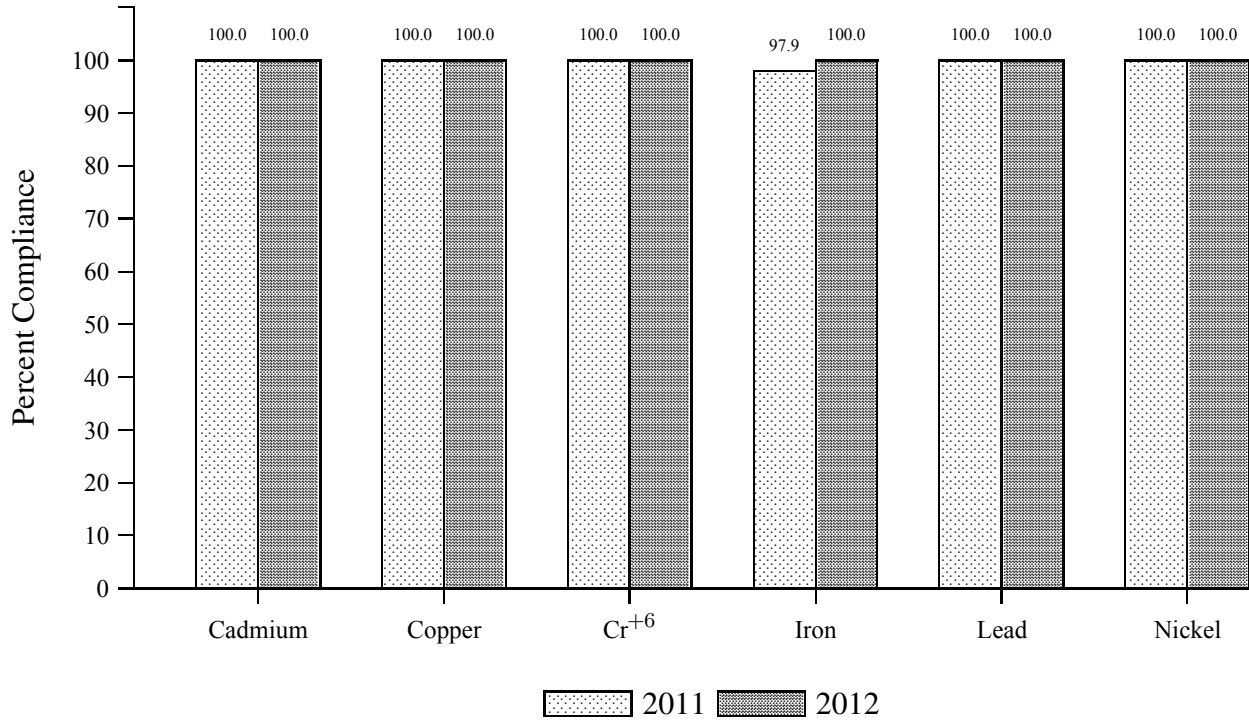


FIGURE 5 (Continued): COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR THE SECONDARY CONTACT WATER SECTION OF THE CHICAGO RIVER IN 2011 AND 2012



*NH₃-N = Un-ionized Ammonia.

FIGURE 6: COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR THE SECONDARY CONTACT WATER SECTION OF THE CALUMET RIVER IN 2011 AND 2012

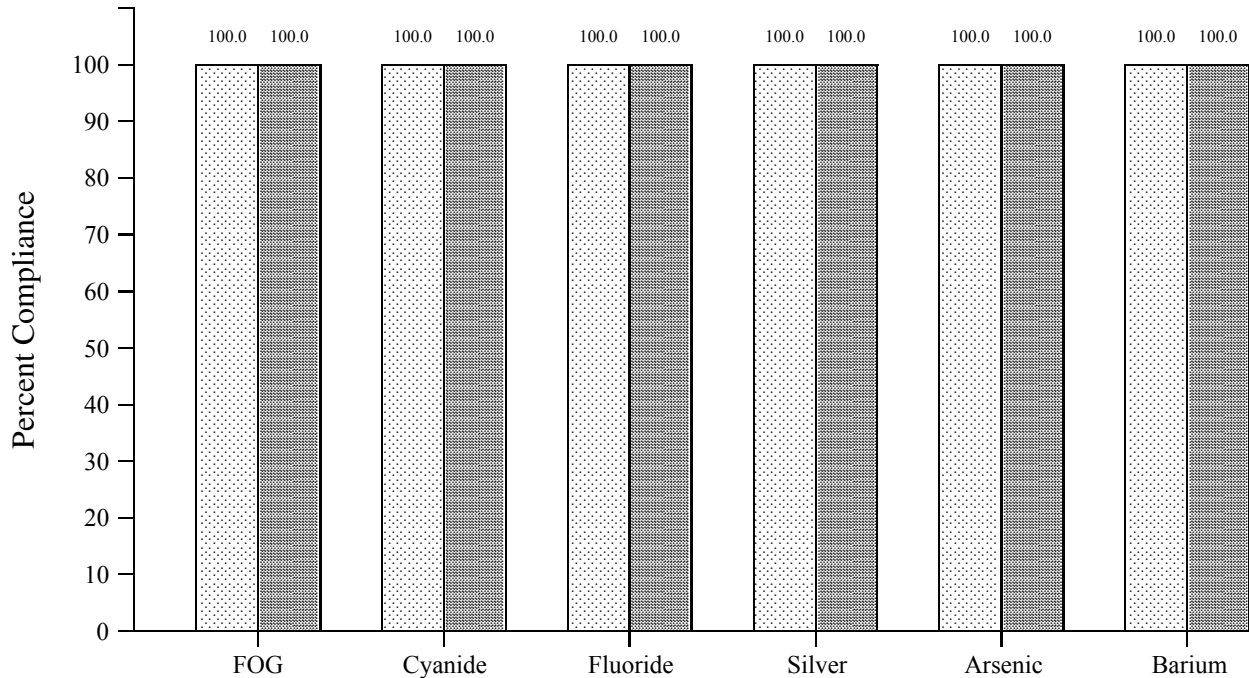
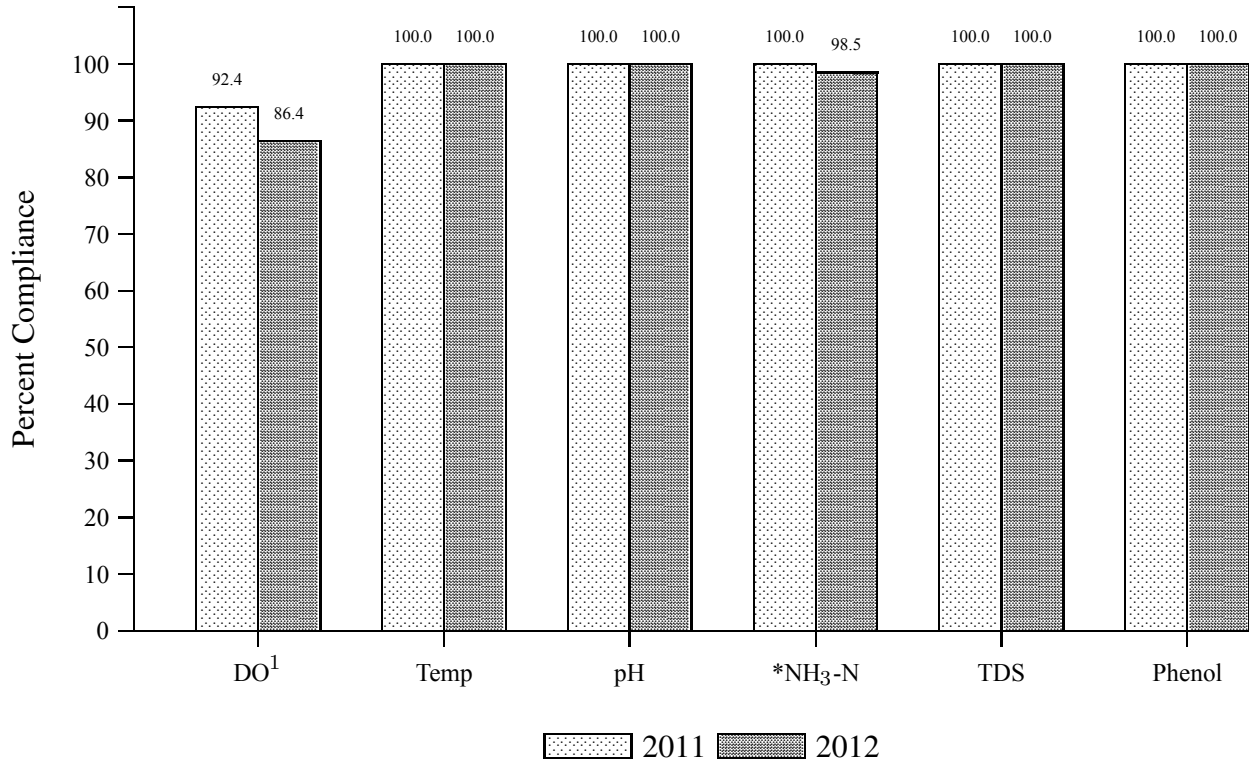
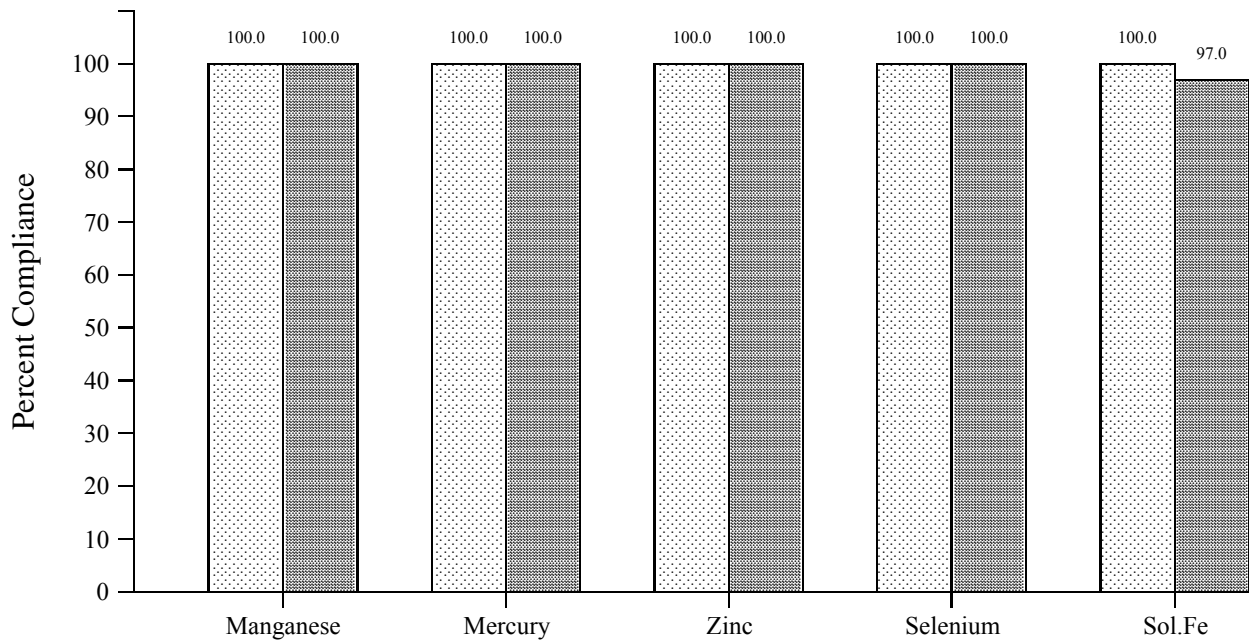
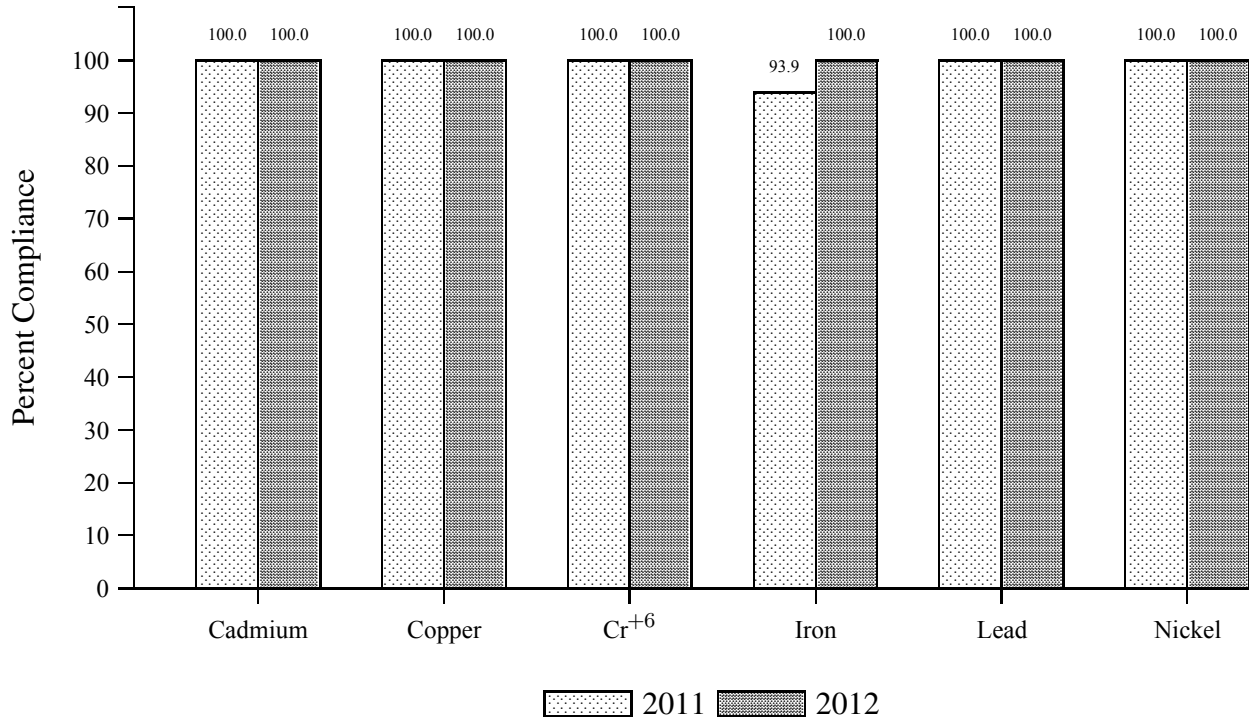


FIGURE 6 (Continued): COMPLIANCE RATES WITH WATER QUALITY STANDARDS FOR THE SECONDARY CONTACT WATER SECTION OF THE CALUMET RIVER IN 2011 AND 2012



*NH₃-N = Un-ionized Ammonia.

TABLE 10: WATER QUALITY PARAMETERS NOT IN TOTAL COMPLIANCE
IN SECONDARY CONTACT WATERS OF ALL RIVER SYSTEMS IN 2012

Parameter	Estimated Percent Compliance ¹	
	Chicago	Calumet
Dissolved Oxygen	93.9	86.4
Un-Ionized Ammonia	100.0	98.5
Fats, Oils, and Greases	99.5	100.0
Soluble Iron	100.0	97.0

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 2012

Parameter	Location No.	Total Violations	Months (No. of Violations) ¹
DO	99	4	Apr, May, Jun, and Sep
	40	2	Mar and May
	75	1	May
	42	1	May
	48	1	May
	92	2	Jul and Aug
			11	Total violations of Dissolved Oxygen (DO)
FOG	40	1	Jan
		1	Total violations of Fats, Oils, and Greases (FOG)

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

Calumet River System. In addition to the 19 parameters listed above, fats, oils, and greases was also in total compliance. Violations of the pertinent Secondary Contact Standards for the remaining three parameters (DO, un-ionized ammonia, and soluble iron) occurred in at least one of the locations sampled. The compliance rates for the three Secondary Contact parameters, DO, un-ionized ammonia, and soluble iron, were 86.4, 98.5, and 97.0 percent, respectively. Detailed violation records for the noncompliant parameters are shown in Table 12.

A comparison of 2012 data with 2011 data indicated that there was no significant difference between 2012 and 2011 compliance rates except for total iron. In the Calumet River System, the compliance rate for total iron significantly increased from 93.9 percent in 2011 to total compliance in 2012.

TABLE 12: NUMBER OF PARAMETER CONCENTRATION VIOLATIONS OF
SECONDARY CONTACT LIMITS IN THE SECONDARY CONTACT WATERS OF
THE CALUMET RIVER SYSTEM IN 2012

Parameter	Location No.	Total Violations	Months (No. of Violations) ¹
DO	86	6	Mar, Jun, Aug, Sep, Oct, and Nov
	56	1	Jun
	58	1	Jun
		$\overline{8}$	Total violations of Dissolved Oxygen (DO)
NH ₃ -N	86	1	May
		$\overline{1}$	Total violations of Un-Ionized Ammonia (NH₃-N)
Sol. Fe	86	2	May and Jun
		$\overline{2}$	Total violations of Soluble Iron (Sol. 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 2012. Three of these WRPs (Hanover Park, John E. Egan, and James C. Kirie) discharge their treated effluents into General Use Waters. The Terrence J. O'Brien, Stickney, and Calumet WRPs discharge their effluents into Secondary Contact Waters. During 2012, 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 Table 13.

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 Springinsguth Road, West Branch DuPage River, 8,342 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 Terrence J. O'Brien 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 THE
WATER RECLAMATION PLANTS IN 2012

WRP	Upstream Sample			Downstream Sample		
	Location	No. ¹	Freq.	Location	No. ¹	Freq.
Terrence J. O'Brien	Central Street, North Shore Channel	35	5	Touhy Avenue, North Shore Channel	36	12
Stickney	Cicero Avenue, Chicago Sanitary & Ship Canal	75	12	Harlem Avenue, Chicago Sanitary & Ship Canal	41	12
Calumet	Indiana Avenue, Little Calumet River	56	10	Halsted Street, Little Calumet River	76	11
John E. Egan	Higgins Road, Salt Creek	79	11	Arlington Heights Road, Salt Creek	80	7
James C. Kirie	Elmhurst Road, Higgins Creek	77	8	Wille Road, Higgins Creek	78	11
Hanover Park	Springinsguth Road, West Branch, Du Page River	110	11	Walnut Lane, West Branch, Du Page River	89	7

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

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 Tables 14 through 19. Tables AIII-1 through AIII-6 in Appendix AIII 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 41 parameters which have either IPCB General Use, Human Health, or Secondary Contact standards, were assayed for all WRPs in 2012. 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 Tables 14 through 19. 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 AND DOWNSTREAM LOCATIONS FOR THE TERRENCE J. O'BRIEN WATER RECLAMATION PLANT IN 2012

Parameter	Abbreviation (Units)	U ¹	vs.	D ²	Sig. Prob. ^{3,4}
Dissolved Oxygen	DO (mg/L)	8.5		7.0	0.177
Temperature	Temp (°C)	19		17	0.351
pH	pH	7.7		7.1	0.118
Total Alkalinity	Alk (mg/L)	141		135	0.674
Chloride	Cl (mg/L)	128		146	0.819
Turbidity	Turb (NTU)	11		5	-
Total Kjeldahl Nitrogen	TKN (mg/L)	1.2		2.2	0.065
Ammonium Nitrogen	NH ₄ -N (mg/L)	0.12		1.10	0.007
Un-Ionized Ammonia	NH ₃ -N (mg/L)	0.004		0.007	0.496
Organic Nitrogen	ORG-N (mg/L)	1.1		1.1	0.958
Nitrite Plus Nitrate Nitrogen	NO ₂ + NO ₃ (mg/L)	0.22		6.87	0.000
Total Solids	TS (mg/L)	570		509	0.674
Total Suspended Solids	TSS (mg/L)	11		7	0.036
Volatile Suspended Solids	VSS (mg/L)	5.2		4.2	0.527
Total Dissolved Solids	TDS (mg/L)	559		502	0.694
Phenols	Phenol (µg/L)	<5		<5	-
Sulfate	SO ₄ (mg/L)	50		44	0.651
Fats, Oils, and Greases	FOG (mg/L)	<5		<5	-
Total Phosphorus	TP (mg/L)	0.14		1.31	0.000
Total Cyanide	CN (mg/L)	<0.005		<0.005	-
WAD Cyanide	WAD-CN (mg/L)	0.0014		0.0012	1.000
Fluoride	F (mg/L)	0.20		0.73	0.000
Total Organic Carbon	TOC (mg/L)	3.0		4.6	0.003
Fecal Coliform *	FC (#/100ml)	35		5642	0.000
Total Calcium	Ca (mg/L)	52		53	0.908
Total Magnesium	Mg (mg/L)	19		19	0.892
Hardness	Hard (mg/L)	208		208	0.990
Gross Alpha Radioactivity	G. Alpha (pCi/L)	1.9		1.8	0.428

TABLE 14 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM AND DOWNSTREAM LOCATIONS FOR THE TERRENCE J. O'BRIEN WATER RECLAMATION PLANT IN 2012

Parameter	Abbreviation (Units)	U ¹	vs.	D ²	Sig. Prob. ^{3,4}
Gross Beta Radioactivity	G. Beta (pCi/L)	1.7		3.3	0.000
Chlorophyll <i>a</i>	Chlrphl ($\mu\text{g/L}$)	30		3	0.315
Benzene	Bnzn ($\mu\text{g/L}$)	<2		<2	-
Ethylbenzene	Ebnzn ($\mu\text{g/L}$)	<2		<2	-
Toluene	Toln ($\mu\text{g/L}$)	<2		<2	-
Xylene	Xyln ($\mu\text{g/L}$)	<3		<3	-
Meta and/or Para Xylenes	xylmp ($\mu\text{g/L}$)	<3		<3	-
Ortho Xylene	xylno ($\mu\text{g/L}$)	<3		<3	-
Total Silver	Ag (mg/L)	<0.001		<0.001	-
Total Arsenic	As (mg/L)	<0.05		<0.05	-
Total Barium	Ba (mg/L)	0.029		0.023	0.015
Total Boron	B (mg/L)	0.052		0.158	0.000
Total Cadmium	Cd (mg/L)	<0.001		<0.001	-
Total Copper	Cu (mg/L)	<0.005		0.006	-
Total Chromium	Cr (mg/L)	<0.005		0.006	-
Total Hexavalent Chromium	Cr ⁺⁶ ($\mu\text{g/L}$)	<6		<6	-
Total Iron	Fe (mg/L)	0.250		0.150	0.285
Total Lead	Pb (mg/L)	<0.02		<0.02	-
Total Nickel	Ni (mg/L)	<0.005		0.011	-
Total Manganese	Mn (mg/L)	0.022		0.032	0.422
Total Mercury	Hg ($\mu\text{g/L}$)	<0.2		<0.2	-
Low Level Mercury	Hg- (ng/L)	4.580		0.000	-
Total Zinc	Zn (mg/L)	<0.01		0.035	-
Total Selenium	Se (mg/L)	0.006		<0.005	0.113
Soluble Calcium	Sol. Ca (mg/L)	63.5		59.3	0.006
Soluble Magnesium	Sol. Mg (mg/L)	24.5		21.0	0.101
Soluble Silver	Sol. Ag (mg/L)	<0.001		<0.001	-
Soluble Arsenic	Sol. As (mg/L)	<0.02		<0.02	-

TABLE 14 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM AND DOWNSTREAM LOCATIONS FOR THE TERRENCE J. O'BRIEN WATER RECLAMATION PLANT IN 2012

Parameter	Abbreviation (Units)	U ¹	vs.	D ²	Sig. Prob. ^{3,4}
Soluble Barium	Sol. Ba (mg/L)	0.033		0.024	-
Soluble Boron	Sol. B (mg/L)	0.060		0.170	-
Soluble Cadmium	Sol. Cd (mg/L)	<0.001		<0.001	-
Soluble Copper	Sol. Cu (mg/L)	<0.005		<0.005	-
Soluble Chromium	Sol. Cr (mg/L)	<0.005		<0.005	-
Soluble Iron	Sol. Fe (mg/L)	<0.1		<0.1	-
Soluble Lead	Sol. Pb (mg/L)	<0.02		<0.02	-
Soluble Nickel	Sol. Ni (mg/L)	<0.005		0.006	-
Soluble Manganese	Sol. Mn (mg/L)	0.010		0.029	0.183
Soluble Zinc	Sol. Zn (mg/L)	<0.01		0.028	-
Soluble Selenium	Sol. Se (mg/L)	<0.005		0.006	-

¹Upstream (U), value following < sign is the average detection limit.

²Downstream (D), value following < sign is the average detection limit.

³Significance Probability ≤ 0.05 indicates that upstream and downstream population means are not equal.

⁴Some 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 AND DOWNSTREAM LOCATIONS FOR THE STICKNEY WATER RECLAMATION PLANT IN 2012

Parameter	Abbreviation (Units)	U ¹	vs.	D ²	Sig. Prob. ^{3,4}
Dissolved Oxygen	DO (mg/L)	6.0		6.8	0.135
Temperature	Temp (°C)	18		18	0.862
pH	pH	6.9		7.1	0.140
Total Alkalinity	Alk (mg/L)	135		126	0.402
Chloride	Cl (mg/L)	167		162	0.932
Turbidity	Turb (NTU)	8.0		5.0	0.299
Total Kjeldahl Nitrogen	TKN (mg/L)	1.8		1.5	0.499
Ammonium Nitrogen	NH ₄ -N (mg/L)	0.93		0.48	0.079
Un-Ionized Ammonia	NH ₃ -N (mg/L)	0.003		0.003	0.945
Organic Nitrogen	ORG-N (mg/L)	0.83		1.02	0.265
Nitrite Plus Nitrate Nitrogen	NO ₂ + NO ₃ (mg/L)	6.1		8.3	0.069
Total Solids	TS (mg/L)	549		580	0.765
Total Suspended Solids	TSS (mg/L)	13		9	0.101
Volatile Suspended Solids	VSS (mg/L)	4.3		3.8	0.358
Total Dissolved Solids	TDS (mg/L)	536		571	0.728
Phenols	Phenol (µg/L)	<5		<5	-
Sulfate	SO ₄ (mg/L)	47		59	0.042
Fats, Oils, and Greases	FOG (mg/L)	<5		<5	-
Total Phosphorus	TP (mg/L)	0.94		1.08	0.443
Total Cyanide	CN (mg/L)	<0.005		<0.005	-
WAD Cyanide	WAD-CN (mg/L)	0.0013		0.0011	0.304
Fluoride	F (mg/L)	0.57		0.66	0.193
Total Organic Carbon	TOC (mg/L)	4.0		4.6	0.076
Fecal Coliform *	FC (#/100ml)	174		3721	0.000
Total Calcium	Ca (mg/L)	52		54	0.703
Total Magnesium	Mg (mg/L)	19		19	0.938
Hardness	Hard (mg/L)	208		213	0.797
Gross Alpha Radioactivity	G. Alpha (pCi/L)	1.7		1.9	0.479

TABLE 15 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM AND DOWNSTREAM LOCATIONS FOR THE STICKNEY WATER RECLAMATION PLANT IN 2012

Parameter	Abbreviation (Units)	U ¹	vs.	D ²	Sig. Prob. ^{3,4}
Gross Beta Radioactivity	G. Beta (pCi/L)	3.2		4.3	0.036
Chlorophyll <i>a</i>	Chlrphl ($\mu\text{g/L}$)	6.9		5.7	0.579
Benzene	Bznz ($\mu\text{g/L}$)	<2		<2	-
Ethylbenzene	Ebnzn ($\mu\text{g/L}$)	<2		<2	-
Toluene	Toln ($\mu\text{g/L}$)	<2		<2	-
Xylene	Xyln ($\mu\text{g/L}$)	<3		<3	-
Meta and/or Para Xylenes	xylmp ($\mu\text{g/L}$)	<3		<3	-
Ortho Xylene	xylno ($\mu\text{g/L}$)	<3		<3	-
Total Silver	Ag (mg/L)	<0.001		<0.001	-
Total Arsenic	As (mg/L)	<0.05		<0.05	-
Total Barium	Ba (mg/L)	0.024		0.020	0.063
Total Boron	B (mg/L)	0.124		0.163	0.025
Total Cadmium	Cd (mg/L)	<0.001		<0.001	-
Total Copper	Cu (mg/L)	0.009		0.007	0.337
Total Chromium	Cr (mg/L)	0.013		<0.005	-
Total Hexavalent Chromium	Cr ⁺⁶ ($\mu\text{g/L}$)	<6		<6	-
Total Iron	Fe (mg/L)	0.625		0.275	0.088
Total Lead	Pb (mg/L)	<0.02		<0.02	-
Total Nickel	Ni (mg/L)	0.016		0.009	0.311
Total Manganese	Mn (mg/L)	0.051		0.026	0.185
Total Mercury	Hg ($\mu\text{g/L}$)	<0.2		<0.2	-
Low Level Mercury	Hg- (ng/L)	-		-	-
Total Zinc	Zn (mg/L)	0.048		0.033	0.318
Total Selenium	Se (mg/L)	<0.005		<0.005	0.546
Soluble Calcium	Sol. Ca (mg/L)	64.8		62.5	0.492
Soluble Magnesium	Sol. Mg (mg/L)	24.0		22.5	0.372
Soluble Silver	Sol. Ag (mg/L)	<0.001		<0.001	-
Soluble Arsenic	Sol. As (mg/L)	<0.02		<0.02	-

TABLE 15 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM AND DOWNSTREAM LOCATIONS FOR THE STICKNEY WATER RECLAMATION PLANT IN 2012

Parameter	Abbreviation (Units)	U ¹	vs.	D ²	Sig. Prob. ^{3,4}
Soluble Barium	Sol. Ba (mg/L)	0.025		0.022	0.129
Soluble Boron	Sol. B (mg/L)	0.148		0.173	0.227
Soluble Cadmium	Sol. Cd (mg/L)	<0.001		<0.001	-
Soluble Copper	Sol. Cu (mg/L)	<0.005		0.006	-
Soluble Chromium	Sol. Cr (mg/L)	<0.005		<0.005	-
Soluble Iron	Sol. Fe (mg/L)	<0.1		<0.1	-
Soluble Lead	Sol. Pb (mg/L)	<0.02		<0.02	-
Soluble Nickel	Sol. Ni (mg/L)	0.006		0.008	0.123
Soluble Manganese	Sol. Mn (mg/L)	0.037		0.018	0.275
Soluble Zinc	Sol. Zn (mg/L)	0.019		0.023	0.414
Soluble Selenium	Sol. Se (mg/L)	0.006		0.006	0.730

¹Upstream (U), value following < sign is the average detection limit.

²Downstream (D), value following < sign is the average detection limit.

³Significance Probability ≤ 0.05 indicates that upstream and downstream population means are not equal.

⁴Some 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 AND DOWNSTREAM LOCATIONS FOR THE CALUMET WATER RECLAMATION PLANT IN 2012

Parameter	Abbreviation (Units)	U ¹	vs.	D ²	Sig. Prob. ^{3,4}
Dissolved Oxygen	DO (mg/L)	7.7		6.6	0.284
Temperature	Temp (°C)	15		16	0.697
pH	pH	7.3		7.2	0.725
Total Alkalinity	Alk (mg/L)	130		157	0.023
Chloride	Cl (mg/L)	110		150	0.194
Turbidity	Turb (NTU)	9.5		4.0	0.049
Total Kjeldahl Nitrogen	TKN (mg/L)	<1		1.2	-
Ammonium Nitrogen	NH ₄ -N (mg/L)	0.18		0.31	0.074
Un-Ionized Ammonia	NH ₃ -N (mg/L)	0.001		0.002	0.197
Organic Nitrogen	ORG-N (mg/L)	0.82		0.87	0.646
Nitrite Plus Nitrate Nitrogen	NO ₂ + NO ₃ (mg/L)	1.9		6.2	0.002
Total Solids	TS (mg/L)	540		620	0.387
Total Suspended Solids	TSS (mg/L)	10		9	0.403
Volatile Suspended Solids	VSS (mg/L)	3.9		3.6	0.664
Total Dissolved Solids	TDS (mg/L)	530		611	0.379
Phenols	Phenol (µg/L)	<5		<5	-
Sulfate	SO ₄ (mg/L)	61		81	0.037
Fats, Oils, and Greases	FOG (mg/L)	<5		<5	-
Total Phosphorus	TP (mg/L)	0.77		2.85	0.000
Total Cyanide	CN (mg/L)	<0.005		<0.005	-
WAD Cyanide	WAD-CN (mg/L)	0.0011		0.0016	0.015
Fluoride	F (mg/L)	0.34		0.61	0.000
Total Organic Carbon	TOC (mg/L)	3.5		5.2	0.003
Fecal Coliform *	FC (#/100ml)	109		985	0.014
Total Calcium	Ca (mg/L)	48		62	0.023
Total Magnesium	Mg (mg/L)	17		22	0.045
Hardness	Hard (mg/L)	192		243	0.030
Gross Alpha Radioactivity	G. Alpha (pCi/L)	1.6		1.8	0.250

TABLE 16 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM AND DOWNSTREAM LOCATIONS FOR THE CALUMET WATER RECLAMATION PLANT IN 2012

Parameter	Abbreviation (Units)	U ¹	vs.	D ²	Sig. Prob. ^{3,4}
Gross Beta Radioactivity	G. Beta (pCi/L)	2.5		3.1	0.183
Chlorophyll <i>a</i>	Chlrphl ($\mu\text{g/L}$)	11		9	0.681
Benzene	Bnzn ($\mu\text{g/L}$)	<2		<2	-
Ethylbenzene	Ebnzn ($\mu\text{g/L}$)	<2		<2	-
Toluene	Toln ($\mu\text{g/L}$)	<2		<2	-
Xylene	Xyln ($\mu\text{g/L}$)	<3		<3	-
Meta and/or Para Xylenes	xylmp ($\mu\text{g/L}$)	<3		<3	-
Ortho Xylene	xylno ($\mu\text{g/L}$)	<3		<3	-
Total Silver	Ag (mg/L)	<0.001		<0.001	0.642
Total Arsenic	As (mg/L)	<0.05		<0.05	-
Total Barium	Ba (mg/L)	0.028		0.021	0.001
Total Boron	B (mg/L)	0.133		0.189	0.041
Total Cadmium	Cd (mg/L)	<0.001		<0.001	-
Total Copper	Cu (mg/L)	0.006		<0.005	-
Total Chromium	Cr (mg/L)	<0.005		<0.005	-
Total Hexavalent Chromium	Cr ⁺⁶ ($\mu\text{g/L}$)	<6		<6	-
Total Iron	Fe (mg/L)	0.233		0.200	0.576
Total Lead	Pb (mg/L)	<0.02		<0.02	-
Total Nickel	Ni (mg/L)	<0.005		0.006	-
Total Manganese	Mn (mg/L)	0.021		0.040	0.124
Total Mercury	Hg ($\mu\text{g/L}$)	<0.2		<0.2	-
Low Level Mercury	Hg- (ng/L)	-		-	-
Total Zinc	Zn (mg/L)	0.013		0.028	0.075
Total Selenium	Se (mg/L)	0.006		0.006	0.775
Soluble Calcium	Sol. Ca (mg/L)	59.3		75.0	0.013
Soluble Magnesium	Sol. Mg (mg/L)	21.3		26.5	0.012
Soluble Silver	Sol. Ag (mg/L)	<0.001		<0.001	-
Soluble Arsenic	Sol. As (mg/L)	<0.02		<0.02	-

TABLE 16 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM AND DOWNSTREAM LOCATIONS FOR THE CALUMET WATER RECLAMATION PLANT IN 2012

Parameter	Abbreviation (Units)	U ¹	vs.	D ²	Sig. Prob. ^{3,4}
Soluble Barium	Sol. Ba (mg/L)	0.030		0.020	0.013
Soluble Boron	Sol. B (mg/L)	0.203		0.210	0.799
Soluble Cadmium	Sol. Cd (mg/L)	<0.001		<0.001	-
Soluble Copper	Sol. Cu (mg/L)	<0.005		<0.005	-
Soluble Chromium	Sol. Cr (mg/L)	<0.005		<0.005	-
Soluble Iron	Sol. Fe (mg/L)	<0.1		<0.1	-
Soluble Lead	Sol. Pb (mg/L)	<0.02		<0.02	-
Soluble Nickel	Sol. Ni (mg/L)	<0.005		<0.005	-
Soluble Manganese	Sol. Mn (mg/L)	0.017		0.028	0.227
Soluble Zinc	Sol. Zn (mg/L)	0.012		0.019	0.036
Soluble Selenium	Sol. Se (mg/L)	<0.005		<0.005	-

¹Upstream (U), value following < sign is the average detection limit.

²Downstream (D), value following < sign is the average detection limit.

³Significance Probability ≤ 0.05 indicates that upstream and downstream population means are not equal.

⁴Some 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 17: COMPARISON OF LEVELS OF 67 WATER QUALITY
PARAMETERS ASSAYED AT UPSTREAM AND DOWNSTREAM LOCATIONS
FOR THE JOHN E. EGAN WATER RECLAMATION PLANT IN 2012

Parameter	Abbreviation (Units)	U ¹	vs.	D ²	Sig. Prob. ^{3,4}
Dissolved Oxygen	DO (mg/L)	7.8		8.4	0.609
Temperature	Temp (°C)	16		14	0.683
pH	pH	7.4		7.4	0.764
Total Alkalinity	Alk (mg/L)	158		165	0.733
Chloride	Cl (mg/L)	346		272	0.130
Turbidity	Turb (NTU)	12		5	0.134
Total Kjeldahl Nitrogen	TKN (mg/L)	<1		1.3	-
Ammonium Nitrogen	NH ₄ -N (mg/L)	0.13		0.16	0.574
Un-Ionized Ammonia	NH ₃ -N (mg/L)	0.002		0.002	0.943
Organic Nitrogen	ORG-N (mg/L)	0.87		1.12	0.276
Nitrite Plus Nitrate Nitrogen	NO ₂ + NO ₃ (mg/L)	0.21		7.75	0.006
Total Solids	TS (mg/L)	936		846	0.371
Total Suspended Solids	TSS (mg/L)	13		8	0.073
Volatile Suspended Solids	VSS (mg/L)	5.5		3.9	0.129
Total Dissolved Solids	TDS (mg/L)	923		838	0.398
Phenols	Phenol (μg/L)	<5		<5	-
Sulfate	SO ₄ (mg/L)	60		76	0.012
Fats, Oils, and Greases	FOG (mg/L)	<5		<5	-
Total Phosphorus	TP (mg/L)	0.13		1.40	0.056
Total Cyanide	CN (mg/L)	<0.005		0.006	0.295
WAD Cyanide	WAD-CN (mg/L)	0.0013		0.0017	0.301
Fluoride	F (mg/L)	0.25		0.56	0.047
Total Organic Carbon	TOC (mg/L)	6.2		5.1	0.148
Fecal Coliform *	FC (#/100ml)	46		466	0.011
Total Calcium	Ca (mg/L)	61		75	0.158
Total Magnesium	Mg (mg/L)	27		29	0.548
Hardness	Hard (mg/L)	264		308	0.260
Gross Alpha Radioactivity	G. Alpha (pCi/L)	2.3		2.3	0.700

TABLE 17 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM AND DOWNSTREAM LOCATIONS FOR THE JOHN E. EGAN WATER RECLAMATION PLANT IN 2012

Parameter	Abbreviation (Units)	U ¹	vs.	D ²	Sig. Prob. ^{3,4}
Gross Beta Radioactivity	G. Beta (pCi/L)	1.9		3.8	0.021
Chlorophyll <i>a</i>	Chlrphl (μg/L)	20		9	0.074
Benzene	Bnzn (μg/L)	<2		<2	-
Ethylbenzene	Ebnzn (μg/L)	<2		<2	-
Toluene	Toln (μg/L)	<2		<2	-
Xylene	Xyln (μg/L)	<3		<3	-
Meta and/or Para Xylenes	xylmp (μg/L)	<3		<3	-
Ortho Xylene	xylno (μg/L)	<3		<3	-
Total Silver	Ag (mg/L)	<0.001		<0.001	0.523
Total Arsenic	As (mg/L)	<0.05		<0.05	-
Total Barium	Ba (mg/L)	0.041		0.035	0.261
Total Boron	B (mg/L)	0.081		0.170	0.013
Total Cadmium	Cd (mg/L)	<0.001		<0.001	-
Total Copper	Cu (mg/L)	<0.005		<0.005	-
Total Chromium	Cr (mg/L)	<0.005		<0.005	-
Total Hexavalent Chromium	Cr ⁺⁶ (μg/L)	<6		<6	-
Total Iron	Fe (mg/L)	0.933		0.275	0.153
Total Lead	Pb (mg/L)	<0.02		<0.02	-
Total Nickel	Ni (mg/L)	<0.005		<0.005	-
Total Manganese	Mn (mg/L)	0.081		0.054	0.078
Total Mercury	Hg (μg/L)	0.209		<0.2	-
Low Level Mercury	Hg- (ng/L)	5.882		3.929	0.050
Total Zinc	Zn (mg/L)	<0.01		0.018	-
Total Selenium	Se (mg/L)	<0.005		<0.005	0.880
Soluble Calcium	Sol. Ca (mg/L)	91.7		79.5	0.072
Soluble Magnesium	Sol. Mg (mg/L)	38.7		31.3	0.018
Soluble Silver	Sol. Ag (mg/L)	<0.001		0.002	0.229
Soluble Arsenic	Sol. As (mg/L)	<0.02		<0.02	-

TABLE 17 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM AND DOWNSTREAM LOCATIONS FOR THE JOHN E. EGAN WATER RECLAMATION PLANT IN 2012

Parameter	Abbreviation (Units)	U ¹	vs.	D ²	Sig. Prob. ^{3,4}
Soluble Barium	Sol. Ba (mg/L)	0.047		0.036	0.049
Soluble Boron	Sol. B (mg/L)	0.070		0.158	0.017
Soluble Cadmium	Sol. Cd (mg/L)	0.002		<0.001	-
Soluble Copper	Sol. Cu (mg/L)	<0.005		<0.005	-
Soluble Chromium	Sol. Cr (mg/L)	<0.005		<0.005	-
Soluble Iron	Sol. Fe (mg/L)	<0.1		<0.1	-
Soluble Lead	Sol. Pb (mg/L)	<0.02		<0.02	-
Soluble Nickel	Sol. Ni (mg/L)	<0.005		0.006	0.105
Soluble Manganese	Sol. Mn (mg/L)	0.068		0.031	0.033
Soluble Zinc	Sol. Zn (mg/L)	<0.01		0.017	-
Soluble Selenium	Sol. Se (mg/L)	0.006		<0.005	-

¹Upstream (U), value following < sign is the average detection limit.

²Downstream (D), value following < sign is the average detection limit.

³Significance Probability ≤ 0.05 indicates that upstream and downstream population means are not equal.

⁴Some 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 AND DOWNSTREAM LOCATIONS FOR THE JAMES C. KIRIE WATER RECLAMATION PLANT IN 2012

Parameter	Abbreviation (Units)	U ¹	vs.	D ²	Sig. Prob. ^{3,4}
Dissolved Oxygen	DO (mg/L)	8.7		8.9	0.828
Temperature	Temp (°C)	13		15	0.477
pH	pH	7.7		7.6	0.429
Total Alkalinity	Alk (mg/L)	159		164	0.829
Chloride	Cl (mg/L)	276		181	0.162
Turbidity	Turb (NTU)	9.0		3.7	0.053
Total Kjeldahl Nitrogen	TKN (mg/L)	1.1		1.3	0.464
Ammonium Nitrogen	NH ₄ -N (mg/L)	0.23		0.33	0.341
Un-Ionized Ammonia	NH ₃ -N (mg/L)	0.003		0.004	0.503
Organic Nitrogen	ORG-N (mg/L)	0.90		0.95	0.803
Nitrite Plus Nitrate Nitrogen	NO ₂ + NO ₃ (mg/L)	0.30		8.62	0.000
Total Solids	TS (mg/L)	825		694	0.241
Total Suspended Solids	TSS (mg/L)	29		7	0.014
Volatile Suspended Solids	VSS (mg/L)	6.1		3.5	0.009
Total Dissolved Solids	TDS (mg/L)	797		687	0.335
Phenols	Phenol (µg/L)	<5		<5	-
Sulfate	SO ₄ (mg/L)	47		77	0.003
Fats, Oils, and Greases	FOG (mg/L)	<5		<5	-
Total Phosphorus	TP (mg/L)	0.16		1.40	0.001
Total Cyanide	CN (mg/L)	<0.005		<0.005	0.816
WAD Cyanide	WAD-CN (mg/L)	0.0014		0.0013	0.658
Fluoride	F (mg/L)	0.26		0.76	0.000
Total Organic Carbon	TOC (mg/L)	4.8		5.0	0.751
Fecal Coliform *	FC (#/100ml)	361		283	0.820
Total Calcium	Ca (mg/L)	64		69	0.646
Total Magnesium	Mg (mg/L)	23		26	0.495
Hardness	Hard (mg/L)	256		279	0.583
Gross Alpha Radioactivity	G. Alpha (pCi/L)	2.4		2.3	0.667

TABLE 18 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM AND DOWNSTREAM LOCATIONS FOR THE JAMES C. KIRIE WATER RECLAMATION PLANT IN 2012

Parameter	Abbreviation (Units)	U ¹	vs.	D ²	Sig. Prob. ^{3,4}
Gross Beta Radioactivity	G. Beta (pCi/L)	2.6		5.4	0.002
Chlorophyll <i>a</i>	Chlrphl ($\mu\text{g/L}$)	13		2	0.009
Benzene	Bznz ($\mu\text{g/L}$)	<2		<2	-
Ethylbenzene	Ebnzn ($\mu\text{g/L}$)	<2		<2	-
Toluene	Toln ($\mu\text{g/L}$)	<2		<2	-
Xylene	Xyln ($\mu\text{g/L}$)	<3		<3	-
Meta and/or Para Xylenes	xylmp ($\mu\text{g/L}$)	<3		<3	-
Ortho Xylene	xylno ($\mu\text{g/L}$)	<3		<3	-
Total Silver	Ag (mg/L)	<0.001		<0.001	0.962
Total Arsenic	As (mg/L)	<0.05		<0.05	-
Total Barium	Ba (mg/L)	0.057		0.025	0.001
Total Boron	B (mg/L)	0.106		0.245	0.000
Total Cadmium	Cd (mg/L)	<0.001		<0.001	-
Total Copper	Cu (mg/L)	<0.005		0.008	-
Total Chromium	Cr (mg/L)	<0.005		<0.005	-
Total Hexavalent Chromium	Cr ⁺⁶ ($\mu\text{g/L}$)	<6		<6	-
Total Iron	Fe (mg/L)	0.500		0.175	0.007
Total Lead	Pb (mg/L)	<0.02		<0.02	-
Total Nickel	Ni (mg/L)	<0.005		0.007	-
Total Manganese	Mn (mg/L)	0.151		0.027	0.025
Total Mercury	Hg ($\mu\text{g/L}$)	<0.2		<0.2	-
Low Level Mercury	Hg- (ng/L)	5.875		6.273	0.827
Total Zinc	Zn (mg/L)	<0.01		0.040	-
Total Selenium	Se (mg/L)	0.006		0.006	0.698
Soluble Calcium	Sol. Ca (mg/L)	85.7		84.5	0.859
Soluble Magnesium	Sol. Mg (mg/L)	32.0		33.3	0.663
Soluble Silver	Sol. Ag (mg/L)	<0.001		<0.001	0.962
Soluble Arsenic	Sol. As (mg/L)	0.021		<0.02	-

TABLE 18 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM AND DOWNSTREAM LOCATIONS FOR THE JAMES C. KIRIE WATER RECLAMATION PLANT IN 2012

Parameter	Abbreviation (Units)	U ¹	vs.	D ²	Sig. Prob. ^{3,4}
Soluble Barium	Sol. Ba (mg/L)	0.058		0.033	0.001
Soluble Boron	Sol. B (mg/L)	0.177		0.230	0.173
Soluble Cadmium	Sol. Cd (mg/L)	<0.001		<0.001	-
Soluble Copper	Sol. Cu (mg/L)	<0.005		<0.005	-
Soluble Chromium	Sol. Cr (mg/L)	<0.005		<0.005	-
Soluble Iron	Sol. Fe (mg/L)	<0.1		<0.1	-
Soluble Lead	Sol. Pb (mg/L)	<0.02		<0.02	-
Soluble Nickel	Sol. Ni (mg/L)	<0.005		0.007	0.014
Soluble Manganese	Sol. Mn (mg/L)	0.087		0.029	0.005
Soluble Zinc	Sol. Zn (mg/L)	0.011		0.034	0.000
Soluble Selenium	Sol. Se (mg/L)	0.006		<0.005	0.503

¹Upstream (U), value following < sign is the average detection limit.

²Downstream (D), value following < sign is the average detection limit.

³Significance Probability ≤ 0.05 indicates that upstream and downstream population means are not equal.

⁴Some 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.

TABLE 19: COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM AND DOWNSTREAM LOCATIONS FOR THE HANOVER PARK WATER RECLAMATION PLANT IN 2012

Parameter	Abbreviation (Units)	U ¹	vs.	D ²	Sig. Prob. ^{3,4}
Dissolved Oxygen	DO (mg/L)	5.5		8.0	0.037
Temperature	Temp (°C)	14		14	0.916
pH	pH	7.4		7.5	0.220
Total Alkalinity	Alk (mg/L)	199		168	0.228
Chloride	Cl (mg/L)	318		171	0.002
Turbidity	Turb (NTU)	19		16	0.883
Total Kjeldahl Nitrogen	TKN (mg/L)	2.1		1.7	0.537
Ammonium Nitrogen	NH ₄ -N (mg/L)	1.0		<0.1	0.104
Un-Ionized Ammonia	NH ₃ -N (mg/L)	0.007		0.001	0.146
Organic Nitrogen	ORG-N (mg/L)	1.1		1.6	0.092
Nitrite Plus Nitrate Nitrogen	NO ₂ + NO ₃ (mg/L)	0.42		10.96	0.000
Total Solids	TS (mg/L)	867		648	0.049
Total Suspended Solids	TSS (mg/L)	19		16	0.481
Volatile Suspended Solids	VSS (mg/L)	7.6		7.0	0.709
Total Dissolved Solids	TDS (mg/L)	848		633	0.052
Phenols	Phenol (µg/L)	<5		<5	-
Sulfate	SO ₄ (mg/L)	68		61	0.747
Fats, Oils, and Greases	FOG (mg/L)	<5		<5	-
Total Phosphorus	TP (mg/L)	0.28		2.16	0.002
Total Cyanide	CN (mg/L)	<0.005		<0.005	0.740
WAD Cyanide	WAD-CN (mg/L)	0.0012		0.0019	0.073
Fluoride	F (mg/L)	0.33		0.61	0.004
Total Organic Carbon	TOC (mg/L)	11		6	0.001
Fecal Coliform *	FC (#/100ml)	3581		1195	0.132
Total Calcium	Ca (mg/L)	77		69	0.486
Total Magnesium	Mg (mg/L)	28		27	0.897
Hardness	Hard (mg/L)	307		283	0.640
Gross Alpha Radioactivity	G. Alpha (pCi/L)	2.4		1.9	0.076

TABLE 19 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM AND DOWNSTREAM LOCATIONS FOR THE HANOVER PARK WATER RECLAMATION PLANT IN 2012

Parameter	Abbreviation (Units)	U ¹	vs.	D ²	Sig. Prob. ^{3,4}
Gross Beta Radioactivity	G. Beta (pCi/L)	2.9		4.8	0.005
Chlorophyll <i>a</i>	Chlrphl ($\mu\text{g/L}$)	27		6	0.045
Benzene	Bznz ($\mu\text{g/L}$)	<2		<2	-
Ethylbenzene	Ebnzn ($\mu\text{g/L}$)	<2		<2	-
Toluene	Toln ($\mu\text{g/L}$)	<2		<2	-
Xylene	Xyln ($\mu\text{g/L}$)	<3		<3	-
Meta and/or Para Xylenes	xylmp ($\mu\text{g/L}$)	<3		<3	-
Ortho Xylene	xylno ($\mu\text{g/L}$)	<3		<3	-
Total Silver	Ag (mg/L)	<0.001		<0.001	0.956
Total Arsenic	As (mg/L)	<0.05		<0.05	-
Total Barium	Ba (mg/L)	0.050		0.035	0.004
Total Boron	B (mg/L)	0.066		0.181	0.001
Total Cadmium	Cd (mg/L)	<0.001		<0.001	-
Total Copper	Cu (mg/L)	<0.005		0.008	0.231
Total Chromium	Cr (mg/L)	0.007		0.006	0.751
Total Hexavalent Chromium	Cr ⁺⁶ ($\mu\text{g/L}$)	6.182		<6	-
Total Iron	Fe (mg/L)	1.167		0.275	0.004
Total Lead	Pb (mg/L)	<0.02		<0.02	-
Total Nickel	Ni (mg/L)	<0.005		0.006	-
Total Manganese	Mn (mg/L)	0.195		0.049	0.001
Total Mercury	Hg ($\mu\text{g/L}$)	<0.2		<0.2	-
Low Level Mercury	Hg- (ng/L)	5.646		5.486	0.893
Total Zinc	Zn (mg/L)	0.030		0.040	0.542
Total Selenium	Se (mg/L)	0.006		<0.005	-
Soluble Calcium	Sol. Ca (mg/L)	102.7		78.8	0.217
Soluble Magnesium	Sol. Mg (mg/L)	38.7		31.0	0.303
Soluble Silver	Sol. Ag (mg/L)	0.002		<0.001	0.708
Soluble Arsenic	Sol. As (mg/L)	0.022		<0.02	-

TABLE 19 (Continued): COMPARISON OF LEVELS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM AND DOWNSTREAM LOCATIONS FOR THE HANOVER PARK WATER RECLAMATION PLANT IN 2012

Parameter	Abbreviation (Units)	U ¹	vs.	D ²	Sig. Prob. ^{3,4}
Soluble Barium	Sol. Ba (mg/L)	0.048		0.035	0.064
Soluble Boron	Sol. B (mg/L)	0.053		0.193	0.003
Soluble Cadmium	Sol. Cd (mg/L)	0.002		<0.001	-
Soluble Copper	Sol. Cu (mg/L)	<0.005		0.006	-
Soluble Chromium	Sol. Cr (mg/L)	<0.005		<0.005	-
Soluble Iron	Sol. Fe (mg/L)	0.218		<0.1	-
Soluble Lead	Sol. Pb (mg/L)	<0.02		<0.02	-
Soluble Nickel	Sol. Ni (mg/L)	<0.005		<0.005	0.740
Soluble Manganese	Sol. Mn (mg/L)	0.105		0.037	0.005
Soluble Zinc	Sol. Zn (mg/L)	0.014		0.039	0.001
Soluble Selenium	Sol. Se (mg/L)	0.006		<0.005	0.243

¹Upstream (U), value following < sign is the average detection limit.

²Downstream (D), value following < sign is the average detection limit.

³Significance Probability ≤ 0.05 indicates that upstream and downstream population means are not equal.

⁴Some 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-6 for details.

*Test applies to population means if variances of log values are equal, otherwise applies to geometric means (see Appendix AIII-6) 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 Tables 14 through 19 and the tables in Appendix AII 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. Water quality standards exist for some parameters. A discussion of the results from each WRP follows.

Terrence J. O'Brien Water Reclamation Plant. Locations 35 and 36, upstream and downstream, respectively, of the Terrence J. O'Brien WRP, are classified as General Use and Secondary Contact waters. Fifty-three 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:

- ammonium nitrogen, nitrite plus nitrate nitrogen, total suspended solids, total phosphorus, fluoride, total organic carbon, fecal coliform, gross beta radioactivity, total barium, total boron, and soluble calcium.

Eight parameters (ammonium nitrogen, nitrite plus nitrate nitrogen, total phosphorus, fluoride, total organic carbon, fecal coliform, gross beta radioactivity, and total boron) had significantly higher means downstream than upstream. The remaining three parameters (total suspended solids, total barium, and soluble calcium) had significantly higher means upstream than downstream.

Out of the 11 parameters listed above, six parameters have either IPCB Human Health, General Use, or Secondary Contact Water quality limits. These parameters are:

- ammonium nitrogen, fluoride, fecal coliform, gross beta radioactivity, total barium, and total boron.

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

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-three water quality parameters were considered for comparison of mean concentrations between upstream and downstream locations. The following four water quality parameters' mean concentrations were significantly different between upstream and downstream locations:

- sulfate, fecal coliform, gross beta radioactivity, and total boron.

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

Out of four parameters listed above, no parameters have IPCB Secondary Contact Water quality limits.

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. Fifty-eight water quality parameters were considered for comparison of mean concentrations between upstream and downstream locations. Mean concentrations of the following 18 water quality parameter mean concentrations were significantly different between upstream and downstream locations:

- total alkalinity, turbidity, nitrite plus nitrate nitrogen, sulfate, total phosphorus, weak acid dissociable cyanide, fluoride, total organic carbon, fecal coliform, total calcium, total magnesium, hardness, total barium, total boron, soluble calcium, soluble magnesium, soluble barium, and soluble zinc.

Fifteen parameters (total alkalinity, nitrite plus nitrate nitrogen, sulfate, total phosphorus, weak acid dissociable cyanide, fluoride, total organic carbon, fecal coliform, total calcium, total magnesium, hardness, total boron, soluble calcium, soluble magnesium, and soluble zinc) had significantly higher mean concentrations downstream than upstream. The remaining three parameters (turbidity, total barium, and soluble barium) had significantly higher mean concentrations upstream than downstream.

Out of the 18 parameters listed above, two parameters have IPCB Secondary Contact Water quality limits. These parameters are:

- fluoride and total barium.

All two 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. Fifty-eight water quality parameters were considered for comparison of mean concentrations between upstream and downstream locations.

The mean concentrations of the following 11 water quality parameters were significantly different between upstream and downstream locations:

- nitrite plus nitrate nitrogen, sulfate, fluoride, fecal coliform, gross beta radioactivity, total boron, low level mercury, soluble magnesium, soluble barium, soluble boron, and soluble manganese.

Seven parameters (nitrite plus nitrate nitrogen, sulfate, fluoride, fecal coliform, gross beta radioactivity, total boron, and soluble boron) had significantly higher mean concentrations downstream than upstream. The remaining four parameters (low level mercury, soluble magnesium, soluble barium, and soluble manganese) had significantly higher mean concentrations upstream than downstream. Out of the 11 parameters listed above, five parameters have IPCB General Use or Human Health water quality limits. These parameters are:

- sulfate, fluoride, fecal coliform, gross beta radioactivity, and total boron.

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

- sulfate, fluoride, gross beta radioactivity, and total boron.

The percent compliance rate of fecal coliform was 81.8 percent. Of the five parameters referenced with IPCB Human Health or General Use limits, four parameters were in total compliance at the downstream location. These parameters were:

- sulfate, fluoride, gross beta radioactivity, and total boron.

The percent compliance rate of fecal coliform was 28.6 percent.

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 water quality parameters were considered for comparison of mean concentrations between upstream and downstream locations. Mean concentrations of the following 16 water quality parameters' mean concentrations were significantly different between upstream and downstream locations:

- nitrite plus nitrate nitrogen, total suspended solids, volatile suspended solids, sulfate, total phosphorus, fluoride, gross beta radioactivity, chlorophyll *a*, total barium, total boron, total iron, total manganese, soluble barium, soluble nickel, soluble manganese, and soluble zinc.

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

- total suspended solids, volatile suspended solids, chlorophyll *a*, total barium, total iron, total manganese, soluble barium, and soluble manganese.

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

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

Out of the 16 parameters listed above, eight parameters have IPCB General Use or Human Health water quality limits. These parameters are:

- sulfate, fluoride, gross beta radioactivity, total barium, total boron, total manganese, soluble nickel, and soluble zinc.

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

Hanover Park Water Reclamation Plant. Both the upstream and downstream sampling locations (110 and 89, respectively) of the Hanover Park WRP are located in the General Use Waters of the Des Plaines River System. Sixty water quality parameters were considered for comparison of mean concentrations between upstream and downstream locations.

Mean concentrations of the following 16 water quality parameters' mean concentrations were significantly different between upstream and downstream locations:

- dissolved oxygen, chloride, nitrite plus nitrate nitrogen, total solids, total phosphorus, fluoride, total organic carbon, gross beta radioactivity, chlorophyll *a*, total barium, total boron, total iron, total manganese, soluble boron, soluble manganese, and soluble zinc.

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

- chloride, total solids, total organic carbon, chlorophyll *a*, total barium, total iron, total manganese, and soluble manganese.

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

- dissolved oxygen, nitrite plus nitrate nitrogen, total phosphorus, fluoride, gross beta radioactivity, total boron, soluble boron, and soluble zinc.

Out of the 16 parameters listed above, eight parameters have IPCB General Use or Human Health water quality limits. These parameters are:

- dissolved oxygen, chloride, fluoride, gross beta radioactivity, total barium, total boron, total manganese, and soluble zinc.

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

- chloride, fluoride, gross beta radioactivity, total barium, total boron, total manganese, and soluble zinc.

The percent compliance rate of dissolved oxygen was 54.5 percent.

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

- dissolved oxygen, chloride, fluoride, gross beta radioactivity, total barium, total boron, total manganese, and soluble zinc.

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APPENDIX AI

DIRECTORY OF WATER QUALITY PARAMETERS ASSAYED AND SAMPLING
LOCATIONS

TABLE AI-1: DIRECTORY OF WATER QUALITY PARAMETERS
ASSAYED IN 2012

Symbol	Parameter	Unit	MDL ²	Water Quality Standard ¹	
				General Use	Secondary Contact
DO	Dissolved Oxygen	mg/L	-	(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	Total Alkalinity	mg/L	10	None	None
Cl	Chloride	mg/L	10	500	None
Turb	Turbidity	NTU	1	None	None
TKN	Total Kjeldahl Nitrogen	mg/L	1	None	None
NH ₄ -N	Ammonium Nitrogen	mg/L	0.1	6.816 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	0.15	None	None
TS	Total Solids	mg/L	-	None	None
TSS	Total Suspended Solids	mg/L	4	None	None
VSS	Volatile Suspended Solids	mg/L	-	None	None
TDS	Total Dissolved Solids	mg/L	60	None	1,500
Phenol	Phenols	µg/L	5	100	300
SO ₄	Sulfate	mg/L	5	2,063 ⁶	None
FOG	Fats, Oils, and Greases	mg/L	5	None	15
TP	Total Phosphorus	mg/L	0.1	None	None
CN	Total Cyanide	mg/L	0.005	None	0.1
WAD-CN	Weak Acid Dissociable Cyanide	mg/L	0.001	0.022	None
F	Fluoride	mg/L	0.1	1.4	15
TOC	Total Organic Carbon	mg/L	1	None	None
FC	Fecal Coliform	cfu/100mL ¹⁰		400	None
Ca	Total Calcium	mg/L	1	None	None
Mg	Total Magnesium	mg/L	1	None	None
Hard	Hardness	mg/L	-	None	None
Alpha	Gross Alpha Radioactivity	pCi/L	-	None	None

TABLE AI-1 (Continued): DIRECTORY OF WATER QUALITY PARAMETERS
ASSAYED IN 2012

Symbol	Parameter	Unit	MDL ²	Water Quality Standard ¹	
				General Use	Secondary Contact
Beta	Gross Beta Radioactivity	pCi/L	-	100	None
Chlrphl	Chlorophyll <i>a</i>	µg/L	-	None	None
Bzn	Benzene*	µg/L	2	310	None
Bzn	Benzene	µg/L	2	4,200	None
Ebnzn	Ethylbenzene	µg/L	2	150	None
Toln	Toluene	µg/L	2	2,000	None
Xyln	Xylene	µg/L	3	920	None
xylnmp	Meta and/or Para Xylenes	µg/L	3	None	None
xylno	Ortho Xylene	µg/L	3	None	None
Ag	Total Silver	mg/L	0.001	0.005	1.1
As	Total Arsenic	mg/L	0.05	None	1
Ba	Total Barium	mg/L	0.004	5	5
B	Total Boron	mg/L	0.05	1	None
Cd	Total Cadmium	mg/L	0.001	None	0.15
Cu	Total Copper	mg/L	0.005	None	1
Cr	Total Chromium	mg/L	0.005	None	None
Cr ⁺⁶	Total Hexavalent Chromium	µg/L	6	16	300
Fe	Total Iron	mg/L	0.1	None	2
Pb	Total Lead	mg/L	0.02	None	0.1
Ni	Total Nickel	mg/L	0.005	None	1
Mn	Total Manganese	mg/L	0.001	1	1
Hg	Total Mercury*	µg/L	0.2	310	None
Hg	Total Mercury	µg/L	0.2	None	0.5
Hg-	Low Level Mercury	ng/L	-	None	None
Zn	Total Zinc	mg/L	0.01	None	1
Se	Total Selenium	mg/L	0.005	1	1
Sol. Ca	Soluble Calcium	mg/L	1	None	None
Sol. Mg	Soluble Magnesium	mg/L	1	None	None

TABLE AI-1 (Continued): DIRECTORY OF WATER QUALITY PARAMETERS
ASSAYED IN 2012

Symbol	Parameter	Unit	MDL ²	Water Quality Standard ¹	
				General Use	Secondary Contact
Sol. Ag	Soluble Silver	mg/L	0.001	None	None
Sol. As	Soluble Arsenic	mg/L	0.02	0.36	None
Sol. Ba	Soluble Barium	mg/L	0.004	None	None
Sol. B	Soluble Boron	mg/L	0.05	None	None
Sol. Cd	Soluble Cadmium	mg/L	0.001	0.042 ⁷	None
Sol. Cu	Soluble Copper	mg/L	0.005	0.064 ⁸	None
Sol. Cr	Soluble Chromium	mg/L	0.005	1.732 ⁹	None
Sol. Fe	Soluble Iron	mg/L	0.1	1	0.5
Sol. Pb	Soluble Lead	mg/L	0.02	0.335 ¹⁰	None
Sol. Ni	Soluble Nickel	mg/L	0.005	0.27 ¹¹	None
Sol. Mn	Soluble Manganese	mg/L	0.001	None	None
Sol. Zn	Soluble Zinc	mg/L	0.01	0.392 ¹²	None
Sol. Se	Soluble Selenium	mg/L	0.005	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.

⁴Standard is 3.0 mg/L for locations (43,58, and 59) and 4.0 mg/L for other Secondary Contact locations .

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

⁶Based on hardness and chloride concentration in certain range.

⁷Based on $\text{Min} (e^{-2.98+1.128 \times (\text{Hard})} * (1.138672 - 0.041838 \times \ln(\text{Hard}))/1000, 0.005)$.

⁸Based on $0.00090 e^{-1.464+0.9422 \times \ln(\text{Hard})}$.

⁹Based on $0.000316 e^{3.688+0.819 \times \ln(\text{Hard})}$.

¹⁰Based on $e^{-1.301+1.1.273 \times \ln(\text{Hard})} * (1.46203 - 0.145712 \times \ln(\text{Hard})) / 1000$.

¹¹Based on $0.000998 e^{0.5173+0.846 \times \ln(\text{Hard})}$.

¹²Based 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

Sampling Station (No. Name)	Sample Type	Water Use	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

Sampling Station (No. Name)	Sample Type	Water Use	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	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

Sampling Station (No. Name)	Sample Type	Water Use	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
111 Arlington Drive, West Branch DuPage River	Grab	GEN	Des Plaines
112 Dempster Street, North Shore Channel	Grab	GEN	Chicago

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

²Kept for Special Studies Separately

*Excluded in 2012 Sampling

APPENDIX AII

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

TABLE AII-1: WATERWAYS SAMPLE MEANS IN 2012

Sampling Station (No. Name)	DO mg/L	Temp °C	pH	Alk mg/L	Cl mg/L
Chicago River System					
106 Dundee Road, West Fork North Branch Chicago River	7.32	11.9	6.95	181	589
103 Golf Road, West Fork North Branch Chicago River	7.99	14.6	7.40	204	440
31 Lake-Cook Road, Middle Fork North Branch	6.45	16.9	7.40	215	324
104 Glenview Road, North Branch Chicago River	7.60	14.2	7.89	195	305
32 Lake-Cook Road, Skokie River	6.88	14.1	7.59	218	295
105 Frontage Road, Skokie River	8.41	15.2	7.73	196	243
34 Dempster Street, North Branch Chicago River	8.30	13.3	7.77	207	400
96 Albany Avenue, North Branch Chicago River	8.02	14.7	7.64	177	294
35 Central Street, North Shore Channel	8.52	19.5	7.71	141	128
112 Dempster Street, North Shore Channel	8.04	12.5	6.71	139	148
102 Oakton Street, North Shore Channel	7.09	16.5	7.34	144	152
36 Touhy Avenue, North Shore Channel	6.96	16.9	7.09	135	146
101 Foster Avenue, North Shore Channel	6.53	16.0	7.12	143	199
37 Wilson Avenue, North Branch Chicago River	7.13	15.4	7.43	145	227
73 Diversey Parkway, North Branch Chicago River	6.73	15.7	7.30	139	148
46 Grand Avenue, North Branch Chicago River	6.94	16.5	7.38	157	217
74 Lake Shore Drive, Chicago River	7.80	15.0	6.96	113	167
100 Wells Street, Chicago River	6.74	16.4	6.98	133	129
39 Madison Street, South Branch Chicago River	6.53	15.9	7.32	149	187
108 Loomis Street, South Branch Chicago River	6.18	17.8	7.34	138	151
99 Archer Avenue, South Fork South Branch Chicago River	5.47	16.8	7.25	134	169
40 Damen Avenue, Chicago Sanitary & Ship Canal	5.29	18.1	7.38	149	218
75 Cicero Avenue, Chicago Sanitary & Ship Canal	5.97	17.8	6.93	135	167
41 Harlem Avenue, Chicago Sanitary & Ship Canal	6.78	18.4	7.10	126	162
42 Route 83, Chicago Sanitary & Ship Canal	5.71	18.7	7.01	141	210
48 Stephen Street, Chicago Sanitary & Ship Canal	6.03	17.3	7.12	147	168
92 Lockport Forebay, Chicago Sanitary & Ship Canal	5.75	18.4	7.22	143	151
Calumet River System					
49 Ewing Avenue, Calumet River	9.22	14.8	7.28	109	39
50 Burnham Avenue, Wolf Lake	8.00	15.0	7.91	106	103
55 130th Street, Calumet River	8.83	14.5	7.76	117	133
86 Burnham Avenue, Grand Calumet River	4.23	13.7	7.19	260	118
56 Indiana Avenue, Little Calumet River	7.72	15.1	7.28	130	110
76 Halsted Street, Little Calumet River	6.64	16.3	7.22	157	150
52 Wentworth Avenue, Little Calumet River	7.10	13.7	7.67	229	154
54 Joe Orr Road, Thorn Creek	7.80	15.2	7.03	193	195
97 170th Street, Thorn Creek	7.18	14.2	7.59	214	234
57 Ashland Avenue, Little Calumet River	6.82	14.8	7.75	181	179
58 Ashland Avenue, Calumet-Sag Channel	6.19	15.9	7.40	172	189
59 Cicero Avenue, Calumet-Sag Channel	6.54	15.2	7.04	160	171
43 Route 83, Calumet-Sag Channel	6.58	17.2	7.19	151	153
Des Plaines River System					
90 Route 19, Poplar Creek	9.17	11.8	7.76	240	279
110 Springinguth Road, West Branch DuPage River	5.47	13.9	7.35	199	318
89 Walnut Lane, West Branch DuPage River	7.99	14.3	7.54	168	171
111 Arlington Drive, West Branch DuPage River	8.33	15.5	7.69	137	175
79 Higgins Road, Salt Creek	7.76	15.7	7.38	158	346
80 Arlington Heights Road, Salt Creek	8.40	13.8	7.44	165	272
18 Devon Avenue, Salt Creek	7.82	15.2	7.34	139	199
24 Wolf Road, Salt Creek	8.17	13.4	7.00	170	251
109 Brookfield Avenue, Salt Creek	7.98	14.9	7.28	148	239
77 Elmhurst Road, Higgins Creek	8.71	13.2	7.70	159	276
78 Wille Road, Higgins Creek	8.88	15.4	7.58	164	181
12 Lake-Cook Road, Buffalo Creek	9.28	11.0	7.49	230	297
13 Lake-Cook Road, Des Plaines River	8.79	11.8	7.91	210	181
17 Oakton Street, Des Plaines River	8.24	13.5	7.81	205	200
19 Belmont Avenue, Des Plaines River	7.82	15.5	7.70	174	187
20 Roosevelt Road, Des Plaines River	8.66	14.4	7.91	198	200
22 Ogden Avenue, Des Plaines River	8.40	14.5	7.66	168	202
23 Willow Springs Road, Des Plaines River	8.73	15.5	7.75	173	209
29 Stephen Street, Des Plaines River	9.80	13.5	8.03	193	232
91 Material Service Road, Des Plaines River	9.68	15.7	8.12	175	212

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2012

Sampling Station (No. Name)	Turb NTU	TKN mg/L	NH ₄ -N mg/L	NH ₃ -N ¹ mg/L	ORG-N mg/L
Chicago River System					
106 Dundee Road, West Fork North Branch Chicago River	27.3	1.40	0.600	0.001	0.80
103 Golf Road, West Fork North Branch Chicago River	18.3	1.14	0.271	0.002	0.87
31 Lake-Cook Road, Middle Fork North Branch	5.0	1.00	0.125	0.001	0.88
104 Glenview Road, North Branch Chicago River	14.7	1.29	0.200	0.005	1.09
32 Lake-Cook Road, Skokie River	16.3	1.06	0.242	0.003	0.82
105 Frontage Road, Skokie River	8.3	1.00	0.129	0.003	0.87
34 Dempster Street, North Branch Chicago River	13.0	1.14	0.186	0.003	0.96
96 Albany Avenue, North Branch Chicago River	8.0	1.00	0.125	0.003	0.88
35 Central Street, North Shore Channel	11.0	1.20	0.120	0.004	1.08
112 Dempster Street, North Shore Channel	ND	1.00	0.140	0.000	0.86
102 Oakton Street, North Shore Channel	4.3	2.14	1.014	0.006	1.13
36 Touhy Avenue, North Shore Channel	5.0	2.17	1.100	0.007	1.07
101 Foster Avenue, North Shore Channel	4.3	2.43	1.471	0.007	0.96
37 Wilson Avenue, North Branch Chicago River	3.5	2.17	0.917	0.008	1.25
73 Diversey Parkway, North Branch Chicago River	5.7	1.92	1.042	0.007	0.88
46 Grand Avenue, North Branch Chicago River	9.0	2.14	1.014	0.010	1.13
74 Lake Shore Drive, Chicago River	2.7	1.00	0.350	0.001	0.65
100 Wells Street, Chicago River	4.0	1.36	0.500	0.003	0.86
39 Madison Street, South Branch Chicago River	7.3	1.67	0.917	0.006	0.75
108 Loomis Street, South Branch Chicago River	7.3	1.50	0.725	0.006	0.78
99 Archer Avenue, South Fork South Branch Chicago River	18.3	2.50	1.325	0.007	1.18
40 Damen Avenue, Chicago Sanitary & Ship Canal	8.0	1.86	0.871	0.007	0.99
75 Cicero Avenue, Chicago Sanitary & Ship Canal	8.0	1.75	0.925	0.003	0.83
41 Harlem Avenue, Chicago Sanitary & Ship Canal	5.0	1.50	0.483	0.003	1.02
42 Route 83, Chicago Sanitary & Ship Canal	4.7	1.86	0.729	0.003	1.13
48 Stephen Street, Chicago Sanitary & Ship Canal	13.3	1.58	0.633	0.004	0.95
92 Lockport Forebay, Chicago Sanitary & Ship Canal	8.8	1.37	0.594	0.005	0.78
Calumet River System					
49 Ewing Avenue, Calumet River	8.0	1.00	0.117	0.003	0.88
50 Burnham Avenue, Wolf Lake	3.0	1.43	0.514	0.173	0.91
55 130th Street, Calumet River	2.7	1.00	0.171	0.006	0.83
86 Burnham Avenue, Grand Calumet River	10.0	4.91	3.673	0.031	1.24
56 Indiana Avenue, Little Calumet River	9.5	1.00	0.180	0.001	0.82
76 Halsted Street, Little Calumet River	4.0	1.18	0.309	0.002	0.87
52 Wentworth Avenue, Little Calumet River	30.7	1.00	0.271	0.005	0.73
54 Joe Orr Road, Thorn Creek	16.3	1.29	0.300	0.001	0.99
97 170th Street, Thorn Creek	23.0	1.00	0.183	0.005	0.82
57 Ashland Avenue, Little Calumet River	13.0	1.00	0.209	0.027	0.79
58 Ashland Avenue, Calumet-Sag Channel	9.0	1.14	0.329	0.003	0.81
59 Cicero Avenue, Calumet-Sag Channel	13.3	1.60	0.440	0.003	1.16
43 Route 83, Calumet-Sag Channel	9.3	1.55	0.409	0.004	1.14
Des Plaines River System					
90 Route 19, Poplar Creek	5.3	1.00	0.143	0.002	0.86
110 Springinsguth Road, West Branch DuPage River	18.5	2.09	1.018	0.007	1.07
89 Walnut Lane, West Branch DuPage River	16.3	1.71	0.129	0.001	1.59
111 Arlington Drive, West Branch DuPage River	8.0	1.54	0.208	0.004	1.33
79 Higgins Road, Salt Creek	12.0	1.00	0.127	0.002	0.87
80 Arlington Heights Road, Salt Creek	5.5	1.28	0.157	0.002	1.12
18 Devon Avenue, Salt Creek	5.9	1.21	0.183	0.002	1.02
24 Wolf Road, Salt Creek	7.3	1.00	0.186	0.001	0.81
109 Brookfield Avenue, Salt Creek	6.3	1.00	0.183	0.002	0.82
77 Elmhurst Road, Higgins Creek	9.0	1.13	0.225	0.003	0.90
78 Wille Road, Higgins Creek	3.7	1.27	0.327	0.004	0.95
12 Lake-Cook Road, Buffalo Creek	7.3	1.17	0.117	0.001	1.05
13 Lake-Cook Road, Des Plaines River	11.0	1.00	0.129	0.003	0.87
17 Oakton Street, Des Plaines River	9.7	1.14	0.114	0.002	1.03
19 Belmont Avenue, Des Plaines River	8.7	1.17	0.142	0.002	1.03
20 Roosevelt Road, Des Plaines River	7.3	1.29	0.214	0.006	1.07
22 Ogden Avenue, Des Plaines River	8.7	1.17	0.125	0.003	1.04
23 Willow Springs Road, Des Plaines River	7.7	1.00	0.167	0.005	0.83
29 Stephen Street, Des Plaines River	7.7	1.29	0.114	0.008	1.17
91 Material Service Road, Des Plaines River	6.3	1.00	0.117	0.007	0.88

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2012

Sampling Station (No. Name)	NO ₂ + NO ₃ mg/L	TS mg/L	TSS mg/L	VSS mg/L	TDS mg/L
Chicago River System					
106 Dundee Road, West Fork North Branch Chicago River	6.16	1,471	25.4	6.60	1,446
103 Golf Road, West Fork North Branch Chicago River	3.44	1,176	22.7	5.71	1,154
31 Lake-Cook Road, Middle Fork North Branch	0.23	890	4.5	2.25	885
104 Glenview Road, North Branch Chicago River	5.82	814	12.0	4.57	802
32 Lake-Cook Road, Skokie River	0.47	926	12.0	4.33	914
105 Frontage Road, Skokie River	7.58	771	14.6	4.00	757
34 Dempster Street, North Branch Chicago River	4.33	1,015	16.3	5.00	999
96 Albany Avenue, North Branch Chicago River	4.40	797	11.1	3.75	786
35 Central Street, North Shore Channel	0.22	570	11.4	5.20	559
112 Dempster Street, North Shore Channel	4.30	519	13.4	4.80	506
102 Oakton Street, North Shore Channel	5.01	513	17.1	5.29	495
36 Touhy Avenue, North Shore Channel	6.87	509	7.2	4.17	502
101 Foster Avenue, North Shore Channel	7.95	572	10.0	4.00	562
37 Wilson Avenue, North Branch Chicago River	7.59	660	9.0	3.67	651
73 Diversey Parkway, North Branch Chicago River	6.81	529	13.7	4.50	515
46 Grand Avenue, North Branch Chicago River	7.36	658	12.4	3.86	645
74 Lake Shore Drive, Chicago River	2.84	514	4.3	2.50	509
100 Wells Street, Chicago River	4.88	462	7.2	3.36	455
39 Madison Street, South Branch Chicago River	5.33	595	11.3	3.67	584
108 Loomis Street, South Branch Chicago River	5.98	449	11.2	4.08	438
99 Archer Avenue, South Fork South Branch Chicago River	4.25	531	17.1	7.50	514
40 Damen Avenue, Chicago Sanitary & Ship Canal	5.72	644	12.9	4.29	631
75 Cicero Avenue, Chicago Sanitary & Ship Canal	6.06	549	13.4	4.33	536
41 Harlem Avenue, Chicago Sanitary & Ship Canal	8.29	580	9.0	3.75	571
42 Route 83, Chicago Sanitary & Ship Canal	8.10	676	8.3	3.29	668
48 Stephen Street, Chicago Sanitary & Ship Canal	7.07	629	10.9	3.67	618
92 Lockport Forebay, Chicago Sanitary & Ship Canal	6.65	598	8.7	3.65	589
Calumet River System					
49 Ewing Avenue, Calumet River	0.35	262	9.8	3.00	252
50 Burnham Avenue, Wolf Lake	0.15	385	9.0	3.71	376
55 130th Street, Calumet River	0.55	472	4.3	2.00	468
86 Burnham Avenue, Grand Calumet River	0.18	608	12.7	8.00	595
56 Indiana Avenue, Little Calumet River	1.87	540	10.3	3.90	530
76 Halsted Street, Little Calumet River	6.18	620	8.6	3.64	611
52 Wentworth Avenue, Little Calumet River	5.34	806	25.4	4.71	780
54 Joe Orr Road, Thorn Creek	11.18	1,590	12.4	3.00	1,577
97 170th Street, Thorn Creek	6.44	1,152	25.2	4.00	1,127
57 Ashland Avenue, Little Calumet River	4.49	948	25.9	5.73	923
58 Ashland Avenue, Calumet-Sag Channel	5.38	759	11.7	3.86	747
59 Cicero Avenue, Calumet-Sag Channel	5.11	686	13.3	3.70	673
43 Route 83, Calumet-Sag Channel	5.25	626	15.9	4.64	610
Des Plaines River System					
90 Route 19, Poplar Creek	0.26	795	18.3	5.14	777
110 Springinguth Road, West Branch DuPage River	0.42	867	19.0	7.64	848
89 Walnut Lane, West Branch DuPage River	10.96	648	15.6	7.00	633
111 Arlington Drive, West Branch DuPage River	12.65	663	33.1	6.92	630
79 Higgins Road, Salt Creek	0.21	936	13.2	5.45	923
80 Arlington Heights Road, Salt Creek	7.75	846	7.6	3.86	838
18 Devon Avenue, Salt Creek	10.19	750	8.8	3.75	741
24 Wolf Road, Salt Creek	6.40	840	27.3	6.29	813
109 Brookfield Avenue, Salt Creek	7.84	733	17.4	4.50	715
77 Elmhurst Road, Higgins Creek	0.30	825	28.5	6.13	797
78 Wille Road, Higgins Creek	8.62	694	7.0	3.55	687
12 Lake-Cook Road, Buffalo Creek	0.26	862	18.5	3.67	844
13 Lake-Cook Road, Des Plaines River	5.98	686	15.6	3.71	670
17 Oakton Street, Des Plaines River	5.54	697	11.7	3.71	685
19 Belmont Avenue, Des Plaines River	7.31	671	16.8	4.17	654
20 Roosevelt Road, Des Plaines River	4.50	686	16.1	4.71	670
22 Ogden Avenue, Des Plaines River	7.02	697	25.8	5.58	671
23 Willow Springs Road, Des Plaines River	6.38	712	21.1	5.42	691
29 Stephen Street, Des Plaines River	4.39	764	28.4	8.86	735
91 Material Service Road, Des Plaines River	5.95	713	18.7	4.83	694

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2012

Sampling Station (No. Name)	Phenol $\mu\text{g/L}$	SO_4 mg/L	FOG mg/L	TP mg/L
Chicago River System				
106 Dundee Road, West Fork North Branch Chicago River	5.0	55.4	ND	1.160
103 Golf Road, West Fork North Branch Chicago River	5.0	64.4	ND	0.586
31 Lake-Cook Road, Middle Fork North Branch	5.0	71.0	ND	0.125
104 Glenview Road, North Branch Chicago River	5.0	63.0	ND	0.757
32 Lake-Cook Road, Skokie River	5.0	60.9	ND	0.168
105 Frontage Road, Skokie River	5.0	63.3	ND	0.943
34 Dempster Street, North Branch Chicago River	5.0	65.1	ND	0.614
96 Albany Avenue, North Branch Chicago River	5.0	56.0	ND	0.608
35 Central Street, North Shore Channel	5.0	49.8	ND	0.140
112 Dempster Street, North Shore Channel	5.0	46.2	5.00	0.760
102 Oakton Street, North Shore Channel	5.0	46.0	5.00	0.857
36 Touhy Avenue, North Shore Channel	5.0	44.4	5.00	1.308
101 Foster Avenue, North Shore Channel	5.0	48.4	5.00	1.286
37 Wilson Avenue, North Branch Chicago River	5.0	49.0	5.00	1.167
73 Diversey Parkway, North Branch Chicago River	5.0	46.7	5.00	1.192
46 Grand Avenue, North Branch Chicago River	5.0	53.1	5.00	1.029
74 Lake Shore Drive, Chicago River	5.0	37.5	ND	0.333
100 Wells Street, Chicago River	5.0	40.9	ND	0.691
39 Madison Street, South Branch Chicago River	5.0	47.7	5.00	0.867
108 Loomis Street, South Branch Chicago River	5.0	45.0	5.00	0.850
99 Archer Avenue, South Fork South Branch Chicago River	5.7	41.4	5.11	0.658
40 Damen Avenue, Chicago Sanitary & Ship Canal	5.0	48.6	11.71	0.814
75 Cicero Avenue, Chicago Sanitary & Ship Canal	5.0	46.8	5.00	0.942
41 Harlem Avenue, Chicago Sanitary & Ship Canal	5.0	59.3	5.00	1.083
42 Route 83, Chicago Sanitary & Ship Canal	5.0	71.1	5.00	0.771
48 Stephen Street, Chicago Sanitary & Ship Canal	5.0	84.8	5.00	1.350
92 Lockport Forebay, Chicago Sanitary & Ship Canal	4.9	87.8	4.90	1.263
Calumet River System				
49 Ewing Avenue, Calumet River	5.0	27.7	ND	0.183
50 Burnham Avenue, Wolf Lake	5.0	47.6	ND	0.100
55 130th Street, Calumet River	5.0	64.3	ND	0.100
86 Burnham Avenue, Grand Calumet River	8.7	70.6	5.00	1.309
56 Indiana Avenue, Little Calumet River	5.0	60.5	5.00	0.770
76 Halsted Street, Little Calumet River	5.0	81.4	5.00	2.845
52 Wentworth Avenue, Little Calumet River	5.0	123.9	ND	0.700
54 Joe Orr Road, Thorn Creek	5.0	723.7	ND	1.429
97 170th Street, Thorn Creek	5.0	437.7	ND	1.083
57 Ashland Avenue, Little Calumet River	5.0	269.0	ND	1.091
58 Ashland Avenue, Calumet-Sag Channel	5.0	111.6	5.00	2.529
59 Cicero Avenue, Calumet-Sag Channel	5.0	120.0	5.00	2.870
43 Route 83, Calumet-Sag Channel	5.0	99.7	5.00	1.764
Des Plaines River System				
90 Route 19, Poplar Creek	5.0	48.3	ND	0.114
110 Springinguth Road, West Branch DuPage River	5.0	67.6	ND	0.282
89 Walnut Lane, West Branch DuPage River	5.0	61.1	ND	2.157
111 Arlington Drive, West Branch DuPage River	5.0	63.1	ND	2.364
79 Higgins Road, Salt Creek	5.0	59.9	ND	0.127
80 Arlington Heights Road, Salt Creek	5.0	75.6	ND	1.401
18 Devon Avenue, Salt Creek	5.0	72.0	ND	2.065
24 Wolf Road, Salt Creek	5.0	81.1	ND	1.100
109 Brookfield Avenue, Salt Creek	5.0	76.8	ND	1.358
77 Elmhurst Road, Higgins Creek	5.0	46.9	ND	0.163
78 Wille Road, Higgins Creek	5.0	76.7	ND	1.400
12 Lake-Cook Road, Buffalo Creek	5.0	84.0	ND	0.150
13 Lake-Cook Road, Des Plaines River	5.1	64.6	ND	0.700
17 Oakton Street, Des Plaines River	5.0	64.3	ND	0.657
19 Belmont Avenue, Des Plaines River	5.0	69.3	ND	1.058
20 Roosevelt Road, Des Plaines River	5.0	65.3	ND	0.586
22 Ogden Avenue, Des Plaines River	5.0	71.7	ND	1.133
23 Willow Springs Road, Des Plaines River	5.0	74.6	ND	1.025
29 Stephen Street, Des Plaines River	5.0	68.7	ND	0.643
91 Material Service Road, Des Plaines River	5.0	73.3	ND	0.842

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2012

Sampling Station (No. Name)	CN mg/L	WAD-CN mg/L	F mg/L	TOC mg/L
Chicago River System				
106 Dundee Road, West Fork North Branch Chicago River	0.007	0.002	0.520	4.60
103 Golf Road, West Fork North Branch Chicago River	0.007	0.001	0.443	4.29
31 Lake-Cook Road, Middle Fork North Branch	0.005	0.001	0.275	5.75
104 Glenview Road, North Branch Chicago River	0.007	0.001	0.486	4.43
32 Lake-Cook Road, Skokie River	0.007	0.001	0.317	4.70
105 Frontage Road, Skokie River	0.005	0.001	0.571	4.29
34 Dempster Street, North Branch Chicago River	0.006	0.001	0.486	4.14
96 Albany Avenue, North Branch Chicago River	0.006	0.001	0.533	4.58
35 Central Street, North Shore Channel	0.005	0.001	0.200	3.00
112 Dempster Street, North Shore Channel	0.005	0.001	0.560	5.00
102 Oakton Street, North Shore Channel	0.006	0.001	0.557	4.29
36 Touhy Avenue, North Shore Channel	0.005	0.001	0.733	4.63
101 Foster Avenue, North Shore Channel	0.005	0.001	0.714	4.57
37 Wilson Avenue, North Branch Chicago River	0.005	0.001	0.700	4.67
73 Diversey Parkway, North Branch Chicago River	0.005	0.001	0.708	4.92
46 Grand Avenue, North Branch Chicago River	0.005	0.002	0.686	4.86
74 Lake Shore Drive, Chicago River	0.005	0.001	0.283	2.67
100 Wells Street, Chicago River	0.005	0.001	0.473	3.55
39 Madison Street, South Branch Chicago River	0.005	0.002	0.567	4.17
108 Loomis Street, South Branch Chicago River	0.005	0.001	0.583	4.25
99 Archer Avenue, South Fork South Branch Chicago River	0.005	0.001	0.567	5.83
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.005	0.001	0.557	4.57
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.005	0.001	0.567	4.00
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.005	0.001	0.658	4.58
42 Route 83, Chicago Sanitary & Ship Canal	0.005	0.002	0.657	5.01
48 Stephen Street, Chicago Sanitary & Ship Canal	0.005	0.002	0.708	4.83
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.006	0.001	0.657	4.88
Calumet River System				
49 Ewing Avenue, Calumet River	0.005	0.001	0.150	2.17
50 Burnham Avenue, Wolf Lake	0.005	0.001	0.557	6.14
55 130th Street, Calumet River	0.005	0.001	0.257	3.14
86 Burnham Avenue, Grand Calumet River	0.006	0.002	0.591	10.64
56 Indiana Avenue, Little Calumet River	0.005	0.001	0.340	3.50
76 Halsted Street, Little Calumet River	0.005	0.002	0.609	5.18
52 Wentworth Avenue, Little Calumet River	0.006	0.002	1.114	6.43
54 Joe Orr Road, Thorn Creek	0.005	0.001	0.643	5.43
97 170th Street, Thorn Creek	0.005	0.001	0.500	5.00
57 Ashland Avenue, Little Calumet River	0.005	0.002	0.555	5.18
58 Ashland Avenue, Calumet-Sag Channel	0.005	0.002	0.543	5.29
59 Cicero Avenue, Calumet-Sag Channel	0.005	0.002	0.580	5.20
43 Route 83, Calumet-Sag Channel	0.005	0.002	0.564	4.73
Des Plaines River System				
90 Route 19, Poplar Creek	0.005	0.001	0.200	5.36
110 Springinguth Road, West Branch DuPage River	0.005	0.001	0.327	10.73
89 Walnut Lane, West Branch DuPage River	0.005	0.002	0.614	6.43
111 Arlington Drive, West Branch DuPage River	0.005	0.001	0.642	6.43
79 Higgins Road, Salt Creek	0.005	0.001	0.245	6.18
80 Arlington Heights Road, Salt Creek	0.006	0.002	0.557	5.09
18 Devon Avenue, Salt Creek	0.005	0.002	0.675	5.43
24 Wolf Road, Salt Creek	0.005	0.001	0.457	4.86
109 Brookfield Avenue, Salt Creek	0.005	0.001	0.525	4.92
77 Elmhurst Road, Higgins Creek	0.005	0.001	0.263	4.75
78 Wille Road, Higgins Creek	0.005	0.001	0.764	5.00
12 Lake-Cook Road, Buffalo Creek	0.005	0.001	0.217	5.33
13 Lake-Cook Road, Des Plaines River	0.005	0.001	0.371	5.57
17 Oakton Street, Des Plaines River	0.005	0.001	0.357	5.29
19 Belmont Avenue, Des Plaines River	0.005	0.001	0.550	5.17
20 Roosevelt Road, Des Plaines River	0.005	0.001	0.386	5.00
22 Ogden Avenue, Des Plaines River	0.006	0.001	0.508	5.33
23 Willow Springs Road, Des Plaines River	0.005	0.001	0.492	5.25
29 Stephen Street, Des Plaines River	0.006	0.001	0.357	5.71
91 Material Service Road, Des Plaines River	0.006	0.001	0.492	5.08

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2012

Sampling Station (No. Name)	FC ² cfu/100mL	Ca mg/L	Mg mg/L	Hard mg/L
Chicago River System				
106 Dundee Road, West Fork North Branch Chicago River	6,260	81.4	33.8	342
103 Golf Road, West Fork North Branch Chicago River	546	84.9	35.0	356
31 Lake-Cook Road, Middle Fork North Branch	511	72.0	33.8	319
104 Glenview Road, North Branch Chicago River	301	71.6	32.6	313
32 Lake-Cook Road, Skokie River	2,400	77.7	33.8	333
105 Frontage Road, Skokie River	96	72.4	33.3	318
34 Dempster Street, North Branch Chicago River	441	80.3	35.0	345
96 Albany Avenue, North Branch Chicago River	380	64.8	27.9	277
35 Central Street, North Shore Channel	35	51.6	19.2	208
112 Dempster Street, North Shore Channel	939	48.0	18.6	196
102 Oakton Street, North Shore Channel	1,663	55.4	20.1	221
36 Touhy Avenue, North Shore Channel	5,642	52.5	18.8	208
101 Foster Avenue, North Shore Channel	6,443	57.9	20.9	230
37 Wilson Avenue, North Branch Chicago River	5,257	59.2	21.8	238
73 Diversey Parkway, North Branch Chicago River	3,446	53.7	19.9	216
46 Grand Avenue, North Branch Chicago River	939	62.3	23.4	252
74 Lake Shore Drive, Chicago River	81	48.3	17.5	193
100 Wells Street, Chicago River	320	50.1	18.2	200
39 Madison Street, South Branch Chicago River	1,351	58.8	22.2	238
108 Loomis Street, South Branch Chicago River	369	53.1	19.3	212
99 Archer Avenue, South Fork South Branch Chicago River	620	49.3	17.1	193
40 Damen Avenue, Chicago Sanitary & Ship Canal	484	58.4	21.7	235
75 Cicero Avenue, Chicago Sanitary & Ship Canal	174	52.1	18.9	208
41 Harlem Avenue, Chicago Sanitary & Ship Canal	3,721	54.0	19.1	213
42 Route 83, Chicago Sanitary & Ship Canal	1,217	61.1	21.4	241
48 Stephen Street, Chicago Sanitary & Ship Canal	668	59.7	21.6	238
92 Lockport Forebay, Chicago Sanitary & Ship Canal	112	58.6	21.2	233
Calumet River System				
49 Ewing Avenue, Calumet River	21	36.5	12.3	142
50 Burnham Avenue, Wolf Lake	16	38.6	11.1	142
55 130th Street, Calumet River	11	46.4	15.9	181
86 Burnham Avenue, Grand Calumet River	533	81.4	26.4	312
56 Indiana Avenue, Little Calumet River	109	48.2	17.3	192
76 Halsted Street, Little Calumet River	985	61.9	21.5	243
52 Wentworth Avenue, Little Calumet River	811	88.4	36.1	370
54 Joe Orr Road, Thorn Creek	1,587	87.9	32.9	355
97 170th Street, Thorn Creek	1,250	95.3	40.8	406
57 Ashland Avenue, Little Calumet River	511	73.5	29.0	303
58 Ashland Avenue, Calumet-Sag Channel	752	69.6	25.0	277
59 Cicero Avenue, Calumet-Sag Channel	1,978	63.1	22.9	252
43 Route 83, Calumet-Sag Channel	269	60.5	22.2	243
Des Plaines River System				
90 Route 19, Poplar Creek	63	77.3	36.9	345
110 Springinsguth Road, West Branch DuPage River	3,581	77.3	27.6	307
89 Walnut Lane, West Branch DuPage River	1,195	69.0	27.0	283
111 Arlington Drive, West Branch DuPage River	725	62.4	23.8	254
79 Higgins Road, Salt Creek	46	61.1	27.2	264
80 Arlington Heights Road, Salt Creek	466	75.0	29.3	308
18 Devon Avenue, Salt Creek	383	64.2	25.1	264
24 Wolf Road, Salt Creek	338	75.0	31.0	315
109 Brookfield Avenue, Salt Creek	567	65.2	26.9	274
77 Elmhurst Road, Higgins Creek	361	64.4	23.1	256
78 Wille Road, Higgins Creek	283	69.0	25.9	279
12 Lake-Cook Road, Buffalo Creek	86	83.0	37.5	362
13 Lake-Cook Road, Des Plaines River	229	72.9	33.6	320
17 Oakton Street, Des Plaines River	343	73.0	33.1	319
19 Belmont Avenue, Des Plaines River	335	64.5	27.6	275
20 Roosevelt Road, Des Plaines River	401	71.0	31.4	307
22 Ogden Avenue, Des Plaines River	501	66.2	28.3	282
23 Willow Springs Road, Des Plaines River	203	66.7	28.8	285
29 Stephen Street, Des Plaines River	226	72.6	31.7	312
91 Material Service Road, Des Plaines River	66	67.3	29.2	288

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2012

Sampling Station (No. Name)	Alpha pCi/L	Beta pCi/L	Chlrphl µg/L	Bzn µg/L
Chicago River System				
106 Dundee Road, West Fork North Branch Chicago River	3.48	5.08	19.5	2.000
103 Golf Road, West Fork North Branch Chicago River	2.87	3.73	12.4	2.000
31 Lake-Cook Road, Middle Fork North Branch	2.48	2.30	3.0	2.000
104 Glenview Road, North Branch Chicago River	2.37	3.26	11.2	2.000
32 Lake-Cook Road, Skokie River	2.55	2.65	8.2	2.000
105 Frontage Road, Skokie River	2.23	3.66	16.5	2.000
34 Dempster Street, North Branch Chicago River	2.53	3.14	16.3	2.000
96 Albany Avenue, North Branch Chicago River	2.32	3.12	9.1	2.000
35 Central Street, North Shore Channel	1.94	1.74	29.6	2.000
112 Dempster Street, North Shore Channel	1.64	3.22	12.4	ND
102 Oakton Street, North Shore Channel	1.69	3.36	18.7	2.000
36 Touhy Avenue, North Shore Channel	1.75	3.25	3.0	2.000
101 Foster Avenue, North Shore Channel	ND	ND	1.8	2.000
37 Wilson Avenue, North Branch Chicago River	ND	ND	2.9	2.000
73 Diversey Parkway, North Branch Chicago River	ND	ND	4.0	2.000
46 Grand Avenue, North Branch Chicago River	ND	ND	7.7	2.000
74 Lake Shore Drive, Chicago River	1.72	2.18	1.5	2.000
100 Wells Street, Chicago River	1.64	2.29	4.2	2.000
39 Madison Street, South Branch Chicago River	ND	ND	4.9	2.000
108 Loomis Street, South Branch Chicago River	ND	ND	4.5	2.000
99 Archer Avenue, South Fork South Branch Chicago River	ND	ND	13.8	2.000
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	6.6	2.000
75 Cicero Avenue, Chicago Sanitary & Ship Canal	1.74	3.21	6.9	2.000
41 Harlem Avenue, Chicago Sanitary & Ship Canal	1.89	4.26	5.7	2.000
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	9.8	2.000
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	6.4	2.000
92 Lockport Forebay, Chicago Sanitary & Ship Canal	1.86	3.86	4.4	2.000
Calumet River System				
49 Ewing Avenue, Calumet River	1.35	1.57	4.9	2.000
50 Burnham Avenue, Wolf Lake	1.46	4.19	6.9	2.000
55 130th Street, Calumet River	1.66	2.69	2.6	2.000
86 Burnham Avenue, Grand Calumet River	ND	ND	33.3	2.500
56 Indiana Avenue, Little Calumet River	1.63	2.49	10.9	2.000
76 Halsted Street, Little Calumet River	1.79	3.15	9.0	2.000
52 Wentworth Avenue, Little Calumet River	2.13	4.11	4.4	2.000
54 Joe Orr Road, Thorn Creek	3.13	4.49	3.4	2.000
97 170th Street, Thorn Creek	2.95	4.68	6.7	2.000
57 Ashland Avenue, Little Calumet River	2.48	3.85	10.8	2.000
58 Ashland Avenue, Calumet-Sag Channel	ND	ND	9.4	2.000
59 Cicero Avenue, Calumet-Sag Channel	ND	ND	4.6	2.000
43 Route 83, Calumet-Sag Channel	ND	ND	6.9	2.000
Des Plaines River System				
90 Route 19, Poplar Creek	2.40	2.23	8.8	2.000
110 Springinguth Road, West Branch DuPage River	2.39	2.88	27.4	ND
89 Walnut Lane, West Branch DuPage River	1.94	4.77	6.4	2.000
111 Arlington Drive, West Branch DuPage River	2.01	5.88	15.5	ND
79 Higgins Road, Salt Creek	2.35	1.94	20.2	2.000
80 Arlington Heights Road, Salt Creek	2.27	3.81	9.2	2.000
18 Devon Avenue, Salt Creek	2.06	4.21	8.3	2.000
24 Wolf Road, Salt Creek	2.39	3.99	6.9	2.000
109 Brookfield Avenue, Salt Creek	2.08	3.97	4.5	2.000
77 Elmhurst Road, Higgins Creek	2.44	2.58	12.5	2.000
78 Wille Road, Higgins Creek	2.26	5.42	2.2	2.000
12 Lake-Cook Road, Buffalo Creek	2.45	2.23	11.1	2.000
13 Lake-Cook Road, Des Plaines River	2.03	3.29	7.6	2.000
17 Oakton Street, Des Plaines River	2.14	2.97	6.7	2.000
19 Belmont Avenue, Des Plaines River	2.00	4.16	4.4	2.000
20 Roosevelt Road, Des Plaines River	2.11	3.41	6.3	2.000
22 Ogden Avenue, Des Plaines River	2.08	4.13	19.1	2.000
23 Willow Springs Road, Des Plaines River	2.11	4.13	6.0	2.000
29 Stephen Street, Des Plaines River	2.29	3.21	26.0	2.000
91 Material Service Road, Des Plaines River	1.98	4.15	10.6	2.000

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2012

Sampling Station (No. Name)	Ebnzn μg/L	Toln μg/L	Xyln μg/L	xylnmp μg/L
Chicago River System				
106 Dundee Road, West Fork North Branch Chicago River	2.000	2.000	3.000	3.000
103 Golf Road, West Fork North Branch Chicago River	2.000	2.000	3.000	3.000
31 Lake-Cook Road, Middle Fork North Branch	2.000	2.000	3.000	3.000
104 Glenview Road, North Branch Chicago River	2.000	2.000	3.000	3.000
32 Lake-Cook Road, Skokie River	2.000	2.000	3.000	3.000
105 Frontage Road, Skokie River	2.000	2.000	3.000	3.000
34 Dempster Street, North Branch Chicago River	2.000	2.000	3.000	3.000
96 Albany Avenue, North Branch Chicago River	2.000	2.000	3.000	3.000
35 Central Street, North Shore Channel	2.000	2.000	3.000	3.000
112 Dempster Street, North Shore Channel	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	2.000	2.000	3.000	3.000
36 Touhy Avenue, North Shore Channel	2.000	2.000	3.000	3.000
101 Foster Avenue, North Shore Channel	2.000	2.000	3.000	3.000
37 Wilson Avenue, North Branch Chicago River	2.000	2.000	3.000	3.000
73 Diversey Parkway, North Branch Chicago River	2.000	2.000	3.000	3.000
46 Grand Avenue, North Branch Chicago River	2.000	2.000	3.000	3.000
74 Lake Shore Drive, Chicago River	2.000	2.000	3.000	3.000
100 Wells Street, Chicago River	2.000	2.000	3.000	3.000
39 Madison Street, South Branch Chicago River	2.000	2.000	3.000	3.000
108 Loomis Street, South Branch Chicago River	2.000	2.000	3.000	3.000
99 Archer Avenue, South Fork South Branch Chicago River	2.000	5.500	3.000	3.000
40 Damen Avenue, Chicago Sanitary & Ship Canal	2.000	7.250	3.000	3.000
75 Cicero Avenue, Chicago Sanitary & Ship Canal	2.000	2.000	3.000	3.000
41 Harlem Avenue, Chicago Sanitary & Ship Canal	2.000	2.000	3.000	3.000
42 Route 83, Chicago Sanitary & Ship Canal	2.000	2.000	3.000	3.000
48 Stephen Street, Chicago Sanitary & Ship Canal	2.000	2.000	3.000	3.000
92 Lockport Forebay, Chicago Sanitary & Ship Canal	2.000	2.000	3.000	3.000
Calumet River System				
49 Ewing Avenue, Calumet River	2.000	2.000	3.000	3.000
50 Burnham Avenue, Wolf Lake	2.000	2.000	3.000	3.000
55 130th Street, Calumet River	2.000	2.000	3.000	3.000
86 Burnham Avenue, Grand Calumet River	2.667	2.333	3.000	3.000
56 Indiana Avenue, Little Calumet River	2.000	2.000	3.000	3.000
76 Halsted Street, Little Calumet River	2.000	2.000	3.000	3.000
52 Wentworth Avenue, Little Calumet River	2.000	2.000	3.000	3.000
54 Joe Orr Road, Thorn Creek	2.000	2.000	3.000	3.000
97 170th Street, Thorn Creek	2.000	2.000	3.000	3.000
57 Ashland Avenue, Little Calumet River	2.000	2.000	3.000	3.000
58 Ashland Avenue, Calumet-Sag Channel	2.000	2.000	3.000	3.000
59 Cicero Avenue, Calumet-Sag Channel	2.000	2.000	3.000	3.000
43 Route 83, Calumet-Sag Channel	2.000	2.000	3.000	3.000
Des Plaines River System				
90 Route 19, Poplar Creek	2.000	2.000	3.000	3.000
110 Springinguth Road, West Branch DuPage River	ND	ND	ND	ND
89 Walnut Lane, West Branch DuPage River	2.000	2.000	3.000	3.000
111 Arlington Drive, West Branch DuPage River	ND	ND	ND	ND
79 Higgins Road, Salt Creek	2.000	2.000	3.000	3.000
80 Arlington Heights Road, Salt Creek	2.000	2.000	3.000	3.000
18 Devon Avenue, Salt Creek	2.000	2.000	3.000	3.000
24 Wolf Road, Salt Creek	2.000	2.000	3.000	3.000
109 Brookfield Avenue, Salt Creek	2.000	2.000	3.000	3.000
77 Elmhurst Road, Higgins Creek	2.000	2.000	3.000	3.000
78 Wille Road, Higgins Creek	2.000	2.000	3.000	3.000
12 Lake-Cook Road, Buffalo Creek	2.000	2.000	3.000	3.000
13 Lake-Cook Road, Des Plaines River	2.000	2.000	3.000	3.000
17 Oakton Street, Des Plaines River	2.000	2.000	3.000	3.000
19 Belmont Avenue, Des Plaines River	2.000	2.000	3.000	3.000
20 Roosevelt Road, Des Plaines River	2.000	2.000	3.000	3.000
22 Ogden Avenue, Des Plaines River	2.000	2.000	3.000	3.000
23 Willow Springs Road, Des Plaines River	2.000	2.000	3.000	3.000
29 Stephen Street, Des Plaines River	2.000	2.000	3.000	3.000
91 Material Service Road, Des Plaines River	2.000	2.000	3.000	3.000

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2012

Sampling Station (No. Name)	xylno μg/L	Ag mg/L	As mg/L	Ba mg/L
Chicago River System				
106 Dundee Road, West Fork North Branch Chicago River	3.000	0.002	0.050	0.072
103 Golf Road, West Fork North Branch Chicago River	3.000	0.002	0.050	0.056
31 Lake-Cook Road, Middle Fork North Branch	3.000	0.001	0.050	0.039
104 Glenview Road, North Branch Chicago River	3.000	0.001	0.050	0.034
32 Lake-Cook Road, Skokie River	3.000	0.002	0.050	0.046
105 Frontage Road, Skokie River	3.000	0.001	0.050	0.032
34 Dempster Street, North Branch Chicago River	3.000	0.001	0.050	0.046
96 Albany Avenue, North Branch Chicago River	3.000	0.001	0.050	0.036
35 Central Street, North Shore Channel	3.000	0.001	0.050	0.029
112 Dempster Street, North Shore Channel	ND	0.001	ND	0.030
102 Oakton Street, North Shore Channel	3.000	0.001	0.050	0.027
36 Touhy Avenue, North Shore Channel	3.000	0.001	0.050	0.023
101 Foster Avenue, North Shore Channel	3.000	0.001	0.050	0.025
37 Wilson Avenue, North Branch Chicago River	3.000	0.001	0.050	0.027
73 Diversey Parkway, North Branch Chicago River	3.000	0.001	0.050	0.024
46 Grand Avenue, North Branch Chicago River	3.000	0.001	0.050	0.028
74 Lake Shore Drive, Chicago River	3.000	0.001	0.050	0.026
100 Wells Street, Chicago River	3.000	0.001	0.050	0.025
39 Madison Street, South Branch Chicago River	3.000	0.001	0.050	0.029
108 Loomis Street, South Branch Chicago River	3.000	0.001	0.050	0.025
99 Archer Avenue, South Fork South Branch Chicago River	3.000	0.001	0.050	0.026
40 Damen Avenue, Chicago Sanitary & Ship Canal	3.000	0.001	0.050	0.029
75 Cicero Avenue, Chicago Sanitary & Ship Canal	3.000	0.001	0.050	0.024
41 Harlem Avenue, Chicago Sanitary & Ship Canal	3.000	0.001	0.050	0.020
42 Route 83, Chicago Sanitary & Ship Canal	3.000	0.001	0.050	0.020
48 Stephen Street, Chicago Sanitary & Ship Canal	3.000	0.001	0.050	0.022
92 Lockport Forebay, Chicago Sanitary & Ship Canal	3.000	0.001	0.050	0.020
Calumet River System				
49 Ewing Avenue, Calumet River	3.000	0.001	0.050	0.023
50 Burnham Avenue, Wolf Lake	3.000	0.001	0.050	0.045
55 130th Street, Calumet River	3.000	0.001	0.050	0.032
86 Burnham Avenue, Grand Calumet River	3.000	0.002	0.050	0.034
56 Indiana Avenue, Little Calumet River	3.000	0.001	0.050	0.028
76 Halsted Street, Little Calumet River	3.000	0.001	0.050	0.021
52 Wentworth Avenue, Little Calumet River	3.000	0.002	0.050	0.039
54 Joe Orr Road, Thorn Creek	3.000	0.001	0.050	0.025
97 170th Street, Thorn Creek	3.000	0.002	0.050	0.046
57 Ashland Avenue, Little Calumet River	3.000	0.001	0.050	0.034
58 Ashland Avenue, Calumet-Sag Channel	3.000	0.001	0.050	0.025
59 Cicero Avenue, Calumet-Sag Channel	3.000	0.001	0.050	0.023
43 Route 83, Calumet-Sag Channel	3.000	0.001	0.050	0.023
Des Plaines River System				
90 Route 19, Poplar Creek	3.000	0.001	0.050	0.071
110 Springinguth Road, West Branch DuPage River	ND	0.001	0.050	0.050
89 Walnut Lane, West Branch DuPage River	3.000	0.001	0.050	0.035
111 Arlington Drive, West Branch DuPage River	ND	0.001	0.050	0.037
79 Higgins Road, Salt Creek	3.000	0.001	0.050	0.041
80 Arlington Heights Road, Salt Creek	3.000	0.001	0.050	0.035
18 Devon Avenue, Salt Creek	3.000	0.001	0.050	0.026
24 Wolf Road, Salt Creek	3.000	0.002	0.050	0.036
109 Brookfield Avenue, Salt Creek	3.000	0.001	0.050	0.031
77 Elmhurst Road, Higgins Creek	3.000	0.001	0.050	0.057
78 Wille Road, Higgins Creek	3.000	0.001	0.050	0.025
12 Lake-Cook Road, Buffalo Creek	3.000	0.002	0.050	0.043
13 Lake-Cook Road, Des Plaines River	3.000	0.001	0.050	0.046
17 Oakton Street, Des Plaines River	3.000	0.001	0.050	0.043
19 Belmont Avenue, Des Plaines River	3.000	0.001	0.050	0.038
20 Roosevelt Road, Des Plaines River	3.000	0.001	0.050	0.039
22 Ogden Avenue, Des Plaines River	3.000	0.001	0.050	0.038
23 Willow Springs Road, Des Plaines River	3.000	0.001	0.050	0.036
29 Stephen Street, Des Plaines River	3.000	0.001	0.050	0.039
91 Material Service Road, Des Plaines River	3.000	0.001	0.050	0.034

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2012

Sampling Station (No. Name)	B mg/L	Cd mg/L	Cu mg/L	Cr mg/L
Chicago River System				
106 Dundee Road, West Fork North Branch Chicago River	0.138	0.001	0.014	0.005
103 Golf Road, West Fork North Branch Chicago River	0.121	0.001	0.007	0.005
31 Lake-Cook Road, Middle Fork North Branch	0.090	0.001	0.007	0.005
104 Glenview Road, North Branch Chicago River	0.113	0.001	0.007	0.005
32 Lake-Cook Road, Skokie River	0.095	0.001	0.006	0.005
105 Frontage Road, Skokie River	0.126	0.001	0.005	0.005
34 Dempster Street, North Branch Chicago River	0.116	0.001	0.006	0.005
96 Albany Avenue, North Branch Chicago River	0.117	0.001	0.006	0.005
35 Central Street, North Shore Channel	0.052	0.001	0.005	0.005
112 Dempster Street, North Shore Channel	0.115	ND	ND	ND
102 Oakton Street, North Shore Channel	0.129	0.001	0.006	0.005
36 Touhy Avenue, North Shore Channel	0.158	0.001	0.006	0.006
101 Foster Avenue, North Shore Channel	0.150	0.001	0.006	0.005
37 Wilson Avenue, North Branch Chicago River	0.138	0.001	0.006	0.005
73 Diversey Parkway, North Branch Chicago River	0.148	0.001	0.006	0.005
46 Grand Avenue, North Branch Chicago River	0.141	0.001	0.007	0.005
74 Lake Shore Drive, Chicago River	0.077	0.001	0.006	0.005
100 Wells Street, Chicago River	0.104	0.001	0.009	0.005
39 Madison Street, South Branch Chicago River	0.117	0.001	0.007	0.007
108 Loomis Street, South Branch Chicago River	0.125	0.001	0.007	0.008
99 Archer Avenue, South Fork South Branch Chicago River	0.111	0.001	0.008	0.005
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.120	0.001	0.008	0.005
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.124	0.001	0.009	0.013
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.163	0.001	0.007	0.005
42 Route 83, Chicago Sanitary & Ship Canal	0.256	0.001	0.005	0.005
48 Stephen Street, Chicago Sanitary & Ship Canal	0.235	0.001	0.008	0.006
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.215	0.001	0.005	0.005
Calumet River System				
49 Ewing Avenue, Calumet River	0.050	0.001	0.005	0.005
50 Burnham Avenue, Wolf Lake	0.217	0.001	0.005	0.005
55 130th Street, Calumet River	0.151	0.001	0.005	0.005
86 Burnham Avenue, Grand Calumet River	0.615	0.001	0.005	0.005
56 Indiana Avenue, Little Calumet River	0.133	0.001	0.006	0.005
76 Halsted Street, Little Calumet River	0.189	0.001	0.005	0.005
52 Wentworth Avenue, Little Calumet River	0.254	0.001	0.005	0.005
54 Joe Orr Road, Thorn Creek	0.293	0.001	0.005	0.005
97 170th Street, Thorn Creek	0.238	0.001	0.005	0.005
57 Ashland Avenue, Little Calumet River	0.223	0.001	0.017	0.005
58 Ashland Avenue, Calumet-Sag Channel	0.193	0.001	0.029	0.005
59 Cicero Avenue, Calumet-Sag Channel	0.189	0.001	0.005	0.005
43 Route 83, Calumet-Sag Channel	0.190	0.001	0.005	0.005
Des Plaines River System				
90 Route 19, Poplar Creek	0.054	0.001	0.005	0.005
110 Springinguth Road, West Branch DuPage River	0.065	0.001	0.005	0.007
89 Walnut Lane, West Branch DuPage River	0.181	0.001	0.008	0.006
111 Arlington Drive, West Branch DuPage River	0.169	0.001	0.006	0.005
79 Higgins Road, Salt Creek	0.081	0.001	0.005	0.005
80 Arlington Heights Road, Salt Creek	0.170	0.001	0.005	0.005
18 Devon Avenue, Salt Creek	0.218	0.001	0.005	0.005
24 Wolf Road, Salt Creek	0.166	0.001	0.005	0.005
109 Brookfield Avenue, Salt Creek	0.196	0.001	0.005	0.005
77 Elmhurst Road, Higgins Creek	0.106	0.001	0.005	0.005
78 Wille Road, Higgins Creek	0.245	0.001	0.008	0.005
12 Lake-Cook Road, Buffalo Creek	0.073	0.001	0.005	0.005
13 Lake-Cook Road, Des Plaines River	0.121	0.001	0.005	0.005
17 Oakton Street, Des Plaines River	0.124	0.001	0.005	0.005
19 Belmont Avenue, Des Plaines River	0.177	0.001	0.006	0.005
20 Roosevelt Road, Des Plaines River	0.133	0.001	0.006	0.005
22 Ogden Avenue, Des Plaines River	0.188	0.001	0.005	0.005
23 Willow Springs Road, Des Plaines River	0.183	0.001	0.005	0.005
29 Stephen Street, Des Plaines River	0.134	0.001	0.005	0.005
91 Material Service Road, Des Plaines River	0.173	0.001	0.005	0.005

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2012

Sampling Station (No. Name)	Cr ⁺⁶ μg/L	Fe mg/L	Pb mg/L	Ni mg/L
Chicago River System				
106 Dundee Road, West Fork North Branch Chicago River	6.000	2.150	0.020	0.005
103 Golf Road, West Fork North Branch Chicago River	6.000	0.850	0.020	0.005
31 Lake-Cook Road, Middle Fork North Branch	6.000	0.350	0.020	0.005
104 Glenview Road, North Branch Chicago River	6.000	0.525	0.020	0.005
32 Lake-Cook Road, Skokie River	6.000	0.700	0.020	0.005
105 Frontage Road, Skokie River	6.000	0.300	0.020	0.005
34 Dempster Street, North Branch Chicago River	6.000	0.725	0.020	0.005
96 Albany Avenue, North Branch Chicago River	6.000	0.375	0.020	0.005
35 Central Street, North Shore Channel	6.000	0.250	0.020	0.005
112 Dempster Street, North Shore Channel	6.000	ND	ND	ND
102 Oakton Street, North Shore Channel	6.000	0.225	0.020	0.010
36 Touhy Avenue, North Shore Channel	6.000	0.150	0.020	0.011
101 Foster Avenue, North Shore Channel	6.000	0.175	0.020	0.010
37 Wilson Avenue, North Branch Chicago River	6.000	0.200	0.020	0.005
73 Diversey Parkway, North Branch Chicago River	6.000	0.250	0.020	0.011
46 Grand Avenue, North Branch Chicago River	6.000	0.325	0.020	0.012
74 Lake Shore Drive, Chicago River	6.000	0.125	0.020	0.006
100 Wells Street, Chicago River	6.000	0.400	0.020	0.007
39 Madison Street, South Branch Chicago River	6.000	0.450	0.020	0.008
108 Loomis Street, South Branch Chicago River	6.000	0.425	0.020	0.010
99 Archer Avenue, South Fork South Branch Chicago River	6.000	0.725	0.020	0.008
40 Damen Avenue, Chicago Sanitary & Ship Canal	6.000	0.450	0.020	0.008
75 Cicero Avenue, Chicago Sanitary & Ship Canal	6.000	0.625	0.020	0.016
41 Harlem Avenue, Chicago Sanitary & Ship Canal	6.000	0.275	0.020	0.009
42 Route 83, Chicago Sanitary & Ship Canal	6.000	0.225	0.020	0.010
48 Stephen Street, Chicago Sanitary & Ship Canal	6.000	0.575	0.020	0.008
92 Lockport Forebay, Chicago Sanitary & Ship Canal	6.078	0.288	0.020	0.007
Calumet River System				
49 Ewing Avenue, Calumet River	6.000	0.400	0.020	0.005
50 Burnham Avenue, Wolf Lake	6.000	0.150	0.020	0.005
55 130th Street, Calumet River	6.000	0.150	0.020	0.005
86 Burnham Avenue, Grand Calumet River	6.000	1.275	0.020	0.005
56 Indiana Avenue, Little Calumet River	6.000	0.233	0.020	0.005
76 Halsted Street, Little Calumet River	6.000	0.200	0.020	0.006
52 Wentworth Avenue, Little Calumet River	6.000	1.525	0.020	0.005
54 Joe Orr Road, Thorn Creek	6.000	0.625	0.020	0.005
97 170th Street, Thorn Creek	6.000	1.050	0.020	0.006
57 Ashland Avenue, Little Calumet River	6.000	1.150	0.020	0.005
58 Ashland Avenue, Calumet-Sag Channel	6.000	0.375	0.020	0.005
59 Cicero Avenue, Calumet-Sag Channel	6.000	0.500	0.020	0.005
43 Route 83, Calumet-Sag Channel	6.000	0.450	0.020	0.005
Des Plaines River System				
90 Route 19, Poplar Creek	6.000	0.525	0.020	0.005
110 Springinsguth Road, West Branch DuPage River	6.182	1.167	0.020	0.005
89 Walnut Lane, West Branch DuPage River	6.000	0.275	0.020	0.006
111 Arlington Drive, West Branch DuPage River	6.000	1.000	0.020	0.005
79 Higgins Road, Salt Creek	6.000	0.933	0.020	0.005
80 Arlington Heights Road, Salt Creek	6.000	0.275	0.020	0.005
18 Devon Avenue, Salt Creek	6.000	0.350	0.020	0.005
24 Wolf Road, Salt Creek	6.000	0.400	0.020	0.006
109 Brookfield Avenue, Salt Creek	6.250	0.325	0.020	0.006
77 Elmhurst Road, Higgins Creek	6.000	0.500	0.020	0.005
78 Wille Road, Higgins Creek	6.000	0.175	0.020	0.007
12 Lake-Cook Road, Buffalo Creek	6.000	0.600	0.020	0.006
13 Lake-Cook Road, Des Plaines River	6.000	0.600	0.020	0.005
17 Oakton Street, Des Plaines River	6.000	0.525	0.020	0.005
19 Belmont Avenue, Des Plaines River	38.417	0.450	0.020	0.005
20 Roosevelt Road, Des Plaines River	6.000	0.500	0.020	0.005
22 Ogden Avenue, Des Plaines River	12.583	0.425	0.020	0.005
23 Willow Springs Road, Des Plaines River	6.000	0.400	0.020	0.005
29 Stephen Street, Des Plaines River	6.000	0.400	0.020	0.005
91 Material Service Road, Des Plaines River	6.333	0.450	0.020	0.006

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2012

Sampling Station (No. Name)	Mn mg/L	Hg $\mu\text{g/L}$	Hg- $\eta\text{g/L}$	Zn mg/L
Chicago River System				
106 Dundee Road, West Fork North Branch Chicago River	0.069	0.200	3.5	0.040
103 Golf Road, West Fork North Branch Chicago River	0.096	0.200	6.7	0.023
31 Lake-Cook Road, Middle Fork North Branch	0.076	0.200	3.8	0.010
104 Glenview Road, North Branch Chicago River	0.059	0.200	3.8	0.025
32 Lake-Cook Road, Skokie River	0.103	0.200	4.0	0.017
105 Frontage Road, Skokie River	0.039	0.200	3.8	0.020
34 Dempster Street, North Branch Chicago River	0.076	0.200	5.7	0.023
96 Albany Avenue, North Branch Chicago River	0.052	0.200	5.9	0.020
35 Central Street, North Shore Channel	0.022	0.200	4.6	0.010
112 Dempster Street, North Shore Channel	0.041	0.200	7.4	ND
102 Oakton Street, North Shore Channel	0.039	0.200	4.5	0.035
36 Touhy Avenue, North Shore Channel	0.032	0.200	5.0	0.035
101 Foster Avenue, North Shore Channel	0.027	0.200	ND	0.030
37 Wilson Avenue, North Branch Chicago River	0.035	0.200	ND	0.033
73 Diversey Parkway, North Branch Chicago River	0.037	0.200	ND	0.030
46 Grand Avenue, North Branch Chicago River	0.046	0.200	ND	0.038
74 Lake Shore Drive, Chicago River	0.021	0.200	3.7	0.020
100 Wells Street, Chicago River	0.039	0.200	8.3	0.033
39 Madison Street, South Branch Chicago River	0.054	0.200	ND	0.043
108 Loomis Street, South Branch Chicago River	0.040	0.200	ND	0.045
99 Archer Avenue, South Fork South Branch Chicago River	0.049	0.200	ND	0.035
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.042	0.200	ND	0.038
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.051	0.200	ND	0.048
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.026	0.200	ND	0.033
42 Route 83, Chicago Sanitary & Ship Canal	0.032	0.200	ND	0.030
48 Stephen Street, Chicago Sanitary & Ship Canal	0.047	0.200	ND	0.035
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.041	0.200	ND	0.028
Calumet River System				
49 Ewing Avenue, Calumet River	0.022	0.200	4.4	0.010
50 Burnham Avenue, Wolf Lake	0.058	0.200	3.9	0.010
55 130th Street, Calumet River	0.021	0.200	3.9	0.010
86 Burnham Avenue, Grand Calumet River	0.238	0.200	ND	0.023
56 Indiana Avenue, Little Calumet River	0.021	0.200	ND	0.013
76 Halsted Street, Little Calumet River	0.040	0.200	ND	0.028
52 Wentworth Avenue, Little Calumet River	0.111	0.200	3.9	0.020
54 Joe Orr Road, Thorn Creek	0.074	0.200	5.2	0.033
97 170th Street, Thorn Creek	0.088	0.200	4.4	0.023
57 Ashland Avenue, Little Calumet River	0.094	0.200	6.8	0.018
58 Ashland Avenue, Calumet-Sag Channel	0.052	0.200	ND	0.028
59 Cicero Avenue, Calumet-Sag Channel	0.046	0.200	ND	0.025
43 Route 83, Calumet-Sag Channel	0.054	0.200	ND	0.025
Des Plaines River System				
90 Route 19, Poplar Creek	0.114	0.200	3.9	0.013
110 Springinguth Road, West Branch DuPage River	0.195	0.200	5.6	0.030
89 Walnut Lane, West Branch DuPage River	0.049	0.200	5.5	0.040
111 Arlington Drive, West Branch DuPage River	0.066	0.200	4.9	0.030
79 Higgins Road, Salt Creek	0.081	0.209	5.9	0.010
80 Arlington Heights Road, Salt Creek	0.054	0.200	3.9	0.018
18 Devon Avenue, Salt Creek	0.050	0.200	5.5	0.018
24 Wolf Road, Salt Creek	0.067	0.200	5.0	0.025
109 Brookfield Avenue, Salt Creek	0.060	0.200	7.1	0.030
77 Elmhurst Road, Higgins Creek	0.151	0.200	5.9	0.010
78 Wille Road, Higgins Creek	0.026	0.200	6.3	0.040
12 Lake-Cook Road, Buffalo Creek	0.242	0.200	3.3	0.015
13 Lake-Cook Road, Des Plaines River	0.066	0.200	4.4	0.010
17 Oakton Street, Des Plaines River	0.051	0.200	3.6	0.010
19 Belmont Avenue, Des Plaines River	0.046	0.200	5.2	0.020
20 Roosevelt Road, Des Plaines River	0.054	0.200	4.4	0.020
22 Ogden Avenue, Des Plaines River	0.066	0.200	8.7	0.010
23 Willow Springs Road, Des Plaines River	0.053	0.200	5.9	0.013
29 Stephen Street, Des Plaines River	0.079	0.200	4.7	0.018
91 Material Service Road, Des Plaines River	0.059	0.200	5.4	0.013

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2012

Sampling Station (No. Name)	Se mg/L	Sol. Ca mg/L	Sol. Mg mg/L	Sol. Ag mg/L
Chicago River System				
106 Dundee Road, West Fork North Branch Chicago River	0.006	84.3	33.7	0.002
103 Golf Road, West Fork North Branch Chicago River	0.005	92.8	37.8	0.002
31 Lake-Cook Road, Middle Fork North Branch	0.006	79.5	37.5	0.002
104 Glenview Road, North Branch Chicago River	0.006	79.5	35.8	0.001
32 Lake-Cook Road, Skokie River	0.007	84.3	37.0	0.002
105 Frontage Road, Skokie River	0.007	79.5	36.8	0.001
34 Dempster Street, North Branch Chicago River	0.006	91.0	39.0	0.002
96 Albany Avenue, North Branch Chicago River	0.005	88.3	38.3	0.001
35 Central Street, North Shore Channel	0.006	63.5	24.5	0.001
112 Dempster Street, North Shore Channel	0.005	ND	ND	0.001
102 Oakton Street, North Shore Channel	0.005	61.0	22.0	0.001
36 Touhy Avenue, North Shore Channel	0.005	59.3	21.0	0.001
101 Foster Avenue, North Shore Channel	0.005	60.8	21.5	0.001
37 Wilson Avenue, North Branch Chicago River	0.005	63.3	23.0	0.001
73 Diversey Parkway, North Branch Chicago River	0.006	65.0	25.0	0.001
46 Grand Avenue, North Branch Chicago River	0.006	66.8	25.3	0.001
74 Lake Shore Drive, Chicago River	0.005	54.5	20.3	0.001
100 Wells Street, Chicago River	0.005	61.5	23.0	0.001
39 Madison Street, South Branch Chicago River	0.005	63.5	24.3	0.001
108 Loomis Street, South Branch Chicago River	0.006	63.8	24.3	0.001
99 Archer Avenue, South Fork South Branch Chicago River	0.005	52.3	17.5	0.001
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.006	63.8	23.8	0.001
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.005	64.8	24.0	0.001
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.005	62.5	22.5	0.001
42 Route 83, Chicago Sanitary & Ship Canal	0.005	62.5	22.5	0.001
48 Stephen Street, Chicago Sanitary & Ship Canal	0.005	69.3	25.5	0.001
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.006	70.0	25.8	0.001
Calumet River System				
49 Ewing Avenue, Calumet River	0.005	36.7	12.0	0.001
50 Burnham Avenue, Wolf Lake	0.005	42.8	13.3	0.001
55 130th Street, Calumet River	0.005	49.8	16.3	0.001
86 Burnham Avenue, Grand Calumet River	0.005	110.3	40.0	0.002
56 Indiana Avenue, Little Calumet River	0.006	59.3	21.3	0.001
76 Halsted Street, Little Calumet River	0.005	75.0	26.5	0.001
52 Wentworth Avenue, Little Calumet River	0.005	84.0	33.8	0.001
54 Joe Orr Road, Thorn Creek	0.005	89.5	34.5	0.002
97 170th Street, Thorn Creek	0.006	89.5	36.5	0.002
57 Ashland Avenue, Little Calumet River	0.005	83.3	33.3	0.001
58 Ashland Avenue, Calumet-Sag Channel	0.005	75.3	27.3	0.001
59 Cicero Avenue, Calumet-Sag Channel	0.006	71.8	26.3	0.001
43 Route 83, Calumet-Sag Channel	0.005	77.0	28.8	0.001
Des Plaines River System				
90 Route 19, Poplar Creek	0.006	85.0	37.8	0.002
110 Springinguth Road, West Branch DuPage River	0.006	102.7	38.7	0.002
89 Walnut Lane, West Branch DuPage River	0.005	78.8	31.0	0.001
111 Arlington Drive, West Branch DuPage River	0.005	84.0	32.5	0.001
79 Higgins Road, Salt Creek	0.005	91.7	38.7	0.001
80 Arlington Heights Road, Salt Creek	0.005	79.5	31.3	0.002
18 Devon Avenue, Salt Creek	0.005	79.8	31.5	0.001
24 Wolf Road, Salt Creek	0.005	88.0	35.8	0.002
109 Brookfield Avenue, Salt Creek	0.005	88.3	35.8	0.001
77 Elmhurst Road, Higgins Creek	0.006	85.7	32.0	0.001
78 Wille Road, Higgins Creek	0.006	84.5	33.3	0.001
12 Lake-Cook Road, Buffalo Creek	0.006	89.3	40.5	0.002
13 Lake-Cook Road, Des Plaines River	0.005	75.3	35.0	0.001
17 Oakton Street, Des Plaines River	0.006	77.5	35.8	0.001
19 Belmont Avenue, Des Plaines River	0.005	78.5	35.8	0.001
20 Roosevelt Road, Des Plaines River	0.005	79.5	36.3	0.001
22 Ogden Avenue, Des Plaines River	0.005	81.5	36.0	0.001
23 Willow Springs Road, Des Plaines River	0.005	81.5	35.8	0.001
29 Stephen Street, Des Plaines River	0.005	80.8	35.5	0.002
91 Material Service Road, Des Plaines River	0.005	80.8	35.5	0.001

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2012

Sampling Station (No. Name)	Sol. As mg/L	Sol. Ba mg/L	Sol. B mg/L	Sol. Cd mg/L
Chicago River System				
106 Dundee Road, West Fork North Branch Chicago River	0.020	0.066	0.120	0.001
103 Golf Road, West Fork North Branch Chicago River	0.020	0.058	0.113	0.001
31 Lake-Cook Road, Middle Fork North Branch	0.020	0.040	0.070	0.001
104 Glenview Road, North Branch Chicago River	0.020	0.036	0.103	0.001
32 Lake-Cook Road, Skokie River	0.020	0.046	0.090	0.001
105 Frontage Road, Skokie River	0.020	0.033	0.115	0.001
34 Dempster Street, North Branch Chicago River	0.020	0.049	0.110	0.001
96 Albany Avenue, North Branch Chicago River	0.020	0.044	0.115	0.001
35 Central Street, North Shore Channel	0.020	0.033	0.060	0.001
112 Dempster Street, North Shore Channel	0.020	ND	ND	0.001
102 Oakton Street, North Shore Channel	0.020	0.024	0.178	0.001
36 Touhy Avenue, North Shore Channel	0.020	0.024	0.170	0.001
101 Foster Avenue, North Shore Channel	0.020	0.025	0.170	0.001
37 Wilson Avenue, North Branch Chicago River	0.020	0.027	0.150	0.001
73 Diversey Parkway, North Branch Chicago River	0.020	0.026	0.168	0.001
46 Grand Avenue, North Branch Chicago River	0.020	0.027	0.158	0.001
74 Lake Shore Drive, Chicago River	0.020	0.027	0.093	0.001
100 Wells Street, Chicago River	0.020	0.027	0.120	0.001
39 Madison Street, South Branch Chicago River	0.020	0.026	0.138	0.001
108 Loomis Street, South Branch Chicago River	0.020	0.027	0.138	0.001
99 Archer Avenue, South Fork South Branch Chicago River	0.020	0.025	0.110	0.001
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.020	0.026	0.135	0.001
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.020	0.025	0.148	0.001
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.020	0.022	0.173	0.001
42 Route 83, Chicago Sanitary & Ship Canal	0.020	0.018	0.253	0.001
48 Stephen Street, Chicago Sanitary & Ship Canal	0.020	0.021	0.248	0.001
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.020	0.021	0.237	0.001
Calumet River System				
49 Ewing Avenue, Calumet River	0.020	0.021	0.050	0.001
50 Burnham Avenue, Wolf Lake	0.020	0.035	0.238	0.001
55 130th Street, Calumet River	0.020	0.031	0.183	0.001
86 Burnham Avenue, Grand Calumet River	0.025	0.033	1.000	0.001
56 Indiana Avenue, Little Calumet River	0.020	0.030	0.203	0.001
76 Halsted Street, Little Calumet River	0.020	0.020	0.210	0.001
52 Wentworth Avenue, Little Calumet River	0.020	0.032	0.175	0.001
54 Joe Orr Road, Thorn Creek	0.020	0.026	0.260	0.001
97 170th Street, Thorn Creek	0.020	0.033	0.193	0.001
57 Ashland Avenue, Little Calumet River	0.020	0.034	0.178	0.001
58 Ashland Avenue, Calumet-Sag Channel	0.020	0.022	0.198	0.001
59 Cicero Avenue, Calumet-Sag Channel	0.020	0.023	0.193	0.001
43 Route 83, Calumet-Sag Channel	0.020	0.024	0.203	0.001
Des Plaines River System				
90 Route 19, Poplar Creek	0.020	0.064	0.050	0.001
110 Springinguth Road, West Branch DuPage River	0.022	0.048	0.053	0.002
89 Walnut Lane, West Branch DuPage River	0.020	0.035	0.193	0.001
111 Arlington Drive, West Branch DuPage River	0.020	0.038	0.140	0.001
79 Higgins Road, Salt Creek	0.020	0.047	0.070	0.002
80 Arlington Heights Road, Salt Creek	0.020	0.036	0.158	0.001
18 Devon Avenue, Salt Creek	0.020	0.036	0.148	0.001
24 Wolf Road, Salt Creek	0.020	0.036	0.165	0.001
109 Brookfield Avenue, Salt Creek	0.020	0.037	0.165	0.001
77 Elmhurst Road, Higgins Creek	0.021	0.058	0.177	0.001
78 Wille Road, Higgins Creek	0.020	0.033	0.230	0.001
12 Lake-Cook Road, Buffalo Creek	0.020	0.041	0.075	0.001
13 Lake-Cook Road, Des Plaines River	0.020	0.035	0.088	0.001
17 Oakton Street, Des Plaines River	0.020	0.036	0.090	0.001
19 Belmont Avenue, Des Plaines River	0.021	0.036	0.103	0.001
20 Roosevelt Road, Des Plaines River	0.020	0.037	0.103	0.001
22 Ogden Avenue, Des Plaines River	0.021	0.038	0.120	0.001
23 Willow Springs Road, Des Plaines River	0.020	0.037	0.115	0.001
29 Stephen Street, Des Plaines River	0.020	0.037	0.115	0.001
91 Material Service Road, Des Plaines River	0.020	0.036	0.118	0.001

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2012

Sampling Station (No. Name)	Sol. Cu mg/L	Sol. Cr mg/L	Sol. Fe mg/L	Sol. Pb mg/L
Chicago River System				
106 Dundee Road, West Fork North Branch Chicago River	0.007	0.005	0.100	0.020
103 Golf Road, West Fork North Branch Chicago River	0.005	0.005	0.100	0.020
31 Lake-Cook Road, Middle Fork North Branch	0.005	0.005	0.100	0.020
104 Glenview Road, North Branch Chicago River	0.005	0.005	0.100	0.020
32 Lake-Cook Road, Skokie River	0.005	0.005	0.100	0.020
105 Frontage Road, Skokie River	0.005	0.005	0.100	0.020
34 Dempster Street, North Branch Chicago River	0.005	0.005	0.100	0.020
96 Albany Avenue, North Branch Chicago River	0.005	0.005	0.100	0.020
35 Central Street, North Shore Channel	0.005	0.005	0.100	0.020
112 Dempster Street, North Shore Channel	0.005	0.005	0.100	0.020
102 Oakton Street, North Shore Channel	0.005	0.005	0.100	0.020
36 Touhy Avenue, North Shore Channel	0.005	0.005	0.100	0.020
101 Foster Avenue, North Shore Channel	0.005	0.005	0.100	0.020
37 Wilson Avenue, North Branch Chicago River	0.005	0.005	0.100	0.020
73 Diversey Parkway, North Branch Chicago River	0.005	0.005	0.100	0.020
46 Grand Avenue, North Branch Chicago River	0.005	0.006	0.100	0.020
74 Lake Shore Drive, Chicago River	0.006	0.005	0.100	0.020
100 Wells Street, Chicago River	0.006	0.005	0.100	0.020
39 Madison Street, South Branch Chicago River	0.005	0.005	0.100	0.020
108 Loomis Street, South Branch Chicago River	0.005	0.005	0.100	0.020
99 Archer Avenue, South Fork South Branch Chicago River	0.005	0.005	0.108	0.020
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.007	0.005	0.100	0.020
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.005	0.005	0.100	0.020
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.006	0.005	0.100	0.020
42 Route 83, Chicago Sanitary & Ship Canal	0.005	0.005	0.100	0.020
48 Stephen Street, Chicago Sanitary & Ship Canal	0.005	0.005	0.117	0.020
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.005	0.005	0.100	0.020
Calumet River System				
49 Ewing Avenue, Calumet River	0.005	0.005	0.100	0.020
50 Burnham Avenue, Wolf Lake	0.005	0.005	0.129	0.020
55 130th Street, Calumet River	0.005	0.005	0.100	0.020
86 Burnham Avenue, Grand Calumet River	0.005	0.005	0.318	0.020
56 Indiana Avenue, Little Calumet River	0.005	0.005	0.100	0.020
76 Halsted Street, Little Calumet River	0.005	0.005	0.100	0.020
52 Wentworth Avenue, Little Calumet River	0.005	0.005	0.100	0.020
54 Joe Orr Road, Thorn Creek	0.005	0.005	0.100	0.020
97 170th Street, Thorn Creek	0.005	0.005	0.100	0.020
57 Ashland Avenue, Little Calumet River	0.005	0.005	0.100	0.020
58 Ashland Avenue, Calumet-Sag Channel	0.005	0.005	0.100	0.020
59 Cicero Avenue, Calumet-Sag Channel	0.005	0.005	0.100	0.020
43 Route 83, Calumet-Sag Channel	0.005	0.005	0.100	0.020
Des Plaines River System				
90 Route 19, Poplar Creek	0.005	0.005	0.100	0.020
110 Springinguth Road, West Branch DuPage River	0.005	0.005	0.218	0.020
89 Walnut Lane, West Branch DuPage River	0.006	0.005	0.100	0.020
111 Arlington Drive, West Branch DuPage River	0.005	0.005	0.100	0.020
79 Higgins Road, Salt Creek	0.005	0.005	0.100	0.020
80 Arlington Heights Road, Salt Creek	0.005	0.005	0.100	0.020
18 Devon Avenue, Salt Creek	0.005	0.005	0.100	0.020
24 Wolf Road, Salt Creek	0.005	0.005	0.100	0.020
109 Brookfield Avenue, Salt Creek	0.005	0.006	0.100	0.020
77 Elmhurst Road, Higgins Creek	0.005	0.005	0.100	0.020
78 Wille Road, Higgins Creek	0.005	0.005	0.100	0.020
12 Lake-Cook Road, Buffalo Creek	0.005	0.005	0.100	0.020
13 Lake-Cook Road, Des Plaines River	0.005	0.005	0.100	0.020
17 Oakton Street, Des Plaines River	0.005	0.005	0.100	0.020
19 Belmont Avenue, Des Plaines River	0.005	0.036	0.100	0.020
20 Roosevelt Road, Des Plaines River	0.005	0.005	0.100	0.020
22 Ogden Avenue, Des Plaines River	0.005	0.011	0.100	0.020
23 Willow Springs Road, Des Plaines River	0.005	0.005	0.100	0.020
29 Stephen Street, Des Plaines River	0.005	0.005	0.100	0.020
91 Material Service Road, Des Plaines River	0.005	0.005	0.100	0.020

TABLE AII-1 (Continued): WATERWAYS SAMPLE MEANS IN 2012

Sampling Station (No. Name)	Sol. Ni mg/L	Sol. Mn mg/L	Sol. Zn mg/L	Sol. Se mg/L
Chicago River System				
106 Dundee Road, West Fork North Branch Chicago River	0.005	0.053	0.022	0.006
103 Golf Road, West Fork North Branch Chicago River	0.005	0.066	0.013	0.006
31 Lake-Cook Road, Middle Fork North Branch	0.005	0.094	0.010	0.006
104 Glenview Road, North Branch Chicago River	0.005	0.049	0.014	0.006
32 Lake-Cook Road, Skokie River	0.005	0.092	0.010	0.006
105 Frontage Road, Skokie River	0.005	0.023	0.017	0.006
34 Dempster Street, North Branch Chicago River	0.005	0.056	0.013	0.006
96 Albany Avenue, North Branch Chicago River	0.005	0.056	0.011	0.007
35 Central Street, North Shore Channel	0.005	0.010	0.010	0.005
112 Dempster Street, North Shore Channel	0.005	ND	0.012	ND
102 Oakton Street, North Shore Channel	0.008	0.025	0.021	0.006
36 Touhy Avenue, North Shore Channel	0.006	0.029	0.028	0.006
101 Foster Avenue, North Shore Channel	0.008	0.030	0.029	0.006
37 Wilson Avenue, North Branch Chicago River	0.005	0.032	0.023	0.005
73 Diversey Parkway, North Branch Chicago River	0.007	0.035	0.023	0.006
46 Grand Avenue, North Branch Chicago River	0.010	0.027	0.024	0.006
74 Lake Shore Drive, Chicago River	0.006	0.025	0.017	0.006
100 Wells Street, Chicago River	0.006	0.041	0.022	0.007
39 Madison Street, South Branch Chicago River	0.006	0.041	0.023	0.007
108 Loomis Street, South Branch Chicago River	0.006	0.036	0.023	0.007
99 Archer Avenue, South Fork South Branch Chicago River	0.006	0.052	0.016	0.005
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.006	0.041	0.021	0.006
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.006	0.037	0.019	0.006
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.008	0.018	0.023	0.006
42 Route 83, Chicago Sanitary & Ship Canal	0.008	0.025	0.023	0.006
48 Stephen Street, Chicago Sanitary & Ship Canal	0.007	0.035	0.022	0.007
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.006	0.035	0.020	0.006
Calumet River System				
49 Ewing Avenue, Calumet River	0.005	0.016	0.010	0.005
50 Burnham Avenue, Wolf Lake	0.005	0.011	0.010	0.005
55 130th Street, Calumet River	0.005	0.011	0.010	0.005
86 Burnham Avenue, Grand Calumet River	0.005	0.237	0.010	0.007
56 Indiana Avenue, Little Calumet River	0.005	0.017	0.012	0.005
76 Halsted Street, Little Calumet River	0.005	0.028	0.019	0.005
52 Wentworth Avenue, Little Calumet River	0.005	0.099	0.011	0.005
54 Joe Orr Road, Thorn Creek	0.005	0.058	0.030	0.006
97 170th Street, Thorn Creek	0.007	0.070	0.013	0.006
57 Ashland Avenue, Little Calumet River	0.005	0.074	0.014	0.006
58 Ashland Avenue, Calumet-Sag Channel	0.005	0.052	0.017	0.006
59 Cicero Avenue, Calumet-Sag Channel	0.005	0.047	0.017	0.005
43 Route 83, Calumet-Sag Channel	0.005	0.061	0.017	0.005
Des Plaines River System				
90 Route 19, Poplar Creek	0.005	0.063	0.010	0.006
110 Springinguth Road, West Branch DuPage River	0.005	0.105	0.014	0.006
89 Walnut Lane, West Branch DuPage River	0.005	0.037	0.039	0.005
111 Arlington Drive, West Branch DuPage River	0.005	0.056	0.027	0.005
79 Higgins Road, Salt Creek	0.005	0.068	0.010	0.006
80 Arlington Heights Road, Salt Creek	0.006	0.031	0.017	0.005
18 Devon Avenue, Salt Creek	0.007	0.026	0.019	0.006
24 Wolf Road, Salt Creek	0.006	0.036	0.019	0.006
109 Brookfield Avenue, Salt Creek	0.009	0.041	0.019	0.006
77 Elmhurst Road, Higgins Creek	0.005	0.087	0.011	0.006
78 Wille Road, Higgins Creek	0.007	0.029	0.034	0.005
12 Lake-Cook Road, Buffalo Creek	0.006	0.249	0.010	0.006
13 Lake-Cook Road, Des Plaines River	0.005	0.047	0.011	0.006
17 Oakton Street, Des Plaines River	0.005	0.028	0.013	0.006
19 Belmont Avenue, Des Plaines River	0.005	0.033	0.017	0.005
20 Roosevelt Road, Des Plaines River	0.005	0.031	0.011	0.005
22 Ogden Avenue, Des Plaines River	0.006	0.029	0.016	0.006
23 Willow Springs Road, Des Plaines River	0.006	0.032	0.016	0.006
29 Stephen Street, Des Plaines River	0.005	0.051	0.013	0.005
91 Material Service Road, Des Plaines River	0.005	0.029	0.018	0.006

ND = No Data.

¹Un-ionized Ammonia.²Geometric Mean.

TABLE AII-2: DISSOLVED OXYGEN VIOLATION HISTORY
2005 THROUGH 2012

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

ND = No Data.

TABLE AII-3: TEMPERATURE VIOLATION HISTORY
2005 THROUGH 2012

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

ND = No Data.

TABLE AII-4: pH VIOLATION HISTORY
2005 THROUGH 2012

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

ND = No Data.

TABLE AII-5: CHLORIDE VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	2/5	3/10	3/10	4/11	3/11	0/4	1/5	2/4
103 Golf Road, West Fork North Branch Chicago River	2/7	3/11	2/10	3/11	2/10	2/10	2/12	5/10
31 Lake-Cook Road, Middle Fork North Branch	0/4	0/9	1/9	0/10	1/10	0/10	1/11	0/10
104 Glenview Road, North Branch Chicago River	1/7	1/12	1/9	0/12	1/12	1/11	1/12	1/12
32 Lake-Cook Road, Skokie River	1/6	0/10	1/9	0/10	1/10	0/10	0/12	2/11
105 Frontage Road, Skokie River	0/7	0/12	0/12	0/12	2/12	0/11	0/12	0/12
34 Dempster Street, North Branch Chicago River	1/7	0/11	1/8	0/12	2/11	1/11	1/12	2/11
96 Albany Avenue, North Branch Chicago River	1/12	0/11	2/11	1/12	3/12	1/11	2/12	1/11
35 Central Street, North Shore Channel	0/5	0/8	0/8	0/9	0/9	0/9	0/9	0/8
112 Dempster Street, North Shore Channel	0/5	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0/7	0/12	0/11	0/11	0/11	0/12	0/12	0/12
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	0/6	1/12	0/11	0/9	0/10	0/11	0/11	0/10
100 Wells Street, Chicago River	0/11	0/12	0/12	0/11	0/12	1/11	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	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	0/6	0/6	0/6	0/7	0/9	0/10	0/11	0/11
50 Burnham Avenue, Wolf Lake	0/7	0/11	0/11	0/10	0/12	0/11	0/10	0/12
55 130th Street, Calumet River	0/7	0/10	0/10	0/9	0/9	0/10	0/11	0/11
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	0/7	0/10	0/11	0/10	0/10	0/11	0/11	0/11
54 Joe Orr Road, Thorn Creek	0/7	0/10	1/9	0/9	0/9	0/10	0/9	0/8
97 170th Street, Thorn Creek	0/6	0/10	1/11	0/9	0/11	0/11	0/11	0/11
57 Ashland Avenue, Little Calumet River	0/11	0/10	1/10	0/9	0/10	0/11	0/11	1/11
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/7	1/11	1/10	0/11	1/11	1/11	2/12	1/11
110 Springinsguth Road, West Branch DuPage River	0/11	2/10	0/8	1/9	1/11	1/10	2/11	3/11
89 Walnut Lane, West Branch DuPage River	0/7	0/12	0/12	0/12	1/12	0/12	1/12	0/12
64 Lake Street, West Branch DuPage River	ND	ND	1/6	0/12	1/12	1/12	0/12	0/12
111 Arlington Drive, West Branch DuPage River	0/12	0/12	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	1/11	2/10	0/8	0/8	2/9	2/10	1/9	2/9
80 Arlington Heights Road, Salt Creek	0/7	2/11	1/12	0/12	3/12	1/12	2/12	2/12
18 Devon Avenue, Salt Creek	0/12	2/11	1/10	0/11	3/12	1/12	2/12	2/12
24 Wolf Road, Salt Creek	0/7	1/11	1/10	0/12	3/12	1/11	0/12	1/12
109 Brookfield Avenue, Salt Creek	1/12	2/11	1/11	0/11	2/11	1/11	1/12	1/12
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	1/8	0/5	1/1	1/4	2/5	0/5	2/7	2/4
78 Wille Road, Higgins Creek	0/11	0/11	0/9	1/12	1/12	1/12	0/12	1/12
12 Lake-Cook Road, Buffalo Creek	0/6	0/9	1/7	0/9	3/11	1/9	0/9	1/7
13 Lake-Cook Road, Des Plaines River	0/7	0/11	0/11	0/12	0/12	0/12	0/12	0/12
17 Oakton Street, Des Plaines River	0/7	0/11	1/11	0/11	0/11	0/11	1/12	1/12
19 Belmont Avenue, Des Plaines River	0/12	0/11	1/11	0/12	1/12	0/11	2/12	0/12
20 Roosevelt Road, Des Plaines River	0/7	0/11	1/11	0/11	3/12	0/11	2/12	1/12
22 Ogden Avenue, Des Plaines River	0/12	0/11	1/12	0/11	2/11	0/11	1/12	1/12
23 Willow Springs Road, Des Plaines River	0/12	0/11	1/11	0/11	2/11	2/11	1/12	1/12
29 Stephen Street, Des Plaines River	0/7	0/11	1/12	0/11	3/12	1/11	1/12	1/12
91 Material Service Road, Des Plaines River	0/12	0/11	1/12	0/12	2/12	1/11	1/12	1/12

NA = Not Applicable.
ND = No Data.

TABLE AII-6: AMMONIUM NITROGEN VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	0/5	0/10	0/10	0/11	0/11	0/4	0/5	0/4
103 Golf Road, West Fork North Branch Chicago River	0/7	0/11	0/10	0/11	0/10	0/11	0/12	0/10
31 Lake-Cook Road, Middle Fork North Branch	0/4	0/9	0/9	0/10	0/10	0/10	0/11	0/10
104 Glenview Road, North Branch Chicago River	0/7	0/12	0/9	0/12	0/12	0/11	0/12	0/12
32 Lake-Cook Road, Skokie River	0/6	0/10	0/9	0/10	0/10	0/10	0/12	0/11
105 Frontage Road, Skokie River	0/7	0/12	0/12	0/12	0/12	0/11	0/12	0/12
34 Dempster Street, North Branch Chicago River	0/7	0/11	0/8	0/12	0/11	0/11	0/12	0/11
96 Albany Avenue, North Branch Chicago River	0/12	0/11	0/11	0/12	0/12	0/11	0/12	0/11
35 Central Street, North Shore Channel	0/5	0/8	0/8	0/9	0/9	0/9	0/9	0/8
112 Dempster Street, North Shore Channel	0/5	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0/7	0/12	0/11	0/11	0/11	0/12	0/12	0/12
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	0/6	0/12	0/11	0/9	0/10	0/11	0/11	0/10
100 Wells Street, Chicago River	0/11	0/12	0/12	0/11	0/12	0/11	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	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	0/6	0/6	0/6	0/7	0/9	0/10	0/11	0/11
50 Burnham Avenue, Wolf Lake	2/7	0/11	0/11	0/10	0/12	0/11	0/11	0/12
55 130th Street, Calumet River	0/7	0/10	0/10	0/9	0/9	0/10	0/11	0/11
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	0/7	0/10	0/11	0/10	0/10	0/11	0/11	0/11
54 Joe Orr Road, Thorn Creek	0/7	0/10	0/9	0/9	0/9	0/10	0/9	0/8
97 170th Street, Thorn Creek	0/6	0/10	0/11	0/9	0/11	0/11	0/11	0/11
57 Ashland Avenue, Little Calumet River	0/11	0/10	0/10	0/9	0/10	0/11	0/11	0/11
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/7	0/11	0/10	0/11	0/11	0/11	0/12	0/11
110 Springinsguth Road, West Branch DuPage River	0/11	0/10	0/8	0/9	0/11	0/10	0/11	0/11
89 Walnut Lane, West Branch DuPage River	0/7	0/12	0/12	0/12	0/12	0/12	0/12	0/12
64 Lake Street, West Branch DuPage River	ND	ND	0/6	0/12	0/12	0/12	0/12	0/12
111 Arlington Drive, West Branch DuPage River	0/12	0/12	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0/11	0/10	0/8	0/8	0/9	0/10	0/9	0/9
80 Arlington Heights Road, Salt Creek	0/7	0/11	0/12	0/12	0/12	0/12	0/12	0/12
18 Devon Avenue, Salt Creek	0/12	0/11	0/10	0/11	0/12	0/12	0/12	0/12
24 Wolf Road, Salt Creek	0/7	0/11	0/10	0/12	0/12	0/11	0/12	0/12
109 Brookfield Avenue, Salt Creek	0/12	0/11	0/11	0/11	0/11	0/11	0/12	0/12
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/8	0/5	0/1	0/4	0/5	0/5	0/7	0/4
78 Wille Road, Higgins Creek	0/11	0/11	0/9	0/12	0/12	0/12	0/12	0/12
12 Lake-Cook Road, Buffalo Creek	0/6	0/9	0/7	0/9	0/11	0/9	0/9	0/7
13 Lake-Cook Road, Des Plaines River	0/7	0/11	0/11	0/12	0/12	0/12	0/12	0/12
17 Oakton Street, Des Plaines River	0/7	0/11	0/11	0/11	0/11	0/11	0/12	0/12
19 Belmont Avenue, Des Plaines River	0/12	0/11	0/11	0/12	0/12	0/11	0/12	0/12
20 Roosevelt Road, Des Plaines River	0/7	0/11	0/11	0/11	0/12	0/11	0/12	0/12
22 Ogden Avenue, Des Plaines River	0/12	0/11	0/12	0/11	0/11	0/11	0/12	0/12
23 Willow Springs Road, Des Plaines River	0/12	0/11	0/11	0/11	0/11	0/11	0/12	0/12
29 Stephen Street, Des Plaines River	0/7	0/11	0/12	0/11	0/12	0/11	0/12	0/12
91 Material Service Road, Des Plaines River	0/12	0/11	0/12	0/12	0/12	0/11	0/12	0/12

NA = Not Applicable.
ND = No Data.

TABLE AII-7: UN-IONIZED AMMONIA VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
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	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	NA	NA	NA	NA	NA	NA	NA	NA
105 Frontage Road, Skokie River	NA	NA	NA	NA	NA	NA	NA	NA
34 Dempster Street, North Branch Chicago River	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
112 Dempster 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
36 Touhy Avenue, North Shore Channel	0/12	0/12	0/11	0/10	0/12	0/12	0/11	0/12
101 Foster Avenue, North Shore Channel	0/7	0/12	0/12	0/12	0/12	0/12	0/11	0/13
37 Wilson Avenue, North Branch Chicago River	0/6	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	1/12	0/12
46 Grand Avenue, North Branch Chicago River	0/7	0/12	0/12	0/12	0/12	0/11	0/12	0/12
74 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	0/6	0/6	0/12	0/11	0/12	0/11	0/12	0/12
108 Loomis Street, South Branch Chicago River	0/12	0/12	0/11	0/12	0/11	0/12	0/12	0/10
99 Archer Avenue, South Fork South Branch Chicago River	0/12	0/12	0/10	0/11	0/12	0/11	0/7	0/11
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/7	0/12	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 Cicero Avenue, Chicago Sanitary & Ship Canal	0/12	0/12	0/12	0/12	0/12	0/12	0/13	1/12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/12	0/11	0/9	0/12	0/12	0/12	0/13	0/12
42 Route 83, Chicago Sanitary & Ship Canal	0/7	0/11	0/12	0/10	0/12	0/11	0/13	0/11
48 Stephen Street, Chicago Sanitary & Ship Canal	0/12	0/11	0/12	0/10	0/12	0/10	0/13	0/11
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/51	0/51	0/51	0/51	0/51	0/50	0/52	0/51
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	NA
55 130th Street, Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
86 Burnham Avenue, Grand Calumet River	1/11	0/10	1/7	0/5	0/10	1/9	0/11	0/10
56 Indiana Avenue, Little Calumet River	0/10	0/10	0/10	0/8	0/9	0/9	0/11	0/9
76 Halsted Street, Little Calumet River	0/11	0/11	0/10	0/11	0/12	0/11	0/11	0/12
52 Wentworth Avenue, Little Calumet River	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
58 Ashland Avenue, Calumet-Sag Channel	0/7	0/11	0/10	0/11	0/12	0/11	0/11	0/12
59 Cicero Avenue, Calumet-Sag Channel	0/10	0/11	0/10	0/10	0/11	0/11	0/11	0/12
43 Route 83, Calumet-Sag Channel	0/11	0/11	0/11	0/10	0/10	0/11	0/11	0/11
Des Plaines River System								
90 Route 19, Poplar Creek	NA	NA	NA	NA	NA	NA	NA	NA
110 Springinsguth Road, 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
111 Arlington Drive, 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	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	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
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
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

NA = Not Applicable.
ND = No Data.

**TABLE AII-8: TOTAL DISSOLVED SOLIDS VIOLATION HISTORY
2005 THROUGH 2012**

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

ND = No Data.

TABLE AII-9: PHENOLS VIOLATION HISTORY
2005 THROUGH 2012

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

ND = No Data.

TABLE AII-10: SULFATE VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	0/5	0/10	0/10	0/10	0/11	0/4	0/5	0/4
103 Golf Road, West Fork North Branch Chicago River	0/7	0/11	0/10	0/11	0/10	0/11	0/12	0/10
31 Lake-Cook Road, Middle Fork North Branch	0/4	0/9	0/9	0/10	0/10	0/10	0/11	0/10
104 Glenview Road, North Branch Chicago River	0/7	0/11	0/9	0/11	0/12	0/11	0/12	0/12
32 Lake-Cook Road, Skokie River	0/6	0/10	0/9	0/9	0/10	0/10	0/12	0/11
105 Frontage Road, Skokie River	0/7	0/12	0/12	0/12	0/12	0/11	0/12	0/12
34 Dempster Street, North Branch Chicago River	0/7	0/11	0/8	0/12	0/11	0/11	0/12	0/11
96 Albany Avenue, North Branch Chicago River	0/12	0/11	0/11	0/12	0/12	0/11	0/12	0/11
35 Central Street, North Shore Channel	0/5	0/8	0/8	0/9	0/9	0/9	0/9	0/8
112 Dempster Street, North Shore Channel	0/5	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0/7	0/12	0/11	0/11	0/11	0/12	0/12	0/12
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	0/6	0/12	0/11	0/9	0/10	0/11	0/11	0/10
100 Wells Street, Chicago River	0/11	0/12	0/12	0/11	0/12	0/11	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	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	0/6	0/6	0/6	0/7	0/9	0/10	0/11	0/11
50 Burnham Avenue, Wolf Lake	0/7	0/11	0/11	0/10	0/12	0/11	0/11	0/12
55 130th Street, Calumet River	0/7	0/10	0/10	0/9	0/9	0/10	0/11	0/11
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	0/7	0/10	0/11	0/10	0/10	0/11	0/11	0/11
54 Joe Orr Road, Thorn Creek	0/7	4/10	4/9	4/9	9/9	4/10	6/8	4/8
97 170th Street, Thorn Creek	0/6	1/10	3/11	1/9	3/11	3/11	3/10	4/11
57 Ashland Avenue, Little Calumet River	0/11	0/10	0/10	0/9	0/10	1/11	0/11	1/11
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/7	0/11	0/10	0/11	0/11	0/11	0/12	0/11
110 Springinsguth Road, West Branch DuPage River	0/11	0/10	0/8	0/9	0/11	0/10	0/11	0/11
89 Walnut Lane, West Branch DuPage River	0/7	0/12	0/12	0/11	0/12	0/12	0/12	0/12
64 Lake Street, West Branch DuPage River	ND	ND	0/6	0/12	0/12	0/12	0/12	0/12
111 Arlington Drive, West Branch DuPage River	0/12	0/12	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0/11	0/10	0/8	0/8	0/9	0/10	0/9	0/9
80 Arlington Heights Road, Salt Creek	0/7	0/11	0/12	0/12	0/12	0/12	0/12	0/12
18 Devon Avenue, Salt Creek	0/12	0/11	0/10	0/11	0/12	0/12	0/12	0/12
24 Wolf Road, Salt Creek	0/7	0/11	0/10	0/11	0/12	0/11	0/12	0/12
109 Brookfield Avenue, Salt Creek	0/12	0/11	0/11	0/11	0/11	0/11	0/12	0/12
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/8	0/5	0/1	0/4	0/5	0/5	0/7	0/4
78 Wille Road, Higgins Creek	0/11	0/11	0/9	0/12	0/12	0/12	0/12	0/12
12 Lake-Cook Road, Buffalo Creek	0/6	0/9	0/7	0/8	0/11	0/9	0/9	0/7
13 Lake-Cook Road, Des Plaines River	0/7	0/11	0/11	0/11	0/12	0/12	0/12	0/12
17 Oakton Street, Des Plaines River	0/7	0/11	0/11	0/11	0/11	0/11	0/12	0/12
19 Belmont Avenue, Des Plaines River	0/12	0/11	0/11	0/12	0/12	0/11	0/12	0/12
20 Roosevelt Road, Des Plaines River	0/7	0/11	0/11	0/11	0/12	0/11	0/12	0/12
22 Ogden Avenue, Des Plaines River	0/12	0/11	0/12	0/11	0/11	0/11	0/12	0/12
23 Willow Springs Road, Des Plaines River	0/12	0/11	0/11	0/11	0/11	0/11	0/12	0/12
29 Stephen Street, Des Plaines River	0/7	0/11	0/12	0/11	0/12	0/11	0/12	0/12
91 Material Service Road, Des Plaines River	0/12	0/11	0/12	0/12	0/12	0/11	0/12	0/12

NA = Not Applicable.
ND = No Data.

TABLE AII-11: FATS, OILS, AND GREASES VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
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	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	NA	NA	NA	NA	NA	NA	NA	NA
105 Frontage Road, Skokie River	NA	NA	NA	NA	NA	NA	NA	NA
34 Dempster Street, North Branch Chicago River	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
112 Dempster 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
36 Touhy Avenue, North Shore Channel	0/12	0/12	0/11	0/10	0/12	0/10	0/11	0/12
101 Foster Avenue, North Shore Channel	0/7	0/12	0/12	0/12	0/12	0/12	0/12	0/13
37 Wilson Avenue, North Branch Chicago River	0/6	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
46 Grand Avenue, North Branch Chicago River	0/7	0/12	0/12	0/12	0/12	0/11	0/12	0/12
74 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	0/6	0/6	0/12	0/11	0/12	0/11	0/12	0/12
108 Loomis Street, South Branch Chicago River	0/12	0/12	0/11	0/12	0/11	0/12	0/12	0/10
99 Archer Avenue, South Fork South Branch Chicago River	0/12	0/12	0/10	0/11	0/12	0/11	0/7	0/11
40 Damen Avenue, Chicago Sanitary & Ship Canal	1/7	0/12	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 Cicero Avenue, Chicago Sanitary & Ship Canal	0/12	0/12	0/12	0/12	0/12	0/12	0/13	0/12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/12	0/12	0/9	0/12	0/12	0/12	0/13	0/12
42 Route 83, Chicago Sanitary & Ship Canal	0/7	0/12	0/12	0/10	0/12	0/11	0/13	0/11
48 Stephen Street, Chicago Sanitary & Ship Canal	0/12	1/12	0/12	0/10	0/12	0/11	0/13	0/11
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/51	0/51	0/51	0/50	0/50	0/51	0/53	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	NA
55 130th Street, Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
86 Burnham Avenue, Grand Calumet River	0/11	0/10	0/7	0/5	0/10	0/10	0/11	0/10
56 Indiana Avenue, Little Calumet River	0/10	0/10	0/10	0/8	0/9	0/9	0/11	0/9
76 Halsted Street, Little Calumet River	0/11	0/11	0/10	0/11	0/12	0/11	0/11	0/12
52 Wentworth Avenue, Little Calumet River	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
58 Ashland Avenue, Calumet-Sag Channel	0/7	0/11	0/10	0/11	0/12	0/11	0/11	0/12
59 Cicero Avenue, Calumet-Sag Channel	0/10	0/11	0/10	0/10	0/11	0/11	0/11	0/12
43 Route 83, Calumet-Sag Channel	0/11	0/11	0/11	1/10	0/10	0/11	0/11	0/11
Des Plaines River System								
90 Route 19, Poplar Creek	NA	NA	NA	NA	NA	NA	NA	NA
110 Springinsguth Road, 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
111 Arlington Drive, 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	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	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
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
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

NA = Not Applicable.
ND = No Data.

TABLE AII-12: TOTAL CYANIDE VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
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	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	NA	NA	NA	NA	NA	NA	NA	NA
105 Frontage Road, Skokie River	NA	NA	NA	NA	NA	NA	NA	NA
34 Dempster Street, North Branch Chicago River	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
112 Dempster 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
36 Touhy Avenue, North Shore Channel	0/12	0/12	0/11	0/10	0/12	0/12	0/12	0/12
101 Foster Avenue, North Shore Channel	0/7	0/12	0/12	0/12	0/12	0/12	0/12	0/13
37 Wilson Avenue, North Branch Chicago River	0/6	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
46 Grand Avenue, North Branch Chicago River	0/7	0/12	0/12	0/12	0/12	0/11	0/12	0/12
74 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	0/6	0/6	0/12	0/11	0/12	0/11	0/12	0/12
108 Loomis Street, South Branch Chicago River	0/12	0/12	0/11	0/12	0/11	0/12	0/12	0/10
99 Archer Avenue, South Fork South Branch Chicago River	0/12	0/12	0/10	0/11	0/12	0/11	0/7	0/11
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/7	0/12	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 Cicero Avenue, Chicago Sanitary & Ship Canal	0/12	0/12	0/12	0/12	0/12	0/12	0/13	0/12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/12	0/12	0/9	0/12	0/12	0/12	0/13	0/12
42 Route 83, Chicago Sanitary & Ship Canal	0/7	0/12	0/12	0/10	0/12	0/11	0/13	0/11
48 Stephen Street, Chicago Sanitary & Ship Canal	0/12	0/12	0/12	0/10	0/12	0/11	0/13	0/11
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/51	0/51	0/51	0/51	0/51	0/51	0/53	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	NA
55 130th Street, Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
86 Burnham Avenue, Grand Calumet River	0/11	0/10	0/7	0/5	0/10	0/10	0/11	0/10
56 Indiana Avenue, Little Calumet River	0/10	0/10	0/10	0/8	0/9	0/9	0/11	0/9
76 Halsted Street, Little Calumet River	0/11	0/11	0/10	0/11	0/12	0/11	0/11	0/12
52 Wentworth Avenue, Little Calumet River	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
58 Ashland Avenue, Calumet-Sag Channel	0/7	0/11	0/10	0/11	0/12	0/11	0/11	0/12
59 Cicero Avenue, Calumet-Sag Channel	0/10	0/11	0/10	0/10	0/11	0/11	0/11	0/12
43 Route 83, Calumet-Sag Channel	0/11	0/11	0/11	0/10	0/10	0/11	0/11	0/10
Des Plaines River System								
90 Route 19, Poplar Creek	NA	NA	NA	NA	NA	NA	NA	NA
110 Springinsguth Road, 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
111 Arlington Drive, 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	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	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
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
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

NA = Not Applicable.
ND = No Data.

**TABLE AII-13: WEAK ACID DISSOCIABLE CYANIDE VIOLATION HISTORY
2005 THROUGH 2012**

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	0/5	0/10	0/10	0/11	0/11	0/4	0/5	0/4
103 Golf Road, West Fork North Branch Chicago River	0/7	0/11	0/10	0/11	0/10	0/11	0/12	0/10
31 Lake-Cook Road, Middle Fork North Branch	0/4	0/9	0/9	0/10	0/10	0/10	0/11	0/10
104 Glenview Road, North Branch Chicago River	0/7	0/12	0/9	0/12	0/12	0/11	0/12	0/12
32 Lake-Cook Road, Skokie River	0/6	0/10	0/9	0/10	0/10	0/10	0/12	0/10
105 Frontage Road, Skokie River	0/7	0/12	0/12	0/12	0/12	0/11	0/12	0/12
34 Dempster Street, North Branch Chicago River	0/7	0/11	0/8	0/12	0/11	0/11	0/12	0/11
96 Albany Avenue, North Branch Chicago River	0/12	0/11	0/11	0/12	0/12	0/11	0/12	0/11
35 Central Street, North Shore Channel	0/5	0/8	0/8	0/9	0/9	0/9	0/9	0/8
112 Dempster Street, North Shore Channel	0/5	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0/7	0/12	0/11	0/11	0/11	0/12	0/12	0/12
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	0/6	0/12	0/11	0/9	0/10	0/11	0/11	0/10
100 Wells Street, Chicago River	0/11	0/12	0/12	0/11	0/12	0/11	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	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	0/6	0/6	0/6	0/7	0/9	0/10	0/11	0/11
50 Burnham Avenue, Wolf Lake	0/7	0/11	0/11	0/10	0/12	0/11	0/11	0/12
55 130th Street, Calumet River	0/7	0/10	0/10	0/9	0/9	0/10	0/11	0/11
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	0/7	0/10	0/11	0/10	0/10	0/11	0/11	0/11
54 Joe Orr Road, Thorn Creek	0/7	0/10	0/9	0/9	0/9	0/10	0/8	0/8
97 170th Street, Thorn Creek	0/6	0/10	0/11	0/9	0/11	0/11	0/11	0/11
57 Ashland Avenue, Little Calumet River	0/11	0/10	0/10	0/9	0/10	0/11	0/11	0/11
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/7	0/11	0/10	0/11	0/11	0/11	0/12	0/11
110 Springinsguth Road, West Branch DuPage River	0/11	0/10	0/8	0/9	0/11	0/10	0/11	0/11
89 Walnut Lane, West Branch DuPage River	0/7	0/12	0/12	0/12	0/12	0/12	0/12	0/12
64 Lake Street, West Branch DuPage River	ND	ND	0/6	0/12	0/12	0/12	0/12	0/12
111 Arlington Drive, West Branch DuPage River	0/12	0/12	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0/11	0/10	0/8	0/8	0/9	0/10	0/9	0/9
80 Arlington Heights Road, Salt Creek	0/7	0/11	0/12	0/12	0/12	0/12	0/12	0/12
18 Devon Avenue, Salt Creek	0/12	0/11	0/10	0/11	0/12	0/12	0/12	0/12
24 Wolf Road, Salt Creek	0/7	0/11	0/10	0/12	0/12	0/11	0/12	0/12
109 Brookfield Avenue, Salt Creek	0/12	0/11	0/11	0/11	0/11	0/11	0/12	0/12
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/8	0/5	0/1	0/4	0/5	0/5	0/7	0/4
78 Wille Road, Higgins Creek	0/11	0/11	0/9	0/12	0/12	0/12	0/12	0/12
12 Lake-Cook Road, Buffalo Creek	0/6	0/9	0/7	0/9	0/11	0/9	0/9	0/7
13 Lake-Cook Road, Des Plaines River	0/7	0/11	0/11	0/12	0/12	0/12	0/12	0/12
17 Oakton Street, Des Plaines River	0/7	0/11	0/11	0/11	0/11	0/11	0/12	0/12
19 Belmont Avenue, Des Plaines River	0/12	0/11	0/11	0/12	0/12	0/11	0/12	0/12
20 Roosevelt Road, Des Plaines River	0/7	0/11	0/11	0/11	0/12	0/11	0/12	0/12
22 Ogden Avenue, Des Plaines River	0/12	0/10	0/12	0/11	0/11	0/11	0/12	0/12
23 Willow Springs Road, Des Plaines River	0/12	0/11	0/11	0/11	0/11	0/11	0/12	0/12
29 Stephen Street, Des Plaines River	0/7	0/11	0/12	0/11	0/12	0/11	0/12	0/12
91 Material Service Road, Des Plaines River	0/12	0/11	0/12	0/12	0/12	0/11	0/12	0/12

NA = Not Applicable.
ND = No Data.

TABLE AII-14: FLUORIDE VIOLATION HISTORY
2005 THROUGH 2012

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

ND = No Data.

**TABLE AII-15: FECAL COLIFORM VIOLATION HISTORY
2005 THROUGH 2012**

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	4/5	10/10	9/10	11/11	10/11	3/4	4/5	3/4
103 Golf Road, West Fork North Branch Chicago River	5/7	8/11	6/10	8/11	9/10	8/11	8/12	8/10
31 Lake-Cook Road, Middle Fork North Branch	2/4	5/9	6/9	5/10	9/10	7/10	10/11	5/10
104 Glenview Road, North Branch Chicago River	2/7	4/12	2/9	6/12	7/12	7/11	7/12	9/12
32 Lake-Cook Road, Skokie River	5/6	8/10	4/9	6/10	6/10	10/10	5/12	7/11
105 Frontage Road, Skokie River	1/7	2/12	2/12	3/12	1/12	1/11	1/12	2/12
34 Dempster Street, North Branch Chicago River	3/7	6/11	6/8	6/12	9/11	7/11	11/12	9/11
96 Albany Avenue, North Branch Chicago River	5/12	3/11	7/11	7/12	8/12	6/11	10/12	9/11
35 Central Street, North Shore Channel	0/5	2/8	2/8	1/9	2/9	1/9	2/9	1/8
112 Dempster Street, North Shore Channel	3/5	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	6/7	8/12	6/11	4/11	8/11	8/12	9/12	7/12
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	1/6	0/12	0/11	3/9	2/10	2/11	0/11	2/10
100 Wells Street, Chicago River	4/11	8/12	3/12	2/11	7/12	2/11	3/12	3/12
39 Madison Street, South Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
108 Loomis Street, South Branch Chicago River	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	0/6	0/6	0/6	0/7	0/9	0/10	0/11	0/11
50 Burnham Avenue, Wolf Lake	0/7	2/11	0/11	0/10	0/12	2/11	0/11	2/12
55 130th Street, Calumet River	0/7	0/10	1/10	0/9	1/9	1/10	1/11	0/11
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	6/7	10/10	11/11	10/10	8/10	10/11	10/11	10/11
54 Joe Orr Road, Thorn Creek	4/7	10/10	7/9	9/9	8/9	8/10	9/9	8/8
97 170th Street, Thorn Creek	4/6	8/10	7/11	6/9	10/11	7/11	8/11	11/11
57 Ashland Avenue, Little Calumet River	5/11	9/10	7/10	4/9	9/10	10/11	6/11	10/11
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	1/7	1/11	1/10	2/11	2/11	4/11	5/12	5/11
110 Springinsguth Road, West Branch DuPage River	11/11	8/10	7/8	8/9	9/11	9/10	11/11	9/11
89 Walnut Lane, West Branch DuPage River	5/7	8/12	7/12	7/12	8/12	8/12	7/12	10/12
64 Lake Street, West Branch DuPage River	ND	ND	4/6	7/12	8/12	9/12	10/12	10/12
111 Arlington Drive, West Branch DuPage River	9/12	7/12	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	2/11	0/10	2/8	1/8	1/9	6/10	3/9	3/9
80 Arlington Heights Road, Salt Creek	5/7	4/11	4/12	3/12	5/12	5/12	6/12	6/12
18 Devon Avenue, Salt Creek	8/12	5/11	6/10	5/11	7/12	7/12	10/12	9/12
24 Wolf Road, Salt Creek	4/7	4/11	5/10	7/12	4/12	6/11	9/12	9/12
109 Brookfield Avenue, Salt Creek	6/12	8/11	6/11	7/11	6/11	8/11	10/12	10/12
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	2/8	2/5	0/1	3/4	3/5	5/5	7/7	3/4
78 Wille Road, Higgins Creek	4/11	3/11	5/9	7/12	6/12	9/12	7/12	5/12
12 Lake-Cook Road, Buffalo Creek	1/6	0/9	1/7	2/9	3/11	4/9	3/9	3/7
13 Lake-Cook Road, Des Plaines River	1/7	1/11	3/11	2/12	5/12	6/12	4/12	6/12
17 Oakton Street, Des Plaines River	1/7	4/11	4/11	2/11	6/11	4/11	7/12	7/12
19 Belmont Avenue, Des Plaines River	4/12	4/11	4/11	4/12	5/12	5/11	8/12	7/11
20 Roosevelt Road, Des Plaines River	3/7	6/11	2/11	6/11	7/12	7/11	10/12	8/12
22 Ogden Avenue, Des Plaines River	6/12	4/11	5/12	3/11	5/11	4/11	11/12	10/12
23 Willow Springs Road, Des Plaines River	3/12	4/11	4/11	2/11	2/11	5/11	8/12	6/12
29 Stephen Street, Des Plaines River	1/7	3/11	2/12	1/11	3/12	3/11	6/12	5/12
91 Material Service Road, Des Plaines River	0/12	3/11	0/12	1/12	2/12	4/11	6/12	5/12

NA = Not Applicable.
ND = No Data.

TABLE AII-16: GROSS BETA RADIOACTIVITY VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	0/5	0/10	0/10	0/11	0/11	0/4	0/5	0/4
103 Golf Road, West Fork North Branch Chicago River	0/7	0/11	0/10	0/11	0/10	0/11	0/12	0/10
31 Lake-Cook Road, Middle Fork North Branch	0/4	0/9	0/9	0/10	0/10	0/10	0/11	0/10
104 Glenview Road, North Branch Chicago River	0/7	0/12	0/9	0/12	0/12	0/11	0/12	0/12
32 Lake-Cook Road, Skokie River	0/6	0/10	0/9	0/10	0/10	0/10	0/12	0/11
105 Frontage Road, Skokie River	0/7	0/12	0/12	0/12	0/12	0/11	0/12	0/12
34 Dempster Street, North Branch Chicago River	0/7	0/11	0/8	0/12	0/11	0/11	0/12	0/11
96 Albany Avenue, North Branch Chicago River	0/12	0/11	0/11	0/12	0/12	0/11	0/12	0/11
35 Central Street, North Shore Channel	0/5	0/8	0/8	0/9	0/9	0/9	0/9	0/8
112 Dempster Street, North Shore Channel	0/5	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0/7	0/12	0/10	0/11	0/11	0/12	0/12	0/12
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	0/6	0/12	0/11	0/9	0/10	0/11	0/11	0/10
100 Wells Street, Chicago River	0/11	0/12	0/12	0/11	0/12	0/11	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	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	0/6	0/6	0/6	0/6	0/9	0/10	0/11	0/11
50 Burnham Avenue, Wolf Lake	0/7	0/11	0/10	0/10	0/12	0/11	0/11	0/12
55 130th Street, Calumet River	0/7	0/10	0/10	0/9	0/9	0/10	0/11	0/11
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	0/7	0/10	0/11	0/10	0/10	0/11	0/11	0/11
54 Joe Orr Road, Thorn Creek	0/7	0/10	0/9	0/9	0/9	0/10	0/9	0/8
97 170th Street, Thorn Creek	0/6	0/10	0/11	0/9	0/11	0/11	0/11	0/11
57 Ashland Avenue, Little Calumet River	0/11	0/10	0/9	0/8	0/10	0/11	0/11	0/11
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/7	0/11	0/10	0/11	0/11	0/11	0/12	0/11
110 Springinsguth Road, West Branch DuPage River	0/11	0/10	0/7	0/8	0/11	0/10	0/11	0/11
89 Walnut Lane, West Branch DuPage River	0/7	0/12	0/12	0/12	0/12	0/12	0/12	0/12
64 Lake Street, West Branch DuPage River	ND	ND	0/6	0/12	0/12	0/12	0/12	0/12
111 Arlington Drive, West Branch DuPage River	0/12	0/12	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0/11	0/10	0/8	0/8	0/9	0/10	0/9	0/9
80 Arlington Heights Road, Salt Creek	0/7	0/11	0/12	0/12	0/12	0/12	0/12	0/12
18 Devon Avenue, Salt Creek	0/12	0/11	0/10	0/10	0/12	0/12	0/12	0/12
24 Wolf Road, Salt Creek	0/7	0/11	0/10	0/12	0/12	0/11	0/12	0/12
109 Brookfield Avenue, Salt Creek	0/12	0/11	0/11	0/11	0/11	0/11	0/12	0/12
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/8	0/5	0/1	0/4	0/5	0/5	0/7	0/4
78 Wille Road, Higgins Creek	0/11	0/11	0/9	0/11	0/12	0/12	0/12	0/12
12 Lake-Cook Road, Buffalo Creek	0/6	0/9	0/7	0/9	0/11	0/9	0/9	0/7
13 Lake-Cook Road, Des Plaines River	0/7	0/11	0/11	0/12	0/12	0/12	0/12	0/12
17 Oakton Street, Des Plaines River	0/7	0/11	0/11	0/11	0/11	0/11	0/12	0/12
19 Belmont Avenue, Des Plaines River	0/12	0/11	0/10	0/12	0/12	0/11	0/12	0/12
20 Roosevelt Road, Des Plaines River	0/7	0/11	0/11	0/11	0/12	0/11	0/12	0/12
22 Ogden Avenue, Des Plaines River	0/12	0/11	0/12	0/11	0/11	0/11	0/12	0/12
23 Willow Springs Road, Des Plaines River	0/12	0/11	0/11	0/11	0/11	0/11	0/12	0/12
29 Stephen Street, Des Plaines River	0/7	0/11	0/12	0/11	0/12	0/11	0/12	0/12
91 Material Service Road, Des Plaines River	0/11	0/11	0/12	0/12	0/12	0/11	0/11	0/12

NA = Not Applicable.
ND = No Data.

TABLE AII-17: BENZENE VIOLATION HISTORY
2005 THROUGH 2012 (Human Health Standard)¹

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	0/1	0/5	0/5	0/6	0/5	0/2	0/2	0/8
103 Golf Road, West Fork North Branch Chicago River	0/3	0/6	0/5	0/6	0/4	0/5	0/4	0/4
31 Lake-Cook Road, Middle Fork North Branch	0/1	0/5	0/4	0/5	0/4	0/4	0/4	0/5
104 Glenview Road, North Branch Chicago River	0/3	0/6	0/5	0/6	0/6	0/5	0/4	0/5
32 Lake-Cook Road, Skokie River	0/2	0/5	0/4	0/5	0/4	0/4	0/4	0/5
105 Frontage Road, Skokie River	0/3	0/6	0/6	0/6	0/6	0/5	0/4	0/5
34 Dempster Street, North Branch Chicago River	0/3	0/5	0/4	0/6	0/5	0/5	0/3	0/5
96 Albany Avenue, North Branch Chicago River	0/6	0/5	0/6	0/6	0/6	0/5	0/4	0/5
35 Central Street, North Shore Channel	0/2	0/4	0/3	0/4	0/4	0/4	0/3	0/4
112 Dempster Street, North Shore Channel	NA	NA	NA	NA	NA	NA	NA	NA
102 Oakton Street, North Shore Channel	0/3	0/6	0/5	0/6	0/5	0/6	0/4	0/5
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	0/3	0/6	0/5	0/4	0/5	0/5	0/3	0/5
100 Wells Street, Chicago River	0/5	0/6	0/6	0/5	0/6	0/5	0/3	0/6
39 Madison Street, South Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
108 Loomis Street, South Branch Chicago River	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	0/4	0/2	0/4	0/4	0/5	0/6	0/4	0/5
50 Burnham Avenue, Wolf Lake	0/4	0/6	0/6	0/5	0/6	0/6	0/4	0/6
55 130th Street, Calumet River	0/4	0/5	0/6	0/5	0/4	0/6	0/4	0/5
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	0/4	0/5	0/6	0/5	0/5	0/6	0/4	0/5
54 Joe Orr Road, Thorn Creek	0/4	0/5	0/6	0/4	0/4	0/5	0/3	0/4
97 170th Street, Thorn Creek	0/4	0/5	0/6	0/5	0/6	0/6	0/4	0/6
57 Ashland Avenue, Little Calumet River	0/6	0/5	0/5	0/5	0/5	0/6	0/4	0/5
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/3	0/5	0/5	0/5	0/5	0/6	0/4	0/5
110 Springinsguth Road, West Branch DuPage River	NA	0/3	0/4	0/5	0/5	0/4	0/4	0/5
89 Walnut Lane, West Branch DuPage River	0/3	0/6	0/6	0/6	0/6	0/6	0/4	0/6
64 Lake Street, West Branch DuPage River	NA	NA	0/3	0/6	0/6	0/6	0/4	0/6
111 Arlington Drive, West Branch DuPage River	NA	0/3	NA	NA	NA	NA	NA	NA
79 Higgins Road, Salt Creek	0/6	0/5	0/4	0/4	0/4	0/5	0/3	0/4
80 Arlington Heights Road, Salt Creek	0/3	0/5	0/6	0/6	0/6	0/5	0/4	0/6
18 Devon Avenue, Salt Creek	0/5	0/5	0/4	0/5	0/6	0/6	0/4	0/6
24 Wolf Road, Salt Creek	0/3	0/5	0/5	0/6	0/6	0/5	0/4	0/6
109 Brookfield Avenue, Salt Creek	0/6	0/5	0/6	0/5	0/5	0/5	0/4	NA
21 First Avenue, Salt Creek	NA	NA	NA	NA	NA	NA	NA	NA
77 Elmhurst Road, Higgins Creek	0/4	0/3	0/1	0/2	0/2	0/4	0/1	0/3
78 Wille Road, Higgins Creek	0/5	0/5	0/4	0/6	0/6	0/6	0/4	0/5
12 Lake-Cook Road, Buffalo Creek	0/3	0/4	0/4	0/4	0/6	0/5	0/2	0/3
13 Lake-Cook Road, Des Plaines River	0/3	0/5	0/5	0/6	0/6	0/6	0/4	0/6
17 Oakton Street, Des Plaines River	0/3	0/5	0/6	0/5	0/5	0/5	0/4	0/6
19 Belmont Avenue, Des Plaines River	0/6	0/5	0/6	0/6	0/6	0/5	0/4	0/6
20 Roosevelt Road, Des Plaines River	0/3	0/5	0/6	0/5	0/6	0/5	0/4	0/6
22 Ogden Avenue, Des Plaines River	0/6	0/5	0/6	0/5	0/5	0/5	0/4	0/6
23 Willow Springs Road, Des Plaines River	0/6	0/5	0/6	0/5	0/5	0/5	0/4	0/6
29 Stephen Street, Des Plaines River	0/3	0/5	0/6	0/5	0/6	0/5	0/4	0/6
91 Material Service Road, Des Plaines River	0/6	0/5	0/6	0/6	0/6	0/5	0/4	0/6

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

TABLE AII-18: BENZENE VIOLATION HISTORY
2005 THROUGH 2012 (General Use Standard)¹

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	0/1	0/5	0/5	0/6	0/5	0/2	0/2	0/8
103 Golf Road, West Fork North Branch Chicago River	0/3	0/6	0/5	0/6	0/4	0/5	0/4	0/4
31 Lake-Cook Road, Middle Fork North Branch	0/1	0/5	0/4	0/5	0/4	0/4	0/4	0/5
104 Glenview Road, North Branch Chicago River	0/3	0/6	0/5	0/6	0/6	0/5	0/4	0/5
32 Lake-Cook Road, Skokie River	0/2	0/5	0/4	0/5	0/4	0/4	0/4	0/5
105 Frontage Road, Skokie River	0/3	0/6	0/6	0/6	0/6	0/5	0/4	0/5
34 Dempster Street, North Branch Chicago River	0/3	0/5	0/4	0/6	0/5	0/5	0/3	0/5
96 Albany Avenue, North Branch Chicago River	0/6	0/5	0/6	0/6	0/6	0/5	0/4	0/5
35 Central Street, North Shore Channel	0/2	0/4	0/3	0/4	0/4	0/4	0/3	0/4
112 Dempster Street, North Shore Channel	NA	NA	NA	NA	NA	NA	NA	NA
102 Oakton Street, North Shore Channel	0/3	0/6	0/5	0/6	0/5	0/6	0/4	0/5
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	0/3	0/6	0/5	0/4	0/5	0/5	0/3	0/5
100 Wells Street, Chicago River	0/5	0/6	0/6	0/5	0/6	0/5	0/3	0/6
39 Madison Street, South Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
108 Loomis Street, South Branch Chicago River	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	0/4	0/2	0/4	0/4	0/5	0/6	0/4	0/5
50 Burnham Avenue, Wolf Lake	0/4	0/6	0/6	0/5	0/6	0/6	0/4	0/6
55 130th Street, Calumet River	0/4	0/5	0/6	0/5	0/4	0/6	0/4	0/5
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	0/4	0/5	0/6	0/5	0/5	0/6	0/4	0/5
54 Joe Orr Road, Thorn Creek	0/4	0/5	0/6	0/4	0/4	0/5	0/3	0/4
97 170th Street, Thorn Creek	0/4	0/5	0/6	0/5	0/6	0/6	0/4	0/6
57 Ashland Avenue, Little Calumet River	0/6	0/5	0/5	0/5	0/5	0/6	0/4	0/5
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/3	0/5	0/5	0/5	0/5	0/6	0/4	0/5
110 Springinsguth Road, West Branch DuPage River	NA	0/3	0/4	0/5	0/5	0/4	0/4	0/5
89 Walnut Lane, West Branch DuPage River	0/3	0/6	0/6	0/6	0/6	0/6	0/4	0/6
64 Lake Street, West Branch DuPage River	NA	NA	0/3	0/6	0/6	0/6	0/4	0/6
111 Arlington Drive, West Branch DuPage River	NA	0/3	NA	NA	NA	NA	NA	NA
79 Higgins Road, Salt Creek	0/6	0/5	0/4	0/4	0/4	0/5	0/3	0/4
80 Arlington Heights Road, Salt Creek	0/3	0/5	0/6	0/6	0/6	0/5	0/4	0/6
18 Devon Avenue, Salt Creek	0/5	0/5	0/4	0/5	0/6	0/6	0/4	0/6
24 Wolf Road, Salt Creek	0/3	0/5	0/5	0/6	0/6	0/5	0/4	0/6
109 Brookfield Avenue, Salt Creek	0/6	0/5	0/6	0/5	0/5	0/5	0/4	NA
21 First Avenue, Salt Creek	NA	NA	NA	NA	NA	NA	NA	NA
77 Elmhurst Road, Higgins Creek	0/4	0/3	0/1	0/2	0/2	0/4	0/1	0/3
78 Wille Road, Higgins Creek	0/5	0/5	0/4	0/6	0/6	0/6	0/4	0/5
12 Lake-Cook Road, Buffalo Creek	0/3	0/4	0/4	0/4	0/6	0/5	0/2	0/3
13 Lake-Cook Road, Des Plaines River	0/3	0/5	0/5	0/6	0/6	0/6	0/4	0/6
17 Oakton Street, Des Plaines River	0/3	0/5	0/6	0/5	0/5	0/5	0/4	0/6
19 Belmont Avenue, Des Plaines River	0/6	0/5	0/6	0/6	0/6	0/5	0/4	0/6
20 Roosevelt Road, Des Plaines River	0/3	0/5	0/6	0/5	0/6	0/5	0/4	0/6
22 Ogden Avenue, Des Plaines River	0/6	0/5	0/6	0/5	0/5	0/5	0/4	0/6
23 Willow Springs Road, Des Plaines River	0/6	0/5	0/6	0/5	0/5	0/5	0/4	0/6
29 Stephen Street, Des Plaines River	0/3	0/5	0/6	0/5	0/6	0/5	0/4	0/6
91 Material Service Road, Des Plaines River	0/6	0/5	0/6	0/6	0/6	0/5	0/4	0/6

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

TABLE AII-19: ETHYLBENZENE VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	0/1	0/5	0/5	0/6	0/5	0/2	0/2	0/8
103 Golf Road, West Fork North Branch Chicago River	0/3	0/6	0/5	0/6	0/4	0/5	0/4	0/4
31 Lake-Cook Road, Middle Fork North Branch	0/1	0/5	0/4	0/5	0/4	0/4	0/4	0/5
104 Glenview Road, North Branch Chicago River	0/3	0/6	0/5	0/6	0/6	0/5	0/4	0/5
32 Lake-Cook Road, Skokie River	0/2	0/5	0/4	0/5	0/4	0/4	0/4	0/5
105 Frontage Road, Skokie River	0/3	0/6	0/6	0/6	0/6	0/5	0/4	0/5
34 Dempster Street, North Branch Chicago River	0/3	0/5	0/4	0/6	0/5	0/5	0/3	0/5
96 Albany Avenue, North Branch Chicago River	0/6	0/5	0/6	0/6	0/6	0/5	0/4	0/5
35 Central Street, North Shore Channel	0/2	0/4	0/3	0/4	0/4	0/4	0/3	0/4
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0/3	0/6	0/5	0/6	0/5	0/6	0/4	0/5
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	0/3	0/6	0/5	0/4	0/5	0/5	0/3	0/5
100 Wells Street, Chicago River	0/5	0/6	0/6	0/5	0/6	0/5	0/3	0/6
39 Madison Street, South Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
108 Loomis Street, South Branch Chicago River	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	0/4	0/2	0/4	0/4	0/5	0/6	0/4	0/5
50 Burnham Avenue, Wolf Lake	0/4	0/6	0/6	0/5	0/6	0/6	0/4	0/6
55 130th Street, Calumet River	0/4	0/5	0/6	0/5	0/4	0/6	0/4	0/5
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	0/4	0/5	0/6	0/5	0/5	0/6	0/4	0/5
54 Joe Orr Road, Thorn Creek	0/4	0/5	0/6	0/4	0/4	0/5	0/3	0/4
97 170th Street, Thorn Creek	0/4	0/5	0/6	0/5	0/6	0/6	0/4	0/6
57 Ashland Avenue, Little Calumet River	0/6	0/5	0/5	0/5	0/5	0/6	0/4	0/5
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/3	0/5	0/5	0/5	0/5	0/6	0/4	0/5
110 Springinsguth Road, West Branch DuPage River	ND	0/3	0/4	0/5	0/5	0/4	0/4	0/5
89 Walnut Lane, West Branch DuPage River	0/3	0/6	0/6	0/6	0/6	0/6	0/4	0/6
64 Lake Street, West Branch DuPage River	ND	ND	0/3	0/6	0/6	0/6	0/4	0/6
111 Arlington Drive, West Branch DuPage River	ND	0/3	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0/6	0/5	0/4	0/4	0/4	0/5	0/3	0/4
80 Arlington Heights Road, Salt Creek	0/3	0/5	0/6	0/6	0/6	0/5	0/4	0/6
18 Devon Avenue, Salt Creek	0/5	0/5	0/4	0/5	0/6	0/6	0/4	0/6
24 Wolf Road, Salt Creek	0/3	0/5	0/5	0/6	0/6	0/5	0/4	0/6
109 Brookfield Avenue, Salt Creek	0/6	0/5	0/6	0/5	0/5	0/5	0/4	ND
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/4	0/3	0/1	0/2	0/2	0/4	0/1	0/3
78 Wille Road, Higgins Creek	0/5	0/5	0/4	0/6	0/6	0/6	0/4	0/5
12 Lake-Cook Road, Buffalo Creek	0/3	0/4	0/4	0/4	0/6	0/5	0/2	0/3
13 Lake-Cook Road, Des Plaines River	0/3	0/5	0/5	0/6	0/6	0/6	0/4	0/6
17 Oakton Street, Des Plaines River	0/3	0/5	0/6	0/5	0/5	0/5	0/4	0/6
19 Belmont Avenue, Des Plaines River	0/6	0/5	0/6	0/6	0/6	0/5	0/4	0/6
20 Roosevelt Road, Des Plaines River	0/3	0/5	0/6	0/5	0/6	0/5	0/4	0/6
22 Ogden Avenue, Des Plaines River	0/6	0/5	0/6	0/5	0/5	0/5	0/4	0/6
23 Willow Springs Road, Des Plaines River	0/6	0/5	0/6	0/5	0/5	0/5	0/4	0/6
29 Stephen Street, Des Plaines River	0/3	0/5	0/6	0/5	0/6	0/5	0/4	0/6
91 Material Service Road, Des Plaines River	0/6	0/5	0/6	0/6	0/6	0/5	0/4	0/6

NA = Not Applicable.
ND = No Data.

TABLE AII-20: TOLUENE VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	0/1	0/5	0/5	0/6	0/5	0/2	0/2	0/8
103 Golf Road, West Fork North Branch Chicago River	0/3	0/6	0/5	0/6	0/4	0/5	0/4	0/4
31 Lake-Cook Road, Middle Fork North Branch	0/1	0/5	0/4	0/5	0/4	0/4	0/4	0/5
104 Glenview Road, North Branch Chicago River	0/3	0/6	0/5	0/6	0/6	0/5	0/4	0/5
32 Lake-Cook Road, Skokie River	0/2	0/5	0/4	0/5	0/4	0/4	0/4	0/5
105 Frontage Road, Skokie River	0/3	0/6	0/6	0/6	0/6	0/5	0/4	0/5
34 Dempster Street, North Branch Chicago River	0/3	0/5	0/4	0/6	0/5	0/5	0/3	0/5
96 Albany Avenue, North Branch Chicago River	0/6	0/5	0/6	0/6	0/6	0/5	0/4	0/5
35 Central Street, North Shore Channel	0/2	0/4	0/3	0/4	0/4	0/4	0/3	0/4
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0/3	0/6	0/5	0/6	0/5	0/6	0/4	0/5
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	0/3	0/6	0/5	0/4	0/5	0/5	0/3	0/5
100 Wells Street, Chicago River	0/5	0/6	0/6	0/5	0/6	0/5	0/3	0/6
39 Madison Street, South Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
108 Loomis Street, South Branch Chicago River	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	0/4	0/2	0/4	0/4	0/5	0/6	0/4	0/5
50 Burnham Avenue, Wolf Lake	0/4	0/6	0/6	0/5	0/6	0/6	0/4	0/6
55 130th Street, Calumet River	0/4	0/5	0/6	0/5	0/4	0/6	0/4	0/5
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	0/4	0/5	0/6	0/5	0/5	0/6	0/4	0/5
54 Joe Orr Road, Thorn Creek	0/4	0/5	0/6	0/4	0/4	0/5	0/3	0/4
97 170th Street, Thorn Creek	0/4	0/5	0/6	0/5	0/6	0/6	0/4	0/6
57 Ashland Avenue, Little Calumet River	0/6	0/5	0/5	0/5	0/5	0/6	0/4	0/5
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/3	0/5	0/5	0/5	0/5	0/6	0/4	0/5
110 Springinsguth Road, West Branch DuPage River	ND	0/3	0/4	0/5	0/5	0/4	0/4	0/5
89 Walnut Lane, West Branch DuPage River	0/3	0/6	0/6	0/6	0/6	0/6	0/4	0/6
64 Lake Street, West Branch DuPage River	ND	ND	0/3	0/6	0/6	0/6	0/4	0/6
111 Arlington Drive, West Branch DuPage River	ND	0/3	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0/6	0/5	0/4	0/4	0/4	0/5	0/3	0/4
80 Arlington Heights Road, Salt Creek	0/3	0/5	0/6	0/6	0/6	0/5	0/4	0/6
18 Devon Avenue, Salt Creek	0/5	0/5	0/4	0/5	0/6	0/6	0/4	0/6
24 Wolf Road, Salt Creek	0/3	0/5	0/5	0/6	0/6	0/5	0/4	0/6
109 Brookfield Avenue, Salt Creek	0/6	0/5	0/6	0/5	0/5	0/5	0/4	ND
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/4	0/3	0/1	0/2	0/2	0/4	0/1	0/3
78 Wille Road, Higgins Creek	0/5	0/5	0/4	0/6	0/6	0/6	0/4	0/5
12 Lake-Cook Road, Buffalo Creek	0/3	0/4	0/4	0/4	0/6	0/5	0/2	0/3
13 Lake-Cook Road, Des Plaines River	0/3	0/5	0/5	0/6	0/6	0/6	0/4	0/6
17 Oakton Street, Des Plaines River	0/3	0/5	0/6	0/5	0/5	0/5	0/4	0/6
19 Belmont Avenue, Des Plaines River	0/6	0/5	0/6	0/6	0/6	0/5	0/4	0/6
20 Roosevelt Road, Des Plaines River	0/3	0/5	0/6	0/5	0/6	0/5	0/4	0/6
22 Ogden Avenue, Des Plaines River	0/6	0/5	0/6	0/5	0/5	0/5	0/4	0/6
23 Willow Springs Road, Des Plaines River	0/6	0/5	0/6	0/5	0/5	0/5	0/4	0/6
29 Stephen Street, Des Plaines River	0/3	0/5	0/6	0/5	0/6	0/5	0/4	0/6
91 Material Service Road, Des Plaines River	0/6	0/5	0/6	0/6	0/6	0/5	0/4	0/6

NA = Not Applicable.
ND = No Data.

TABLE AII-21: XYLENE VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	0/1	0/5	0/5	0/6	0/5	0/2	0/2	0/8
103 Golf Road, West Fork North Branch Chicago River	0/3	0/6	0/5	0/6	0/4	0/5	0/4	0/4
31 Lake-Cook Road, Middle Fork North Branch	0/1	0/5	0/4	0/5	0/4	0/4	0/4	0/5
104 Glenview Road, North Branch Chicago River	0/3	0/6	0/5	0/6	0/6	0/5	0/4	0/5
32 Lake-Cook Road, Skokie River	0/2	0/5	0/4	0/5	0/4	0/4	0/4	0/5
105 Frontage Road, Skokie River	0/3	0/6	0/6	0/6	0/6	0/5	0/4	0/5
34 Dempster Street, North Branch Chicago River	0/3	0/5	0/4	0/6	0/5	0/5	0/3	0/5
96 Albany Avenue, North Branch Chicago River	0/6	0/5	0/6	0/6	0/6	0/5	0/4	0/5
35 Central Street, North Shore Channel	0/2	0/4	0/3	0/4	0/4	0/4	0/3	0/4
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0/3	0/6	0/5	0/6	0/5	0/6	0/4	0/5
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	0/3	0/6	0/5	0/4	0/5	0/5	0/3	0/5
100 Wells Street, Chicago River	0/5	0/6	0/6	0/5	0/6	0/5	0/3	0/6
39 Madison Street, South Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
108 Loomis Street, South Branch Chicago River	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	0/4	0/2	0/4	0/4	0/5	0/6	0/4	0/5
50 Burnham Avenue, Wolf Lake	0/4	0/6	0/6	0/5	0/6	0/6	0/4	0/6
55 130th Street, Calumet River	0/4	0/5	0/6	0/5	0/4	0/6	0/4	0/5
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	0/4	0/5	0/6	0/5	0/5	0/6	0/4	0/5
54 Joe Orr Road, Thorn Creek	0/4	0/5	0/6	0/4	0/4	0/5	0/3	0/4
97 170th Street, Thorn Creek	0/4	0/5	0/6	0/5	0/6	0/6	0/4	0/6
57 Ashland Avenue, Little Calumet River	0/6	0/5	0/5	0/5	0/5	0/6	0/4	0/5
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/3	0/5	0/5	0/5	0/5	0/6	0/4	0/5
110 Springinsguth Road, West Branch DuPage River	ND	0/3	0/4	0/5	0/5	0/4	0/4	0/5
89 Walnut Lane, West Branch DuPage River	0/3	0/6	0/6	0/6	0/6	0/6	0/4	0/6
64 Lake Street, West Branch DuPage River	ND	ND	0/3	0/6	0/6	0/6	0/4	0/6
111 Arlington Drive, West Branch DuPage River	ND	0/3	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0/6	0/5	0/4	0/4	0/4	0/5	0/3	0/4
80 Arlington Heights Road, Salt Creek	0/3	0/5	0/6	0/6	0/6	0/5	0/4	0/6
18 Devon Avenue, Salt Creek	0/5	0/5	0/4	0/5	0/6	0/6	0/4	0/6
24 Wolf Road, Salt Creek	0/3	0/5	0/5	0/6	0/6	0/5	0/4	0/6
109 Brookfield Avenue, Salt Creek	0/6	0/5	0/6	0/5	0/5	0/5	0/4	ND
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/4	0/3	0/1	0/2	0/2	0/4	0/1	0/3
78 Wille Road, Higgins Creek	0/5	0/5	0/4	0/6	0/6	0/6	0/4	0/5
12 Lake-Cook Road, Buffalo Creek	0/3	0/4	0/4	0/4	0/6	0/5	0/2	0/3
13 Lake-Cook Road, Des Plaines River	0/3	0/5	0/5	0/6	0/6	0/6	0/4	0/6
17 Oakton Street, Des Plaines River	0/3	0/5	0/6	0/5	0/5	0/5	0/4	0/6
19 Belmont Avenue, Des Plaines River	0/6	0/5	0/6	0/6	0/6	0/5	0/4	0/6
20 Roosevelt Road, Des Plaines River	0/3	0/5	0/6	0/5	0/6	0/5	0/4	0/6
22 Ogden Avenue, Des Plaines River	0/6	0/5	0/6	0/5	0/5	0/5	0/4	0/6
23 Willow Springs Road, Des Plaines River	0/6	0/5	0/6	0/5	0/5	0/5	0/4	0/6
29 Stephen Street, Des Plaines River	0/3	0/5	0/6	0/5	0/6	0/5	0/4	0/6
91 Material Service Road, Des Plaines River	0/6	0/5	0/6	0/6	0/6	0/5	0/4	0/6

NA = Not Applicable.
ND = No Data.

TABLE AII-22: TOTAL SILVER VIOLATION HISTORY
2005 THROUGH 2012

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

ND = No Data.

TABLE AII-23: TOTAL ARSENIC VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
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	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	NA	NA	NA	NA	NA	NA	NA	NA
105 Frontage Road, Skokie River	NA	NA	NA	NA	NA	NA	NA	NA
34 Dempster Street, North Branch Chicago River	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
112 Dempster 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
36 Touhy Avenue, North Shore Channel	0/4	0/12	0/11	0/10	0/12	0/12	0/12	0/12
101 Foster Avenue, North Shore Channel	0/4	0/12	0/12	0/12	0/12	0/12	0/12	0/13
37 Wilson Avenue, North Branch Chicago River	0/3	0/12	0/12	0/12	0/12	0/12	0/12	0/12
73 Diversey Parkway, North Branch Chicago River	0/4	0/12	0/12	0/12	0/12	0/12	0/12	0/12
46 Grand Avenue, North Branch Chicago River	0/4	0/12	0/12	0/12	0/12	0/11	0/12	0/12
74 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	0/4	0/6	0/12	0/11	0/12	0/11	0/12	0/12
108 Loomis Street, South Branch Chicago River	0/4	0/12	0/11	0/12	0/11	0/12	0/12	0/10
99 Archer Avenue, South Fork South Branch Chicago River	0/4	0/12	0/10	0/11	0/12	0/11	0/7	0/11
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/4	0/12	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 Cicero Avenue, Chicago Sanitary & Ship Canal	0/4	0/12	0/12	0/12	0/12	0/12	0/13	0/12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/4	0/12	0/9	0/12	0/12	0/12	0/13	0/12
42 Route 83, Chicago Sanitary & Ship Canal	0/4	0/12	0/12	0/10	0/12	0/11	0/13	0/11
48 Stephen Street, Chicago Sanitary & Ship Canal	0/4	0/12	0/12	0/10	0/12	0/11	0/13	0/11
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/17	0/51	0/51	0/51	0/51	0/51	0/53	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	NA
55 130th Street, Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
86 Burnham Avenue, Grand Calumet River	0/4	0/10	0/7	0/5	0/10	0/10	0/11	0/10
56 Indiana Avenue, Little Calumet River	0/3	0/10	0/10	0/8	0/9	0/9	0/11	0/9
76 Halsted Street, Little Calumet River	0/4	0/11	0/10	0/11	0/12	0/11	0/11	0/12
52 Wentworth Avenue, Little Calumet River	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
58 Ashland Avenue, Calumet-Sag Channel	0/4	0/11	0/10	0/11	0/12	0/11	0/11	0/12
59 Cicero Avenue, Calumet-Sag Channel	0/4	0/11	0/10	0/10	0/11	0/11	0/11	0/12
43 Route 83, Calumet-Sag Channel	0/4	0/11	0/11	0/10	0/10	0/11	0/11	0/11
Des Plaines River System								
90 Route 19, Poplar Creek	NA	NA	NA	NA	NA	NA	NA	NA
110 Springinsguth Road, 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
111 Arlington Drive, 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	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	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
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
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

NA = Not Applicable.
ND = No Data.

**TABLE AII-24: TOTAL BARIUM VIOLATION HISTORY
2005 THROUGH 2012**

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

ND = No Data.

TABLE AII-25: TOTAL BORON VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	0/5	0/10	0/10	0/11	0/11	0/4	0/5	0/4
103 Golf Road, West Fork North Branch Chicago River	0/7	0/11	0/10	0/11	0/10	0/11	0/12	0/10
31 Lake-Cook Road, Middle Fork North Branch	0/4	0/9	0/9	0/10	0/10	0/10	0/11	0/10
104 Glenview Road, North Branch Chicago River	0/7	0/12	0/9	0/12	0/12	0/11	0/12	0/12
32 Lake-Cook Road, Skokie River	0/6	0/10	0/9	0/10	0/10	0/10	0/12	0/11
105 Frontage Road, Skokie River	0/7	0/12	0/12	0/12	0/12	0/11	0/12	0/12
34 Dempster Street, North Branch Chicago River	0/7	0/11	0/8	0/12	0/11	0/11	0/12	0/11
96 Albany Avenue, North Branch Chicago River	0/12	0/11	0/11	0/12	0/12	0/11	0/12	0/11
35 Central Street, North Shore Channel	0/5	0/8	0/8	0/9	0/9	0/9	0/9	0/8
112 Dempster Street, North Shore Channel	0/5	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0/7	0/12	0/11	0/11	0/11	0/12	0/12	0/12
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	0/6	0/12	0/11	0/9	0/10	0/11	0/11	0/10
100 Wells Street, Chicago River	0/11	0/12	0/12	0/11	0/12	0/11	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	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	0/6	0/6	0/6	0/7	0/9	0/10	0/11	0/11
50 Burnham Avenue, Wolf Lake	0/7	0/11	0/11	0/10	0/12	0/11	0/11	0/12
55 130th Street, Calumet River	0/7	0/10	0/10	0/9	0/9	0/10	0/11	0/11
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	0/7	0/10	0/11	0/10	0/10	0/11	0/11	0/11
54 Joe Orr Road, Thorn Creek	0/7	0/10	0/9	0/9	0/9	0/10	0/9	0/8
97 170th Street, Thorn Creek	0/6	0/10	0/11	0/9	0/11	0/11	0/11	0/11
57 Ashland Avenue, Little Calumet River	0/11	0/10	0/10	0/9	0/10	0/11	0/11	0/11
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/7	0/11	0/10	0/11	0/11	0/11	0/12	0/11
110 Springinsguth Road, West Branch DuPage River	0/11	0/10	0/8	0/9	0/11	0/10	0/11	0/11
89 Walnut Lane, West Branch DuPage River	0/7	0/12	0/12	0/12	0/12	0/12	0/12	0/12
64 Lake Street, West Branch DuPage River	ND	ND	0/6	0/12	0/12	0/12	0/12	0/12
111 Arlington Drive, West Branch DuPage River	0/12	0/12	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0/11	0/10	0/8	0/8	0/9	0/10	0/9	0/9
80 Arlington Heights Road, Salt Creek	0/7	0/11	0/12	0/12	0/12	0/12	0/12	0/12
18 Devon Avenue, Salt Creek	0/12	0/11	0/10	0/11	0/12	0/12	0/12	0/12
24 Wolf Road, Salt Creek	0/7	0/11	0/10	0/12	0/12	0/11	0/12	0/12
109 Brookfield Avenue, Salt Creek	0/12	0/11	0/11	0/11	0/11	0/11	0/12	0/12
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/8	0/5	0/1	0/4	0/5	0/5	0/7	0/4
78 Wille Road, Higgins Creek	0/11	0/11	0/9	0/12	0/12	0/12	0/12	0/12
12 Lake-Cook Road, Buffalo Creek	0/6	0/9	0/7	0/9	0/11	0/9	0/9	0/7
13 Lake-Cook Road, Des Plaines River	0/7	0/11	0/11	0/12	0/12	0/12	0/12	0/12
17 Oakton Street, Des Plaines River	0/7	0/11	0/11	0/11	0/11	0/11	0/12	0/12
19 Belmont Avenue, Des Plaines River	0/12	0/11	0/11	0/12	0/12	0/11	0/12	0/12
20 Roosevelt Road, Des Plaines River	0/7	0/11	0/11	0/11	0/12	0/11	0/12	0/12
22 Ogden Avenue, Des Plaines River	0/12	0/11	0/12	0/11	0/11	0/11	0/12	0/12
23 Willow Springs Road, Des Plaines River	0/12	0/11	0/12	0/11	0/11	0/11	0/12	0/12
29 Stephen Street, Des Plaines River	0/7	0/11	0/12	0/11	0/12	0/11	0/12	0/12
91 Material Service Road, Des Plaines River	0/12	0/11	0/12	0/12	0/12	0/11	0/12	0/12

NA = Not Applicable.
ND = No Data.

TABLE AII-26: TOTAL CADMIUM VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
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	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	NA	NA	NA	NA	NA	NA	NA	NA
105 Frontage Road, Skokie River	NA	NA	NA	NA	NA	NA	NA	NA
34 Dempster Street, North Branch Chicago River	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
112 Dempster 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
36 Touhy Avenue, North Shore Channel	0/4	0/12	0/11	0/10	0/12	0/12	0/12	0/12
101 Foster Avenue, North Shore Channel	0/4	0/12	0/12	0/12	0/12	0/12	0/12	0/13
37 Wilson Avenue, North Branch Chicago River	0/3	0/12	0/12	0/12	0/12	0/12	0/12	0/12
73 Diversey Parkway, North Branch Chicago River	0/4	0/12	0/12	0/12	0/12	0/12	0/12	0/12
46 Grand Avenue, North Branch Chicago River	0/4	0/12	0/12	0/12	0/12	0/11	0/12	0/12
74 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	0/4	0/6	0/12	0/11	0/12	0/11	0/12	0/12
108 Loomis Street, South Branch Chicago River	0/4	0/12	0/11	0/12	0/11	0/12	0/12	0/10
99 Archer Avenue, South Fork South Branch Chicago River	0/4	0/12	0/10	0/11	0/12	0/11	0/7	0/11
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/4	0/12	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 Cicero Avenue, Chicago Sanitary & Ship Canal	0/4	0/12	0/12	0/12	0/12	0/12	0/13	0/12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/4	0/12	0/9	0/12	0/12	0/12	0/13	0/12
42 Route 83, Chicago Sanitary & Ship Canal	0/4	0/12	0/12	0/10	0/12	0/11	0/13	0/11
48 Stephen Street, Chicago Sanitary & Ship Canal	0/4	0/12	0/12	0/10	0/12	0/11	0/13	0/11
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/17	0/51	0/51	0/51	0/51	0/51	0/53	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	NA
55 130th Street, Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
86 Burnham Avenue, Grand Calumet River	0/4	0/10	0/7	0/5	0/10	0/10	0/11	0/10
56 Indiana Avenue, Little Calumet River	0/3	0/10	0/10	0/8	0/9	0/9	0/11	0/9
76 Halsted Street, Little Calumet River	0/4	0/11	0/10	0/11	0/12	0/11	0/11	0/12
52 Wentworth Avenue, Little Calumet River	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
58 Ashland Avenue, Calumet-Sag Channel	0/4	0/11	0/10	0/11	0/12	0/11	0/11	0/12
59 Cicero Avenue, Calumet-Sag Channel	0/4	0/11	0/10	0/10	0/11	0/11	0/11	0/12
43 Route 83, Calumet-Sag Channel	0/4	0/11	0/11	0/10	0/10	0/11	0/11	0/11
Des Plaines River System								
90 Route 19, Poplar Creek	NA	NA	NA	NA	NA	NA	NA	NA
110 Springinsguth Road, 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
111 Arlington Drive, 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	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	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
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
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

NA = Not Applicable.
ND = No Data.

**TABLE AII-27: TOTAL COPPER VIOLATION HISTORY
2005 THROUGH 2012**

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
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	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	NA	NA	NA	NA	NA	NA	NA	NA
105 Frontage Road, Skokie River	NA	NA	NA	NA	NA	NA	NA	NA
34 Dempster Street, North Branch Chicago River	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
112 Dempster 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
36 Touhy Avenue, North Shore Channel	0/4	0/12	0/11	0/10	0/12	0/12	0/12	0/12
101 Foster Avenue, North Shore Channel	0/4	0/12	0/12	0/12	0/12	0/12	0/12	0/13
37 Wilson Avenue, North Branch Chicago River	0/3	0/12	0/12	0/12	0/12	0/12	0/12	0/12
73 Diversey Parkway, North Branch Chicago River	0/4	0/12	0/12	0/12	0/12	0/12	0/12	0/12
46 Grand Avenue, North Branch Chicago River	0/4	0/12	0/12	0/12	0/12	0/11	0/12	0/12
74 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	0/4	0/6	0/12	0/11	0/12	0/11	0/12	0/12
108 Loomis Street, South Branch Chicago River	0/4	0/12	0/11	0/12	0/11	0/12	0/12	0/10
99 Archer Avenue, South Fork South Branch Chicago River	0/4	0/12	0/10	0/11	0/12	0/11	0/7	0/11
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/4	0/12	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 Cicero Avenue, Chicago Sanitary & Ship Canal	0/4	0/12	0/12	0/12	0/12	0/12	0/13	0/12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/4	0/12	0/9	0/12	0/12	0/12	0/13	0/12
42 Route 83, Chicago Sanitary & Ship Canal	0/4	0/12	0/12	0/10	0/12	0/11	0/13	0/11
48 Stephen Street, Chicago Sanitary & Ship Canal	0/4	0/12	0/12	0/10	0/12	0/11	0/13	0/11
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/17	0/51	0/51	0/51	0/51	0/51	0/53	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	NA
55 130th Street, Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
86 Burnham Avenue, Grand Calumet River	0/4	0/10	0/7	0/5	0/10	0/10	0/11	0/10
56 Indiana Avenue, Little Calumet River	0/3	0/10	0/10	0/8	0/9	0/9	0/11	0/9
76 Halsted Street, Little Calumet River	0/4	0/11	0/10	0/11	0/12	0/11	0/11	0/12
52 Wentworth Avenue, Little Calumet River	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
58 Ashland Avenue, Calumet-Sag Channel	0/4	0/11	0/10	0/11	0/12	0/11	0/11	0/12
59 Cicero Avenue, Calumet-Sag Channel	0/4	0/11	0/10	0/10	0/11	0/11	0/11	0/12
43 Route 83, Calumet-Sag Channel	0/4	0/11	0/11	0/10	0/10	0/11	0/11	0/11
Des Plaines River System								
90 Route 19, Poplar Creek	NA	NA	NA	NA	NA	NA	NA	NA
110 Springinsguth Road, 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
111 Arlington Drive, 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	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	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
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
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

NA = Not Applicable.
ND = No Data.

TABLE AII-28: TOTAL HEXAVALENT CHROMIUM VIOLATION HISTORY
2005 THROUGH 2012

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

ND = No Data.

**TABLE AII-29: TOTAL IRON VIOLATION HISTORY
2005 THROUGH 2012**

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
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	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	NA	NA	NA	NA	NA	NA	NA	NA
105 Frontage Road, Skokie River	NA	NA	NA	NA	NA	NA	NA	NA
34 Dempster Street, North Branch Chicago River	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
112 Dempster 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
36 Touhy Avenue, North Shore Channel	0/4	0/12	0/11	0/10	0/12	0/12	0/12	0/12
101 Foster Avenue, North Shore Channel	0/4	0/12	0/12	0/12	0/12	0/12	0/12	0/13
37 Wilson Avenue, North Branch Chicago River	0/3	0/12	0/12	0/12	0/12	0/12	0/12	0/12
73 Diversey Parkway, North Branch Chicago River	0/4	1/12	0/12	1/12	0/12	0/12	0/12	0/12
46 Grand Avenue, North Branch Chicago River	0/4	0/12	0/12	0/12	0/12	0/11	0/12	0/12
74 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	0/4	0/6	0/12	0/11	0/12	0/11	0/12	0/12
108 Loomis Street, South Branch Chicago River	0/4	0/12	0/11	0/12	0/11	0/12	0/12	0/10
99 Archer Avenue, South Fork South Branch Chicago River	0/4	0/12	0/10	0/11	0/12	0/11	0/7	0/11
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/4	0/12	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 Cicero Avenue, Chicago Sanitary & Ship Canal	0/4	1/12	0/12	0/12	0/12	0/12	0/13	0/12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/4	0/12	0/9	0/12	0/12	0/12	0/13	0/12
42 Route 83, Chicago Sanitary & Ship Canal	0/4	1/12	0/12	0/10	0/12	0/11	0/13	0/11
48 Stephen Street, Chicago Sanitary & Ship Canal	0/4	1/12	0/12	0/10	0/12	1/11	0/13	0/11
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/17	0/51	0/51	2/51	2/51	0/51	0/53	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	NA
55 130th Street, Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
86 Burnham Avenue, Grand Calumet River	0/4	1/10	1/7	0/5	1/10	2/10	0/11	2/10
56 Indiana Avenue, Little Calumet River	0/3	0/10	0/10	0/8	0/9	0/9	0/11	0/9
76 Halsted Street, Little Calumet River	0/4	0/11	0/10	0/11	1/12	0/11	0/11	0/12
52 Wentworth Avenue, Little Calumet River	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
58 Ashland Avenue, Calumet-Sag Channel	0/4	3/11	1/10	0/11	0/12	0/11	0/11	0/12
59 Cicero Avenue, Calumet-Sag Channel	0/4	0/11	1/10	0/10	0/11	0/11	1/11	0/12
43 Route 83, Calumet-Sag Channel	0/4	0/11	0/11	1/10	0/10	0/11	0/11	0/11
Des Plaines River System								
90 Route 19, Poplar Creek	NA	NA	NA	NA	NA	NA	NA	NA
110 Springinsguth Road, 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
111 Arlington Drive, 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	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	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
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
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

NA = Not Applicable.
ND = No Data.

TABLE AII-30: TOTAL LEAD VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
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	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	NA	NA	NA	NA	NA	NA	NA	NA
105 Frontage Road, Skokie River	NA	NA	NA	NA	NA	NA	NA	NA
34 Dempster Street, North Branch Chicago River	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
112 Dempster 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
36 Touhy Avenue, North Shore Channel	0/4	0/12	0/11	0/10	0/12	0/12	0/12	0/12
101 Foster Avenue, North Shore Channel	0/4	0/12	0/12	0/12	0/12	0/12	0/12	0/13
37 Wilson Avenue, North Branch Chicago River	0/3	0/12	0/12	0/12	0/12	0/12	0/12	0/12
73 Diversey Parkway, North Branch Chicago River	0/4	0/12	0/12	0/12	0/12	0/12	0/12	0/12
46 Grand Avenue, North Branch Chicago River	0/4	0/12	0/12	0/12	0/12	0/11	0/12	0/12
74 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	0/4	0/6	0/12	0/11	0/12	0/11	0/12	0/12
108 Loomis Street, South Branch Chicago River	0/4	0/12	0/11	0/12	0/11	0/12	0/12	0/10
99 Archer Avenue, South Fork South Branch Chicago River	0/4	0/12	0/10	0/11	0/12	0/11	0/7	0/11
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/4	0/12	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 Cicero Avenue, Chicago Sanitary & Ship Canal	0/4	0/12	0/12	0/12	0/12	0/12	0/13	0/12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/4	0/12	0/9	0/12	0/12	0/12	0/13	0/12
42 Route 83, Chicago Sanitary & Ship Canal	0/4	0/12	0/12	0/10	0/12	0/11	0/13	0/11
48 Stephen Street, Chicago Sanitary & Ship Canal	0/4	0/12	0/12	0/10	0/12	0/11	0/13	0/11
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/17	0/51	0/51	0/51	0/51	0/51	0/53	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	NA
55 130th Street, Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
86 Burnham Avenue, Grand Calumet River	0/4	0/10	0/7	0/5	0/10	0/10	0/11	1/10
56 Indiana Avenue, Little Calumet River	0/3	0/10	0/10	0/8	0/9	0/9	0/11	0/9
76 Halsted Street, Little Calumet River	0/4	0/11	0/10	0/11	0/12	1/11	0/11	0/12
52 Wentworth Avenue, Little Calumet River	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
58 Ashland Avenue, Calumet-Sag Channel	0/4	0/11	0/10	0/11	0/12	0/11	0/11	0/12
59 Cicero Avenue, Calumet-Sag Channel	0/4	0/11	0/10	0/10	0/11	0/11	0/11	0/12
43 Route 83, Calumet-Sag Channel	0/4	0/11	0/11	0/10	0/10	0/11	0/11	0/11
Des Plaines River System								
90 Route 19, Poplar Creek	NA	NA	NA	NA	NA	NA	NA	NA
110 Springinsguth Road, 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
111 Arlington Drive, 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	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	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
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
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

NA = Not Applicable.
ND = No Data.

**TABLE AII-31: TOTAL NICKEL VIOLATION HISTORY
2005 THROUGH 2012**

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
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	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	NA	NA	NA	NA	NA	NA	NA	NA
105 Frontage Road, Skokie River	NA	NA	NA	NA	NA	NA	NA	NA
34 Dempster Street, North Branch Chicago River	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
112 Dempster 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
36 Touhy Avenue, North Shore Channel	0/4	0/12	0/11	0/10	0/12	0/12	0/12	0/12
101 Foster Avenue, North Shore Channel	0/4	0/12	0/12	0/12	0/12	0/12	0/12	0/13
37 Wilson Avenue, North Branch Chicago River	0/3	0/12	0/12	0/12	0/12	0/12	0/12	0/12
73 Diversey Parkway, North Branch Chicago River	0/4	0/12	0/12	0/12	0/12	0/12	0/12	0/12
46 Grand Avenue, North Branch Chicago River	0/4	0/12	0/12	0/12	0/12	0/11	0/12	0/12
74 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	0/4	0/6	0/12	0/11	0/12	0/11	0/12	0/12
108 Loomis Street, South Branch Chicago River	0/4	0/12	0/11	0/12	0/11	0/12	0/12	0/10
99 Archer Avenue, South Fork South Branch Chicago River	0/4	0/12	0/10	0/11	0/12	0/11	0/7	0/11
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/4	0/12	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 Cicero Avenue, Chicago Sanitary & Ship Canal	0/4	0/12	0/12	0/12	0/12	0/12	0/13	0/12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/4	0/12	0/9	0/12	0/12	0/12	0/13	0/12
42 Route 83, Chicago Sanitary & Ship Canal	0/4	0/12	0/12	0/10	0/12	0/11	0/13	0/11
48 Stephen Street, Chicago Sanitary & Ship Canal	0/4	0/12	0/12	0/10	0/12	0/11	0/13	0/11
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/17	0/51	0/51	0/51	0/51	0/51	0/53	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	NA
55 130th Street, Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
86 Burnham Avenue, Grand Calumet River	0/4	0/10	0/7	0/5	0/10	0/10	0/11	0/10
56 Indiana Avenue, Little Calumet River	0/3	0/10	0/10	0/8	0/9	0/9	0/11	0/9
76 Halsted Street, Little Calumet River	0/4	0/11	0/10	0/11	0/12	0/11	0/11	0/12
52 Wentworth Avenue, Little Calumet River	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
58 Ashland Avenue, Calumet-Sag Channel	0/4	0/11	0/10	0/11	0/12	0/11	0/11	0/12
59 Cicero Avenue, Calumet-Sag Channel	0/4	0/11	0/10	0/10	0/11	0/11	0/11	0/12
43 Route 83, Calumet-Sag Channel	0/4	0/11	0/11	0/10	0/10	0/11	0/11	0/11
Des Plaines River System								
90 Route 19, Poplar Creek	NA	NA	NA	NA	NA	NA	NA	NA
110 Springinsguth Road, 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
111 Arlington Drive, 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	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	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
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
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

NA = Not Applicable.
ND = No Data.

TABLE AII-32: TOTAL MANGANESE VIOLATION HISTORY
2005 THROUGH 2012

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

ND = No Data.

TABLE AII-33: TOTAL MERCURY VIOLATION HISTORY
2005 THROUGH 2012 (Human Health Standard)¹

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	0/1	0/5	0/10	0/11	0/11	1/4	0/5	0/4
103 Golf Road, West Fork North Branch Chicago River	0/3	0/6	0/10	0/11	0/10	0/11	3/12	5/10
31 Lake-Cook Road, Middle Fork North Branch	0/1	0/5	0/9	0/10	0/10	0/10	2/11	2/10
104 Glenview Road, North Branch Chicago River	0/3	0/6	0/9	0/12	0/12	1/11	4/12	6/12
32 Lake-Cook Road, Skokie River	0/2	0/5	0/9	0/10	0/10	1/10	4/12	3/11
105 Frontage Road, Skokie River	0/3	0/6	0/12	0/12	0/12	1/11	2/12	5/12
34 Dempster Street, North Branch Chicago River	0/3	0/5	0/8	0/12	0/11	2/11	2/12	4/11
96 Albany Avenue, North Branch Chicago River	0/6	0/5	0/11	0/12	0/12	3/11	1/12	4/11
35 Central Street, North Shore Channel	0/2	0/4	0/8	0/9	0/9	0/9	1/9	1/8
112 Dempster Street, North Shore Channel	NA	NA	NA	NA	NA	NA	NA	NA
102 Oakton Street, North Shore Channel	0/3	0/6	0/11	0/11	0/11	2/12	2/12	3/12
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	0/3	0/6	0/11	0/9	0/10	2/11	1/11	0/10
100 Wells Street, Chicago River	0/5	0/6	0/12	0/11	0/12	1/11	3/12	3/12
39 Madison Street, South Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
108 Loomis Street, South Branch Chicago River	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	0/4	0/2	0/6	0/7	0/9	0/10	1/11	0/11
50 Burnham Avenue, Wolf Lake	0/4	0/6	0/11	0/10	0/12	2/11	2/11	1/12
55 130th Street, Calumet River	0/4	0/5	0/10	0/9	0/9	0/10	2/11	3/11
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	0/4	0/5	0/11	0/10	0/10	0/11	2/11	5/11
54 Joe Orr Road, Thorn Creek	0/4	0/5	0/9	0/9	0/9	0/10	2/9	2/8
97 170th Street, Thorn Creek	0/4	0/5	0/11	0/9	0/11	1/11	2/11	5/11
57 Ashland Avenue, Little Calumet River	0/6	0/5	0/10	0/9	0/10	1/11	2/11	4/11
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/3	0/5	0/10	0/11	0/11	2/11	1/12	3/11
110 Springinsguth Road, West Branch DuPage River	NA	0/3	0/8	0/9	0/11	1/10	1/11	3/11
89 Walnut Lane, West Branch DuPage River	0/3	0/6	0/12	0/12	0/12	1/12	1/12	2/12
64 Lake Street, West Branch DuPage River	NA	NA	0/6	0/12	0/12	3/12	2/12	2/12
111 Arlington Drive, West Branch DuPage River	NA	0/3	NA	NA	NA	NA	NA	NA
79 Higgins Road, Salt Creek	0/6	0/5	0/8	0/8	0/9	2/10	0/9	1/9
80 Arlington Heights Road, Salt Creek	0/3	0/5	0/12	0/12	0/12	0/12	2/12	2/12
18 Devon Avenue, Salt Creek	0/5	0/5	0/10	0/11	0/12	1/12	3/12	2/12
24 Wolf Road, Salt Creek	0/3	0/5	0/10	0/12	0/12	2/11	2/12	2/12
109 Brookfield Avenue, Salt Creek	0/6	0/5	0/11	0/11	0/11	1/11	2/12	0/11
21 First Avenue, Salt Creek	NA	NA	NA	NA	NA	NA	NA	NA
77 Elmhurst Road, Higgins Creek	0/4	0/3	0/1	0/4	0/5	1/5	0/7	0/4
78 Wille Road, Higgins Creek	0/5	0/5	0/9	0/12	0/12	1/12	2/12	2/12
12 Lake-Cook Road, Buffalo Creek	0/3	0/4	0/7	0/9	0/11	1/9	1/9	1/7
13 Lake-Cook Road, Des Plaines River	0/3	0/5	0/11	0/12	0/12	1/12	3/12	1/12
17 Oakton Street, Des Plaines River	0/3	0/5	0/11	0/11	0/11	2/11	2/12	2/12
19 Belmont Avenue, Des Plaines River	0/6	0/5	0/11	0/12	0/12	0/11	2/12	0/12
20 Roosevelt Road, Des Plaines River	0/3	0/5	0/11	0/11	0/12	1/11	2/12	2/12
22 Ogden Avenue, Des Plaines River	0/6	0/5	0/12	0/11	0/11	1/11	3/12	2/12
23 Willow Springs Road, Des Plaines River	0/6	0/5	0/12	0/11	0/11	1/11	2/12	2/12
29 Stephen Street, Des Plaines River	0/3	0/5	0/12	0/11	0/12	2/11	2/12	2/12
91 Material Service Road, Des Plaines River	0/6	0/5	0/12	0/12	0/12	1/11	2/12	2/12

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

TABLE AII-34: TOTAL MERCURY VIOLATION HISTORY
2005 THROUGH 2012 (Secondary Contact Standard)¹

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
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	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	NA	NA	NA	NA	NA	NA	NA	NA
105 Frontage Road, Skokie River	NA	NA	NA	NA	NA	NA	NA	NA
34 Dempster Street, North Branch Chicago River	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
112 Dempster 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
36 Touhy Avenue, North Shore Channel	0/12	0/12	0/11	0/10	0/12	0/12	0/12	0/12
101 Foster Avenue, North Shore Channel	0/7	0/12	0/12	0/12	0/12	0/12	0/12	0/13
37 Wilson Avenue, North Branch Chicago River	0/6	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
46 Grand Avenue, North Branch Chicago River	0/7	0/12	0/12	0/12	0/12	0/11	0/12	0/12
74 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	0/6	0/6	0/12	0/11	0/12	0/11	0/12	0/12
108 Loomis Street, South Branch Chicago River	0/12	0/12	0/11	0/12	0/11	0/12	0/12	0/10
99 Archer Avenue, South Fork South Branch Chicago River	0/12	0/12	0/10	0/11	0/12	0/11	0/7	0/11
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/7	0/12	0/12	0/11	0/12	0/12	0/12	0/12
107 Western Avenue, Chicago Sanitary & Ship Canal	NA	NA	NA	NA	NA	NA	NA	NA
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/12	0/12	0/12	0/12	0/12	0/12	0/13	0/12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/12	0/12	0/9	0/12	0/12	0/12	0/13	0/12
42 Route 83, Chicago Sanitary & Ship Canal	0/7	0/12	0/12	0/10	0/12	0/11	0/13	0/11
48 Stephen Street, Chicago Sanitary & Ship Canal	0/12	0/12	0/12	0/10	0/12	0/11	0/13	0/11
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/51	0/51	0/51	0/51	0/51	0/51	0/53	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	NA
55 130th Street, Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
86 Burnham Avenue, Grand Calumet River	0/11	0/10	0/7	0/5	0/10	0/10	0/11	1/10
56 Indiana Avenue, Little Calumet River	0/10	0/10	0/10	0/8	0/9	0/9	0/11	0/9
76 Halsted Street, Little Calumet River	0/11	0/11	0/10	0/11	0/12	0/11	0/11	0/12
52 Wentworth Avenue, Little Calumet River	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
58 Ashland Avenue, Calumet-Sag Channel	0/7	0/11	0/10	0/11	0/12	0/11	0/11	0/12
59 Cicero Avenue, Calumet-Sag Channel	0/10	0/11	0/10	0/10	0/11	0/11	0/11	0/12
43 Route 83, Calumet-Sag Channel	0/11	0/11	0/11	0/10	0/10	0/11	0/11	0/11
Des Plaines River System								
90 Route T9, Poplar Creek	NA	NA	NA	NA	NA	NA	NA	NA
110 Springinsguth Road, 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
111 Arlington Drive, 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	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	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
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
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

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

TABLE AII-35: TOTAL ZINC VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
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	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	NA	NA	NA	NA	NA	NA	NA	NA
105 Frontage Road, Skokie River	NA	NA	NA	NA	NA	NA	NA	NA
34 Dempster Street, North Branch Chicago River	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
112 Dempster 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
36 Touhy Avenue, North Shore Channel	0/4	0/12	0/11	0/10	0/12	0/12	0/12	0/12
101 Foster Avenue, North Shore Channel	0/4	0/12	0/12	0/12	0/12	0/12	0/12	0/13
37 Wilson Avenue, North Branch Chicago River	0/3	0/12	0/12	0/12	0/12	0/12	0/12	0/12
73 Diversey Parkway, North Branch Chicago River	0/4	0/12	0/12	0/12	0/12	0/12	0/12	0/12
46 Grand Avenue, North Branch Chicago River	0/4	0/12	0/12	0/12	0/12	0/11	0/12	0/12
74 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	0/4	0/6	0/12	0/11	0/12	0/11	0/12	0/12
108 Loomis Street, South Branch Chicago River	0/4	0/12	0/11	0/12	0/11	0/12	0/12	0/10
99 Archer Avenue, South Fork South Branch Chicago River	0/4	0/12	0/10	0/11	0/12	0/11	0/7	0/11
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/4	0/12	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 Cicero Avenue, Chicago Sanitary & Ship Canal	0/4	0/12	0/12	0/12	0/12	0/12	0/13	0/12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/4	0/12	0/9	0/12	0/12	0/12	0/13	0/12
42 Route 83, Chicago Sanitary & Ship Canal	0/4	0/12	0/12	0/10	0/12	0/11	0/13	0/11
48 Stephen Street, Chicago Sanitary & Ship Canal	0/4	0/12	0/12	0/10	0/12	0/11	0/13	0/11
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/17	0/51	0/51	0/51	0/51	0/51	0/53	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	NA
55 130th Street, Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
86 Burnham Avenue, Grand Calumet River	0/4	0/10	0/7	0/5	0/10	0/10	0/11	0/10
56 Indiana Avenue, Little Calumet River	0/3	0/10	0/10	0/8	0/9	0/9	0/11	0/9
76 Halsted Street, Little Calumet River	0/4	0/11	0/10	0/11	0/12	0/11	0/11	0/12
52 Wentworth Avenue, Little Calumet River	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
58 Ashland Avenue, Calumet-Sag Channel	0/4	0/11	0/10	0/11	0/12	0/11	0/11	0/12
59 Cicero Avenue, Calumet-Sag Channel	0/4	0/11	0/10	0/10	0/11	0/11	0/11	0/12
43 Route 83, Calumet-Sag Channel	0/4	0/11	0/11	0/10	0/10	0/11	0/11	0/11
Des Plaines River System								
90 Route 19, Poplar Creek	NA	NA	NA	NA	NA	NA	NA	NA
110 Springinsguth Road, 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
111 Arlington Drive, 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	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	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
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
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

NA = Not Applicable.
ND = No Data.

TABLE AII-36: TOTAL SELENIUM VIOLATION HISTORY
2005 THROUGH 2012

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

ND = No Data.

TABLE AII-37: SOLUBLE ARSENIC VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	0/5	0/10	0/9	0/11	0/11	0/4	0/5	0/4
103 Golf Road, West Fork North Branch Chicago River	0/7	0/11	0/9	0/11	0/10	0/11	0/12	0/10
31 Lake-Cook Road, Middle Fork North Branch	0/4	0/9	0/8	0/10	0/10	0/10	0/11	0/10
104 Glenview Road, North Branch Chicago River	0/7	0/12	0/8	0/12	0/12	0/11	0/12	0/12
32 Lake-Cook Road, Skokie River	0/6	0/10	0/8	0/10	0/10	0/10	0/12	0/11
105 Frontage Road, Skokie River	0/7	0/12	0/11	0/12	0/12	0/11	0/12	0/12
34 Dempster Street, North Branch Chicago River	0/7	0/11	0/7	0/12	0/11	0/11	0/12	0/11
96 Albany Avenue, North Branch Chicago River	0/12	0/11	0/10	0/12	0/12	0/11	0/12	0/11
35 Central Street, North Shore Channel	0/5	0/8	0/7	0/9	0/9	0/9	0/9	0/8
112 Dempster Street, North Shore Channel	0/5	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0/7	0/12	0/10	0/11	0/11	0/12	0/12	0/12
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	0/6	0/12	0/10	0/9	0/10	0/11	0/11	0/10
100 Wells Street, Chicago River	0/11	0/12	0/11	0/11	0/12	0/11	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	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	0/6	0/6	0/5	0/7	0/9	0/10	0/11	0/11
50 Burnham Avenue, Wolf Lake	0/7	0/11	0/10	0/10	0/12	0/11	0/11	0/12
55 130th Street, Calumet River	0/7	0/10	0/9	0/9	0/9	0/10	0/11	0/11
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	0/7	0/10	0/10	0/10	0/10	0/11	0/11	0/11
54 Joe Orr Road, Thorn Creek	0/7	0/10	0/9	0/9	0/9	0/10	0/9	0/8
97 170th Street, Thorn Creek	0/6	0/10	0/10	0/9	0/11	0/11	0/11	0/11
57 Ashland Avenue, Little Calumet River	0/11	0/10	0/9	0/9	0/10	0/11	0/11	0/11
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/7	0/11	0/10	0/11	0/11	0/11	0/12	0/11
110 Springinsguth Road, West Branch DuPage River	0/11	0/10	0/8	0/9	0/11	0/10	0/11	0/11
89 Walnut Lane, West Branch DuPage River	0/7	0/12	0/12	0/12	0/12	0/12	0/12	0/12
64 Lake Street, West Branch DuPage River	ND	ND	0/6	0/12	0/12	0/12	0/12	0/12
111 Arlington Drive, West Branch DuPage River	0/12	0/12	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0/11	0/10	0/8	0/8	0/9	0/10	0/9	0/9
80 Arlington Heights Road, Salt Creek	0/7	0/11	0/12	0/12	0/12	0/12	0/12	0/12
18 Devon Avenue, Salt Creek	0/12	0/11	0/10	0/11	0/12	0/12	0/12	0/12
24 Wolf Road, Salt Creek	0/7	0/11	0/10	0/12	0/12	0/11	0/12	0/12
109 Brookfield Avenue, Salt Creek	0/12	0/11	0/11	0/11	0/11	0/11	0/12	0/12
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/8	0/5	0/1	0/4	0/5	0/5	0/7	0/4
78 Wille Road, Higgins Creek	0/11	0/11	0/9	0/12	0/12	0/12	0/12	0/12
12 Lake-Cook Road, Buffalo Creek	0/6	0/9	0/7	0/9	0/11	0/9	0/9	0/7
13 Lake-Cook Road, Des Plaines River	0/7	0/11	0/11	0/12	0/12	0/12	0/12	0/12
17 Oakton Street, Des Plaines River	0/7	0/11	0/11	0/11	0/11	0/11	0/12	0/12
19 Belmont Avenue, Des Plaines River	0/12	0/11	0/11	0/12	0/12	0/11	0/12	0/12
20 Roosevelt Road, Des Plaines River	0/7	0/11	0/11	0/11	0/12	0/11	0/12	0/12
22 Ogden Avenue, Des Plaines River	0/12	0/11	0/12	0/11	0/11	0/11	0/12	0/12
23 Willow Springs Road, Des Plaines River	0/12	0/11	0/12	0/11	0/11	0/11	0/12	0/12
29 Stephen Street, Des Plaines River	0/7	0/11	0/12	0/11	0/12	0/11	0/12	0/12
91 Material Service Road, Des Plaines River	0/12	0/11	0/12	0/12	0/12	0/11	0/12	0/12

NA = Not Applicable.
ND = No Data.

TABLE AII-38: SOLUBLE CADMIUM VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	0/3	0/10	0/9	0/11	0/11	0/4	0/5	0/4
103 Golf Road, West Fork North Branch Chicago River	0/4	0/11	0/9	0/11	0/10	0/11	0/12	0/10
31 Lake-Cook Road, Middle Fork North Branch	0/2	0/9	0/8	0/10	0/10	0/10	0/11	0/10
104 Glenview Road, North Branch Chicago River	0/4	0/12	0/8	0/12	0/12	0/11	0/12	0/12
32 Lake-Cook Road, Skokie River	0/3	0/10	0/8	0/10	0/10	0/10	0/12	0/11
105 Frontage Road, Skokie River	0/4	0/12	0/11	0/12	0/12	0/11	0/12	0/12
34 Dempster Street, North Branch Chicago River	0/4	0/11	0/7	0/12	0/11	0/11	0/12	0/11
96 Albany Avenue, North Branch Chicago River	0/4	0/11	0/10	0/12	0/12	0/11	0/12	0/11
35 Central Street, North Shore Channel	0/2	0/8	0/7	0/9	0/9	0/9	0/9	0/8
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0/4	0/12	0/10	0/11	0/11	0/12	0/12	0/12
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	0/4	0/12	0/10	0/9	0/10	0/11	0/11	0/10
100 Wells Street, Chicago River	0/4	0/12	0/11	0/11	0/12	0/11	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	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	0/3	0/6	0/5	0/7	0/9	0/10	0/11	0/11
50 Burnham Avenue, Wolf Lake	0/4	0/11	0/10	0/10	0/12	0/11	0/11	0/12
55 130th Street, Calumet River	0/4	0/10	0/9	0/9	0/9	0/10	0/11	0/11
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	0/4	0/10	0/10	0/10	0/10	0/11	0/11	0/11
54 Joe Orr Road, Thorn Creek	0/4	0/10	0/9	0/9	0/9	0/10	0/9	0/8
97 170th Street, Thorn Creek	0/4	0/10	0/10	0/9	0/11	0/11	0/11	0/11
57 Ashland Avenue, Little Calumet River	0/4	0/10	0/9	0/9	0/10	0/11	0/11	0/11
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/4	0/11	0/10	0/11	0/11	0/11	0/12	0/11
110 Springinsguth Road, West Branch DuPage River	0/3	0/10	0/8	0/9	0/11	0/10	0/11	0/11
89 Walnut Lane, West Branch DuPage River	0/4	0/12	0/12	0/12	0/12	0/12	0/12	0/12
64 Lake Street, West Branch DuPage River	ND	ND	0/6	0/12	0/12	0/12	0/12	0/12
111 Arlington Drive, West Branch DuPage River	0/4	0/12	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0/3	0/10	0/8	0/8	0/9	0/10	0/9	0/9
80 Arlington Heights Road, Salt Creek	0/4	0/11	0/12	0/12	0/12	0/12	0/12	0/12
18 Devon Avenue, Salt Creek	0/4	0/11	0/10	0/11	0/12	0/12	0/12	0/12
24 Wolf Road, Salt Creek	0/4	0/11	0/10	0/12	0/12	0/11	0/12	0/12
109 Brookfield Avenue, Salt Creek	0/4	0/11	0/11	0/11	0/11	0/11	0/12	0/12
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/3	0/5	0/1	0/4	0/5	0/5	0/7	0/4
78 Wille Road, Higgins Creek	0/4	0/11	0/9	0/12	0/12	0/12	0/12	0/12
12 Lake-Cook Road, Buffalo Creek	0/4	0/9	0/7	0/9	0/11	0/9	0/9	0/7
13 Lake-Cook Road, Des Plaines River	0/4	0/11	0/11	0/12	0/12	0/12	0/12	0/12
17 Oakton Street, Des Plaines River	0/4	0/11	0/11	0/11	0/11	0/11	0/12	0/12
19 Belmont Avenue, Des Plaines River	0/4	0/11	0/11	0/12	0/12	0/11	0/12	0/12
20 Roosevelt Road, Des Plaines River	0/4	0/11	0/11	0/11	0/12	0/11	0/12	0/12
22 Ogden Avenue, Des Plaines River	0/4	0/11	0/12	0/11	0/11	0/11	0/12	0/12
23 Willow Springs Road, Des Plaines River	0/4	0/11	0/12	0/11	0/11	0/11	0/12	0/12
29 Stephen Street, Des Plaines River	0/4	0/11	0/12	0/11	0/12	0/11	0/12	0/12
91 Material Service Road, Des Plaines River	0/4	0/11	0/12	0/12	0/12	0/11	0/12	0/12

NA = Not Applicable.
ND = No Data.

TABLE AII-39: SOLUBLE COPPER VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	0/5	0/10	0/9	0/11	0/11	0/4	0/5	0/4
103 Golf Road, West Fork North Branch Chicago River	0/7	0/11	0/9	0/11	0/10	0/11	0/12	0/10
31 Lake-Cook Road, Middle Fork North Branch	0/4	0/9	0/8	0/10	0/10	0/10	0/11	0/10
104 Glenview Road, North Branch Chicago River	0/7	0/12	0/8	0/12	0/12	0/11	0/12	0/12
32 Lake-Cook Road, Skokie River	0/6	0/10	0/8	0/10	0/10	0/10	0/12	0/11
105 Frontage Road, Skokie River	0/7	0/12	0/11	0/12	0/12	0/11	0/12	0/12
34 Dempster Street, North Branch Chicago River	0/7	0/11	0/7	0/12	0/11	0/11	0/12	0/11
96 Albany Avenue, North Branch Chicago River	0/12	0/11	0/10	0/12	0/12	0/11	0/12	0/11
35 Central Street, North Shore Channel	0/5	0/8	0/7	0/9	0/9	0/9	0/9	0/8
112 Dempster Street, North Shore Channel	0/5	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0/7	0/12	0/10	0/11	0/11	0/12	0/12	0/12
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	0/6	0/12	0/10	0/9	0/10	0/11	0/11	0/10
100 Wells Street, Chicago River	0/11	0/12	0/11	0/11	0/12	0/11	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	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	0/6	0/6	0/5	0/7	0/9	0/10	0/11	0/11
50 Burnham Avenue, Wolf Lake	0/7	0/11	0/10	0/10	0/12	0/11	0/11	0/12
55 130th Street, Calumet River	0/7	0/10	0/9	0/9	0/9	0/10	0/11	0/11
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	0/7	0/10	0/10	0/10	0/10	0/11	0/11	0/11
54 Joe Orr Road, Thorn Creek	0/7	0/10	0/9	0/9	0/9	0/10	0/9	0/8
97 170th Street, Thorn Creek	0/6	0/10	0/10	0/9	0/11	0/11	0/11	0/11
57 Ashland Avenue, Little Calumet River	0/11	0/10	0/9	0/9	0/10	0/11	0/11	0/11
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/7	0/11	0/10	0/11	0/11	0/11	0/12	0/11
110 Springinsguth Road, West Branch DuPage River	0/11	0/10	0/8	0/9	0/11	0/10	0/11	0/11
89 Walnut Lane, West Branch DuPage River	0/7	0/12	0/12	0/12	0/12	0/12	0/12	0/12
64 Lake Street, West Branch DuPage River	ND	ND	0/6	0/12	0/12	0/12	0/12	0/12
111 Arlington Drive, West Branch DuPage River	0/12	0/12	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0/11	0/10	0/8	0/8	0/9	0/10	0/9	0/9
80 Arlington Heights Road, Salt Creek	0/7	0/11	0/12	0/12	0/12	0/12	0/12	0/12
18 Devon Avenue, Salt Creek	0/12	0/11	0/10	0/11	0/12	0/12	0/12	0/12
24 Wolf Road, Salt Creek	0/7	0/11	0/10	0/12	0/12	0/11	0/12	0/12
109 Brookfield Avenue, Salt Creek	0/12	0/11	0/11	0/11	0/11	0/11	0/12	0/12
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/8	0/5	0/1	0/4	0/5	0/5	0/7	0/4
78 Wille Road, Higgins Creek	0/11	0/11	1/9	0/12	0/12	0/12	0/12	0/12
12 Lake-Cook Road, Buffalo Creek	0/6	0/9	0/7	0/9	0/11	0/9	0/9	0/7
13 Lake-Cook Road, Des Plaines River	0/7	0/11	0/11	0/12	0/12	0/12	0/12	0/12
17 Oakton Street, Des Plaines River	0/7	0/11	0/11	0/11	0/11	0/11	0/12	0/12
19 Belmont Avenue, Des Plaines River	0/12	0/11	0/11	0/12	0/12	0/11	0/12	0/12
20 Roosevelt Road, Des Plaines River	0/7	0/11	0/11	0/11	0/12	0/11	0/12	0/12
22 Ogden Avenue, Des Plaines River	0/12	0/11	0/12	0/11	0/11	0/11	0/12	0/12
23 Willow Springs Road, Des Plaines River	0/12	0/11	0/12	0/11	0/11	0/11	0/12	0/12
29 Stephen Street, Des Plaines River	0/7	0/11	0/12	0/11	0/12	0/11	0/12	0/12
91 Material Service Road, Des Plaines River	0/12	0/11	0/12	0/12	0/12	0/11	0/12	0/12

NA = Not Applicable.
ND = No Data.

TABLE AII-40: SOLUBLE CHROMIUM VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	0/5	0/10	0/9	0/11	0/11	0/4	0/5	0/4
103 Golf Road, West Fork North Branch Chicago River	0/7	0/11	0/9	0/11	0/10	0/11	0/12	0/10
31 Lake-Cook Road, Middle Fork North Branch	0/4	0/9	0/8	0/10	0/10	0/10	0/11	0/10
104 Glenview Road, North Branch Chicago River	0/7	0/12	0/8	0/12	0/12	0/11	0/12	0/12
32 Lake-Cook Road, Skokie River	0/6	0/10	0/8	0/10	0/10	0/10	0/12	0/11
105 Frontage Road, Skokie River	0/7	0/12	0/11	0/12	0/12	0/11	0/12	0/12
34 Dempster Street, North Branch Chicago River	0/7	0/11	0/7	0/12	0/11	0/11	0/12	0/11
96 Albany Avenue, North Branch Chicago River	0/12	0/11	0/10	0/12	0/12	0/11	0/12	0/11
35 Central Street, North Shore Channel	0/5	0/8	0/7	0/9	0/9	0/9	0/9	0/8
112 Dempster Street, North Shore Channel	0/5	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0/7	0/12	0/10	0/11	0/11	0/12	0/12	0/12
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	0/6	0/12	0/10	0/9	0/10	0/11	0/11	0/10
100 Wells Street, Chicago River	0/11	0/12	0/11	0/11	0/12	0/11	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	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	0/6	0/6	0/5	0/7	0/9	0/10	0/11	0/11
50 Burnham Avenue, Wolf Lake	0/7	0/11	0/10	0/10	0/12	0/11	0/11	0/12
55 130th Street, Calumet River	0/7	0/10	0/9	0/9	0/9	0/10	0/11	0/11
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	0/7	0/10	0/10	0/10	0/10	0/11	0/11	0/11
54 Joe Orr Road, Thorn Creek	0/7	0/10	0/9	0/9	0/9	0/10	0/9	0/8
97 170th Street, Thorn Creek	0/6	0/10	0/10	0/9	0/11	0/11	0/11	0/11
57 Ashland Avenue, Little Calumet River	0/11	0/10	0/9	0/9	0/10	0/11	0/11	0/11
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/7	0/11	0/10	0/11	0/11	0/11	0/12	0/11
110 Springinsguth Road, West Branch DuPage River	0/11	0/10	0/8	0/9	0/11	0/10	0/11	0/11
89 Walnut Lane, West Branch DuPage River	0/7	0/12	0/12	0/12	0/12	0/12	0/12	0/12
64 Lake Street, West Branch DuPage River	ND	ND	0/6	0/12	0/12	0/12	0/12	0/12
111 Arlington Drive, West Branch DuPage River	0/12	0/12	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0/11	0/10	0/8	0/8	0/9	0/10	0/9	0/9
80 Arlington Heights Road, Salt Creek	0/7	0/11	0/12	0/12	0/12	0/12	0/12	0/12
18 Devon Avenue, Salt Creek	0/12	0/11	0/10	0/11	0/12	0/12	0/12	0/12
24 Wolf Road, Salt Creek	0/7	0/11	0/10	0/12	0/12	0/11	0/12	0/12
109 Brookfield Avenue, Salt Creek	0/12	0/11	0/11	0/11	0/11	0/11	0/12	0/12
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/8	0/5	0/1	0/4	0/5	0/5	0/7	0/4
78 Wille Road, Higgins Creek	0/11	0/11	0/9	0/12	0/12	0/12	0/12	0/12
12 Lake-Cook Road, Buffalo Creek	0/6	0/9	0/7	0/9	0/11	0/9	0/9	0/7
13 Lake-Cook Road, Des Plaines River	0/7	0/11	0/11	0/12	0/12	0/12	0/12	0/12
17 Oakton Street, Des Plaines River	0/7	0/11	0/11	0/11	0/11	0/11	0/12	0/12
19 Belmont Avenue, Des Plaines River	0/12	0/11	0/11	0/12	0/12	0/11	0/12	0/12
20 Roosevelt Road, Des Plaines River	0/7	0/11	0/11	0/11	0/12	0/11	0/12	0/12
22 Ogden Avenue, Des Plaines River	0/12	0/11	0/12	0/11	0/11	0/11	0/12	0/12
23 Willow Springs Road, Des Plaines River	0/12	0/11	0/12	0/11	0/11	0/11	0/12	0/12
29 Stephen Street, Des Plaines River	0/7	0/11	0/12	0/11	0/12	0/11	0/12	0/12
91 Material Service Road, Des Plaines River	0/12	0/11	0/12	0/12	0/12	0/11	0/12	0/12

NA = Not Applicable.
ND = No Data.

TABLE AII-41: SOLUBLE IRON VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	0/5	0/10	0/9	0/11	0/11	0/4	0/5	0/4
103 Golf Road, West Fork North Branch Chicago River	0/7	0/11	0/9	0/11	0/10	0/11	0/12	0/10
31 Lake-Cook Road, Middle Fork North Branch	0/4	0/9	0/8	0/10	0/10	0/10	0/11	0/10
104 Glenview Road, North Branch Chicago River	0/7	0/12	0/8	0/12	0/12	0/11	0/12	0/12
32 Lake-Cook Road, Skokie River	0/6	0/10	0/8	0/10	0/10	0/10	0/12	0/11
105 Frontage Road, Skokie River	0/7	0/12	0/11	0/12	0/12	0/11	0/12	0/12
34 Dempster Street, North Branch Chicago River	0/7	0/11	0/7	0/12	0/11	0/11	0/12	0/11
96 Albany Avenue, North Branch Chicago River	0/12	0/11	0/10	0/12	0/12	0/11	0/12	0/11
35 Central Street, North Shore Channel	0/5	0/8	0/7	0/9	0/9	0/9	0/9	0/8
112 Dempster Street, North Shore Channel	0/5	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0/7	0/12	0/10	0/11	0/11	0/12	0/12	0/12
36 Touhy Avenue, North Shore Channel	0/12	0/12	0/10	0/10	0/12	0/12	0/12	0/12
101 Foster Avenue, North Shore Channel	0/7	0/12	0/11	0/12	0/12	0/12	0/12	0/13
37 Wilson Avenue, North Branch Chicago River	0/6	0/12	0/11	0/12	0/12	0/12	0/12	0/12
73 Diversey Parkway, North Branch Chicago River	0/12	0/12	0/11	0/12	0/12	0/12	0/12	0/12
46 Grand Avenue, North Branch Chicago River	0/7	0/12	0/11	0/12	0/12	0/11	0/12	0/12
74 Lake Shore Drive, Chicago River	0/6	0/12	0/10	0/9	0/10	0/11	0/11	0/10
100 Wells Street, Chicago River	0/11	0/12	0/11	0/11	0/12	0/11	0/12	0/12
39 Madison Street, South Branch Chicago River	0/6	0/6	0/11	0/11	0/12	0/11	0/12	0/12
108 Loomis Street, South Branch Chicago River	0/12	0/12	0/10	0/12	0/11	0/12	0/12	0/10
99 Archer Avenue, South Fork South Branch Chicago River	0/12	0/12	0/9	0/11	0/12	0/11	0/7	0/11
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/7	0/12	0/11	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 Cicero Avenue, Chicago Sanitary & Ship Canal	0/12	0/12	0/11	0/12	0/12	0/12	0/13	0/12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/12	0/12	0/8	0/11	0/11	0/12	0/13	0/12
42 Route 83, Chicago Sanitary & Ship Canal	0/7	1/12	0/11	0/10	0/12	0/11	0/13	0/11
48 Stephen Street, Chicago Sanitary & Ship Canal	0/12	1/12	0/11	0/10	0/12	0/11	0/13	0/11
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/50	0/51	0/47	0/51	0/51	0/51	0/53	0/52
Calumet River System								
49 Ewing Avenue, Calumet River	0/6	0/6	0/5	0/7	0/9	0/10	0/11	0/11
50 Burnham Avenue, Wolf Lake	0/7	0/11	0/10	0/10	0/12	0/11	0/11	0/12
55 130th Street, Calumet River	0/7	0/10	0/9	0/9	0/9	0/10	0/11	0/11
86 Burnham Avenue, Grand Calumet River	2/11	0/10	0/6	0/5	0/10	1/10	0/11	0/10
56 Indiana Avenue, Little Calumet River	0/10	0/10	0/9	0/8	0/9	0/9	0/11	0/9
76 Halsted Street, Little Calumet River	0/11	0/11	0/9	0/11	0/12	0/11	0/11	0/12
52 Wentworth Avenue, Little Calumet River	0/7	0/10	0/10	0/10	0/10	0/11	0/11	0/11
54 Joe Orr Road, Thorn Creek	0/7	0/10	0/9	0/9	0/9	0/10	0/9	0/8
97 170th Street, Thorn Creek	0/6	0/10	0/10	0/9	0/11	0/11	0/11	0/11
57 Ashland Avenue, Little Calumet River	0/11	0/10	0/9	0/9	0/10	0/11	0/11	0/11
58 Ashland Avenue, Calumet-Sag Channel	0/7	0/11	0/9	0/11	0/12	0/11	0/11	0/12
59 Cicero Avenue, Calumet-Sag Channel	0/10	0/11	0/9	0/10	0/11	0/11	0/11	0/12
43 Route 83, Calumet-Sag Channel	0/11	0/11	0/10	0/10	0/10	1/11	0/11	0/11
Des Plaines River System								
90 Route 19, Poplar Creek	0/7	0/11	0/10	0/11	0/11	0/11	0/12	0/11
110 Springinsguth Road, West Branch DuPage River	0/11	0/10	0/8	0/9	0/11	0/10	0/11	0/11
89 Walnut Lane, West Branch DuPage River	0/7	0/12	0/12	0/12	0/12	0/12	0/12	0/12
64 Lake Street, West Branch DuPage River	ND	ND	0/6	0/12	0/12	0/12	0/12	0/12
111 Arlington Drive, West Branch DuPage River	0/12	0/12	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0/11	0/10	0/8	0/8	0/9	0/10	0/9	0/9
80 Arlington Heights Road, Salt Creek	0/7	0/11	0/12	0/12	0/12	0/12	0/12	0/12
18 Devon Avenue, Salt Creek	0/12	0/11	0/10	0/11	0/12	0/12	0/12	0/12
24 Wolf Road, Salt Creek	0/7	0/11	0/10	0/12	0/12	0/11	0/12	0/12
109 Brookfield Avenue, Salt Creek	0/12	0/11	0/11	0/11	0/11	0/11	0/12	0/12
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/8	0/5	0/1	0/4	0/5	0/5	0/7	0/4
78 Wille Road, Higgins Creek	0/11	0/11	0/9	0/12	0/12	0/12	0/12	0/12
12 Lake-Cook Road, Buffalo Creek	0/6	0/9	0/7	0/9	0/11	0/9	0/9	0/7
13 Lake-Cook Road, Des Plaines River	0/7	0/11	0/11	0/12	0/12	0/12	0/12	0/12
17 Oakton Street, Des Plaines River	0/7	0/11	0/11	0/11	0/11	0/11	0/12	0/12
19 Belmont Avenue, Des Plaines River	0/12	0/11	0/11	0/12	0/12	0/11	0/12	0/12
20 Roosevelt Road, Des Plaines River	0/7	0/11	0/11	0/11	0/12	0/11	0/12	0/12
22 Ogden Avenue, Des Plaines River	0/12	0/11	0/12	0/11	0/11	0/11	0/12	0/12
23 Willow Springs Road, Des Plaines River	0/12	0/11	0/12	0/11	0/11	0/11	0/12	0/12
29 Stephen Street, Des Plaines River	0/7	0/11	0/12	0/11	0/12	0/11	0/12	0/12
91 Material Service Road, Des Plaines River	0/12	0/11	0/12	0/12	0/12	0/11	0/12	0/12

ND = No Data.

**TABLE AII-42: SOLUBLE LEAD VIOLATION HISTORY
2005 THROUGH 2012**

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	0/5	0/10	0/9	0/11	0/11	0/4	0/5	0/4
103 Golf Road, West Fork North Branch Chicago River	0/7	0/11	0/9	0/11	0/10	0/11	0/12	0/10
31 Lake-Cook Road, Middle Fork North Branch	0/4	0/9	0/8	0/10	0/10	0/10	0/11	0/10
104 Glenview Road, North Branch Chicago River	0/7	0/12	0/8	0/12	0/12	0/11	0/12	0/12
32 Lake-Cook Road, Skokie River	0/6	0/10	0/8	0/10	0/10	0/10	0/12	0/11
105 Frontage Road, Skokie River	0/7	0/12	0/11	0/12	0/12	0/11	0/12	0/12
34 Dempster Street, North Branch Chicago River	0/7	0/11	0/7	0/12	0/11	0/11	0/12	0/11
96 Albany Avenue, North Branch Chicago River	0/12	0/11	0/10	0/12	0/12	0/11	0/12	0/11
35 Central Street, North Shore Channel	0/5	0/8	0/7	0/9	0/9	0/9	0/9	0/8
112 Dempster Street, North Shore Channel	0/5	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0/7	0/12	0/10	0/11	0/11	0/12	0/12	0/12
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	0/6	0/12	0/10	0/9	0/10	0/11	0/11	0/10
100 Wells Street, Chicago River	0/11	0/12	0/11	0/11	0/12	0/11	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	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	0/6	0/6	0/5	0/7	0/9	0/10	0/11	0/11
50 Burnham Avenue, Wolf Lake	0/7	0/11	0/10	0/10	0/12	0/11	0/11	0/12
55 130th Street, Calumet River	0/7	0/10	0/9	0/9	0/9	0/10	0/11	0/11
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	0/7	0/10	0/10	0/10	0/10	0/11	0/11	0/11
54 Joe Orr Road, Thorn Creek	0/7	0/10	0/9	0/9	0/9	0/10	0/9	0/8
97 170th Street, Thorn Creek	0/6	0/10	0/10	0/8	0/11	0/11	0/11	0/11
57 Ashland Avenue, Little Calumet River	0/11	0/10	0/9	0/9	0/10	0/11	0/11	0/11
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/7	0/11	0/10	0/11	0/11	0/11	0/12	0/11
110 Springinsguth Road, West Branch DuPage River	0/11	0/10	0/8	0/9	0/11	0/10	0/11	0/11
89 Walnut Lane, West Branch DuPage River	0/7	0/12	0/12	0/12	0/12	0/12	0/12	0/12
64 Lake Street, West Branch DuPage River	ND	ND	0/6	0/12	0/12	0/12	0/12	0/12
111 Arlington Drive, West Branch DuPage River	0/12	0/12	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0/11	0/10	0/8	0/8	0/9	0/10	0/9	0/9
80 Arlington Heights Road, Salt Creek	0/7	0/11	0/12	0/12	0/12	0/12	0/12	0/12
18 Devon Avenue, Salt Creek	0/12	0/11	0/10	0/11	0/12	0/12	0/12	0/12
24 Wolf Road, Salt Creek	0/7	0/11	0/10	0/12	0/12	0/11	0/12	0/12
109 Brookfield Avenue, Salt Creek	0/12	0/11	0/11	0/11	0/11	0/11	0/12	0/12
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/8	0/5	0/1	0/4	0/5	0/5	0/7	0/4
78 Wille Road, Higgins Creek	0/11	0/11	0/9	0/12	0/12	0/12	0/12	0/12
12 Lake-Cook Road, Buffalo Creek	0/6	0/9	0/7	0/9	0/11	0/9	0/9	0/7
13 Lake-Cook Road, Des Plaines River	0/7	0/11	0/11	0/12	0/12	0/12	0/12	0/12
17 Oakton Street, Des Plaines River	0/7	0/11	0/11	0/11	0/11	0/11	0/12	0/12
19 Belmont Avenue, Des Plaines River	0/12	0/11	0/11	0/12	0/12	0/11	0/12	0/12
20 Roosevelt Road, Des Plaines River	0/7	0/11	0/11	0/11	0/12	0/11	0/12	0/12
22 Ogden Avenue, Des Plaines River	0/12	0/11	0/12	0/11	0/11	0/11	0/12	0/12
23 Willow Springs Road, Des Plaines River	0/12	0/11	0/12	0/11	0/11	0/11	0/12	0/12
29 Stephen Street, Des Plaines River	0/7	0/11	0/12	0/11	0/12	0/11	0/12	0/12
91 Material Service Road, Des Plaines River	0/12	0/11	0/12	0/12	0/12	0/11	0/12	0/12

NA = Not Applicable.
ND = No Data.

TABLE AII-43: SOLUBLE NICKEL VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	0/5	0/10	0/9	0/11	0/11	0/4	0/5	0/4
103 Golf Road, West Fork North Branch Chicago River	0/7	0/11	0/9	0/11	0/10	0/11	0/12	0/10
31 Lake-Cook Road, Middle Fork North Branch	0/4	0/9	0/8	0/10	0/10	0/10	0/11	0/10
104 Glenview Road, North Branch Chicago River	0/7	0/12	0/8	0/12	0/12	0/11	0/12	0/12
32 Lake-Cook Road, Skokie River	0/6	0/10	0/8	0/10	0/10	0/10	0/12	0/11
105 Frontage Road, Skokie River	0/7	0/12	0/11	0/12	0/12	0/11	0/12	0/12
34 Dempster Street, North Branch Chicago River	0/7	0/11	0/7	0/12	0/11	0/11	0/12	0/11
96 Albany Avenue, North Branch Chicago River	0/12	0/11	0/10	0/12	0/12	0/11	0/12	0/11
35 Central Street, North Shore Channel	0/5	0/8	0/7	0/9	0/9	0/9	0/9	0/8
112 Dempster Street, North Shore Channel	0/5	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0/7	0/12	0/10	0/11	0/11	0/12	0/12	0/11
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	0/6	0/12	0/10	0/9	0/10	0/11	0/11	0/10
100 Wells Street, Chicago River	0/11	0/12	0/11	0/11	0/12	0/11	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	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	0/6	0/5	0/5	0/7	0/9	0/10	0/11	0/11
50 Burnham Avenue, Wolf Lake	0/7	0/11	0/10	0/10	0/12	0/11	0/11	0/12
55 130th Street, Calumet River	0/7	0/10	0/9	0/9	0/9	0/10	0/11	0/11
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	0/7	0/10	0/10	0/10	0/10	0/11	0/11	0/11
54 Joe Orr Road, Thorn Creek	0/7	0/10	0/9	0/9	0/9	0/10	0/9	0/8
97 170th Street, Thorn Creek	0/6	0/10	0/10	0/9	0/11	0/11	0/11	0/11
57 Ashland Avenue, Little Calumet River	0/11	0/10	0/9	0/9	0/10	0/11	0/11	0/11
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/7	0/11	0/10	0/11	0/11	0/11	0/12	0/11
110 Springinsguth Road, West Branch DuPage River	0/11	0/10	0/8	0/9	0/11	0/10	0/11	0/11
89 Walnut Lane, West Branch DuPage River	0/7	0/12	0/12	0/12	0/12	0/12	0/12	0/11
64 Lake Street, West Branch DuPage River	ND	ND	0/6	0/12	0/12	0/12	0/12	0/12
111 Arlington Drive, West Branch DuPage River	0/12	0/12	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0/11	0/10	0/8	0/8	0/9	0/10	0/9	0/9
80 Arlington Heights Road, Salt Creek	0/7	0/11	0/12	0/12	0/12	0/12	0/12	0/12
18 Devon Avenue, Salt Creek	0/12	0/11	0/10	0/11	0/12	0/12	0/12	0/12
24 Wolf Road, Salt Creek	0/7	0/11	0/10	0/12	0/12	0/11	0/12	0/12
109 Brookfield Avenue, Salt Creek	0/12	0/11	0/11	0/11	0/11	0/11	0/12	0/12
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/8	0/5	0/1	0/4	0/5	0/5	0/7	0/4
78 Wille Road, Higgins Creek	0/11	0/11	0/9	0/12	0/12	0/12	0/12	0/12
12 Lake-Cook Road, Buffalo Creek	0/6	0/9	0/7	0/9	0/11	0/9	0/9	0/7
13 Lake-Cook Road, Des Plaines River	0/7	0/11	0/11	0/12	0/12	0/12	0/12	0/12
17 Oakton Street, Des Plaines River	0/7	0/11	0/11	0/11	0/11	0/11	0/12	0/12
19 Belmont Avenue, Des Plaines River	0/12	0/11	0/11	0/12	0/12	0/11	0/12	0/12
20 Roosevelt Road, Des Plaines River	0/7	0/11	0/11	0/11	0/12	0/11	0/12	0/12
22 Ogden Avenue, Des Plaines River	0/12	0/11	0/12	0/11	0/11	0/11	0/12	0/12
23 Willow Springs Road, Des Plaines River	0/12	0/11	0/12	0/11	0/11	0/11	0/12	0/12
29 Stephen Street, Des Plaines River	0/7	0/11	0/12	0/11	0/12	0/11	0/12	0/12
91 Material Service Road, Des Plaines River	0/12	0/11	0/12	0/12	0/12	0/11	0/12	0/12

NA = Not Applicable.
ND = No Data.

TABLE AII-44: SOLUBLE MERCURY VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
103 Golf Road, West Fork North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	0/1
31 Lake-Cook Road, Middle Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND
104 Glenview Road, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
32 Lake-Cook Road, Skokie River	ND	ND	ND	ND	ND	ND	ND	0/2
105 Frontage Road, Skokie River	ND	ND	ND	ND	ND	ND	ND	0/2
34 Dempster Street, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	0/1
96 Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	0/1
35 Central Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	0/1
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	0/1
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
100 Wells Street, Chicago River	ND	ND	ND	ND	ND	ND	ND	0/1
39 Madison Street, South Branch Chicago River	NA	NA	NA	NA	NA	NA	NA	NA
108 Loomis Street, South Branch Chicago River	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	ND	ND	ND	ND	ND	ND	ND	ND
50 Burnham Avenue, Wolf Lake	ND	ND	ND	ND	ND	ND	ND	ND
55 130th Street, Calumet River	ND	ND	ND	ND	ND	ND	0/1	ND
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	ND	ND	ND	ND	ND	ND	0/1	0/1
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND
97 170th Street, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND
57 Ashland Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	0/1	0/3
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	ND	ND	ND	ND	ND	0/1	ND	0/2
110 Springinsguth Road, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	0/1
89 Walnut Lane, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	ND
64 Lake Street, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	ND
111 Arlington Drive, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
80 Arlington Heights Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	0/2
18 Devon Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	0/2
24 Wolf Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
109 Brookfield Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND
78 Wille Road, Higgins Creek	ND	ND	ND	ND	ND	ND	0/1	0/1
12 Lake-Cook Road, Buffalo Creek	ND	ND	ND	ND	ND	ND	ND	0/1
13 Lake-Cook Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	0/1
17 Oakton Street, Des Plaines River	ND	ND	ND	ND	ND	ND	0/1	0/1
19 Belmont Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND
20 Roosevelt Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND
22 Ogden Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND
23 Willow Springs Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	0/1
29 Stephen Street, Des Plaines River	ND	ND	ND	ND	ND	ND	0/1	ND
91 Material Service Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	0/1

NA = Not Applicable.
ND = No Data.

TABLE AII-45: SOLUBLE ZINC VIOLATION HISTORY
2005 THROUGH 2012

Sampling Station (No. Name)	Ratio of Violations/Sampling Frequency Per Year							
	12	11	10	09	08	07	06	05
Chicago River System								
106 Dundee Road, West Fork North Branch Chicago River	0/5	0/10	0/9	0/11	0/11	0/4	0/5	0/4
103 Golf Road, West Fork North Branch Chicago River	0/7	0/11	0/9	0/11	0/10	0/11	0/12	0/10
31 Lake-Cook Road, Middle Fork North Branch	0/4	0/9	0/8	0/10	0/10	0/10	0/11	0/10
104 Glenview Road, North Branch Chicago River	0/7	0/12	0/8	0/12	0/12	0/11	0/12	0/12
32 Lake-Cook Road, Skokie River	0/6	0/10	0/8	0/10	0/10	0/10	0/12	0/11
105 Frontage Road, Skokie River	0/7	0/12	0/11	0/12	0/12	0/11	0/12	0/12
34 Dempster Street, North Branch Chicago River	0/7	0/11	0/7	0/12	0/11	0/11	0/12	0/11
96 Albany Avenue, North Branch Chicago River	0/12	0/11	0/10	0/12	0/12	0/11	0/12	0/11
35 Central Street, North Shore Channel	0/5	0/8	0/7	0/9	0/9	0/9	0/9	0/8
112 Dempster Street, North Shore Channel	0/5	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0/7	0/12	0/10	0/11	0/11	0/12	0/12	0/12
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
37 Wilson Avenue, North Branch Chicago River	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	NA	NA	NA	NA	NA	NA
74 Lake Shore Drive, Chicago River	0/6	0/12	0/10	0/9	0/10	0/11	0/11	0/10
100 Wells Street, Chicago River	0/11	0/12	0/11	0/11	0/12	0/11	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	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	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	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	NA	NA	NA	NA	NA	NA	NA	NA
48 Stephen Street, 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	0/6	0/6	0/5	0/7	0/9	0/10	0/11	0/11
50 Burnham Avenue, Wolf Lake	0/7	0/11	0/10	0/10	0/12	0/11	0/11	0/12
55 130th Street, Calumet River	0/7	0/10	0/9	0/9	0/9	0/10	0/11	0/11
86 Burnham Avenue, Grand Calumet River	NA	NA	NA	NA	NA	NA	NA	NA
56 Indiana Avenue, Little Calumet River	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	0/7	0/10	0/10	0/10	0/10	0/11	0/11	0/11
54 Joe Orr Road, Thorn Creek	0/7	0/10	0/9	0/9	0/9	0/10	0/9	0/8
97 170th Street, Thorn Creek	0/6	0/10	0/10	0/9	0/11	0/11	0/11	0/11
57 Ashland Avenue, Little Calumet River	0/11	0/10	0/9	0/9	0/10	0/11	0/11	0/11
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
43 Route 83, Calumet-Sag Channel	NA	NA	NA	NA	NA	NA	NA	NA
Des Plaines River System								
90 Route 19, Poplar Creek	0/7	0/11	0/10	0/11	0/11	0/11	0/12	0/11
110 Springinsguth Road, West Branch DuPage River	0/11	0/10	0/8	0/9	0/11	0/10	0/11	0/11
89 Walnut Lane, West Branch DuPage River	0/7	0/12	0/12	0/12	0/12	0/12	0/12	0/12
64 Lake Street, West Branch DuPage River	ND	ND	0/6	0/12	0/12	0/12	0/12	0/12
111 Arlington Drive, West Branch DuPage River	0/12	0/12	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0/11	0/10	0/8	0/8	0/9	0/10	0/9	0/9
80 Arlington Heights Road, Salt Creek	0/7	0/11	0/12	0/12	0/12	0/12	0/12	0/12
18 Devon Avenue, Salt Creek	0/12	0/11	0/10	0/11	0/12	0/12	0/12	0/12
24 Wolf Road, Salt Creek	0/7	0/11	0/10	0/12	0/12	0/11	0/12	0/12
109 Brookfield Avenue, Salt Creek	0/12	0/11	0/11	0/11	0/11	0/11	0/12	0/12
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/8	0/5	0/1	0/4	0/5	0/5	0/7	0/4
78 Wille Road, Higgins Creek	0/11	0/11	0/9	0/12	0/12	0/12	0/12	0/12
12 Lake-Cook Road, Buffalo Creek	0/6	0/9	0/7	0/9	0/11	0/9	0/9	0/7
13 Lake-Cook Road, Des Plaines River	0/7	0/11	0/11	0/12	0/12	0/12	0/12	0/12
17 Oakton Street, Des Plaines River	0/7	0/11	0/11	0/11	0/11	0/11	0/12	0/12
19 Belmont Avenue, Des Plaines River	0/12	0/11	0/11	0/12	0/12	0/11	0/12	0/12
20 Roosevelt Road, Des Plaines River	0/7	0/11	0/11	0/11	0/12	0/11	0/12	0/12
22 Ogden Avenue, Des Plaines River	0/12	0/11	0/12	0/11	0/11	0/11	0/12	0/12
23 Willow Springs Road, Des Plaines River	0/12	0/11	0/12	0/11	0/11	0/11	0/12	0/12
29 Stephen Street, Des Plaines River	0/7	0/11	0/12	0/11	0/12	0/11	0/12	0/12
91 Material Service Road, Des Plaines River	0/12	0/11	0/12	0/12	0/12	0/11	0/12	0/12

NA = Not Applicable.
ND = No Data.

TABLE AII-46: BIOCHEMICAL OXYGEN DEMAND MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)											
	12	11	10	09	08	07	06	05	04	03	02	
Chicago River System												
106 Dundee Road, West Fork North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
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
104 Glenview Road, North Branch Chicago River	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	ND
105 Frontage Road, Skokie River	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	ND
96 Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	4.00	2.00	2.89	3.50	
35 Central Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	1.00	2.00	2.56	
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	8.00	3.33	3.30	3.45	
36 Touhy Avenue, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	11.00	6.42	7.58	6.58	
101 Foster Avenue, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	8.00	5.92	5.42	6.58	
37 Wilson Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	10.00	5.67	5.25	4.92	
73 Diversey Parkway, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	6.00	3.25	3.25	3.00	
46 Grand Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	2.00	3.17	2.67	1.83	
74 Lake Shore Drive, Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	1.33	2.70	2.08	
100 Wells Street, Chicago River	ND	ND	ND	ND	ND	ND	ND	3.00	2.17	3.25	2.33	
39 Madison Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	4.00	2.92	3.91	2.58	
108 Loomis Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	3.00	2.92	4.25	2.92	
99 Archer Avenue, South Fork South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	6.08	3.73	4.83	
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	4.00	2.42	ND	ND	
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.75	
75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	4.00	3.75	4.67	2.58	
41 Harlem Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	5.00	3.17	3.33	2.25	
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	0.00	2.83	2.75	2.58	
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	3.00	1.83	2.50	1.25	
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	3.14	1.50	1.65	1.74	
Calumet River System												
49 Ewing Avenue, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	1.10	0.92	0.92	
50 Burnham Avenue, Wolf Lake	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	0.27	1.90	1.67	
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
56 Indiana Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	1.78	2.36	2.42	
76 Halsted Street, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	4.00	1.75	2.64	1.58	
52 Wentworth Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
97 170th Street, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
57 Ashland Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	2.40	4.50	2.17	
58 Ashland Avenue, Calumet-Sag Channel	ND	ND	ND	ND	ND	ND	ND	3.00	0.83	3.00	1.25	
59 Cicero Avenue, Calumet-Sag Channel	ND	ND	ND	ND	ND	ND	ND	3.00	1.55	2.00	2.50	
43 Route 83, Calumet-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	1.89	2.00	1.58	
Des Plaines River System												
90 Route 19, Poplar Creek	ND	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
89 Walnut Lane, West Branch DuPage River	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	ND
111 Arlington Drive, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
80 Arlington Heights Road, Salt Creek	ND	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
24 Wolf Road, Salt Creek	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	ND
21 First Avenue, Salt Creek	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	ND
78 Wille Road, Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12 Lake-Cook Road, Buffalo Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	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	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	ND
23 Willow Springs Road, Des Plaines River	ND	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
91 Material Service Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No Data.

TABLE AII-47: CARBONACEOUS BIOCHEMICAL OXYGEN DEMAND MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)											
	12	11	10	09	08	07	06	05	04	03	02	
Chicago River System												
106 Dundee Road, West Fork North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
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
104 Glenview Road, North Branch Chicago River	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	ND
105 Frontage Road, Skokie River	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	ND
96 Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	3.00	1.86	1.78	2.36	
35 Central Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	1.00	1.67	1.11	
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	0.00	2.08	1.44	1.91	
36 Touhy Avenue, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	4.00	2.50	2.25	2.00	
101 Foster Avenue, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	2.00	1.92	1.75	2.33	
37 Wilson Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	4.00	1.67	2.50	2.08	
73 Diversey Parkway, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	2.00	1.33	1.17	1.33	
46 Grand Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	1.50	1.50	0.92	0.50	
74 Lake Shore Drive, Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	1.11	2.80	1.50	
100 Wells Street, Chicago River	ND	ND	ND	ND	ND	ND	ND	3.00	1.58	1.67	1.64	
39 Madison Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	2.00	1.42	2.00	1.42	
108 Loomis Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	0.00	1.25	2.58	1.50	
99 Archer Avenue, South Fork South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	3.08	1.58	2.25	
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	2.00	1.42	ND	ND	
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.75	
75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	3.00	1.67	0.83	0.75	
41 Harlem Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	3.00	1.50	1.33	0.50	
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	2.00	0.50	1.25	0.58	
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	0.00	0.58	1.17	0.50	
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	0.71	0.61	0.52	0.40	
Calumet River System												
49 Ewing Avenue, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	0.50	1.33	0.83	
50 Burnham Avenue, Wolf Lake	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	0.27	1.40	1.25	
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
56 Indiana Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	0.00	1.36	1.92	
76 Halsted Street, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	4.00	1.08	1.00	0.67	
52 Wentworth Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
97 170th Street, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
57 Ashland Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	1.40	2.10	1.58	
58 Ashland Avenue, Calumet-Sag Channel	ND	ND	ND	ND	ND	ND	ND	3.00	1.08	1.50	0.67	
59 Cicero Avenue, Calumet-Sag Channel	ND	ND	ND	ND	ND	ND	ND	4.00	0.83	1.27	0.92	
43 Route 83, Calumet-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	0.60	1.18	0.83	
Des Plaines River System												
90 Route 19, Poplar Creek	ND	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
89 Walnut Lane, West Branch DuPage River	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	ND
111 Arlington Drive, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
80 Arlington Heights Road, Salt Creek	ND	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
24 Wolf Road, Salt Creek	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	ND
21 First Avenue, Salt Creek	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	ND
78 Wille Road, Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12 Lake-Cook Road, Buffalo Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	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	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	ND
23 Willow Springs Road, Des Plaines River	ND	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
91 Material Service Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No Data.

TABLE AII-48: DISSOLVED OXYGEN MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	7.32	7.83	8.03	7.78	6.93	8.75	8.10	10.30	8.02	7.00	9.12
103 Golf Road, West Fork North Branch Chicago River	7.99	7.75	7.70	7.27	7.21	7.31	8.58	7.38	7.64	6.86	7.10
31 Lake-Cook Road, Middle Fork North Branch	6.45	7.13	6.18	7.88	6.55	6.16	7.15	5.42	6.46	6.22	6.55
104 Glenview Road, North Branch Chicago River	7.60	7.68	8.20	7.53	7.39	6.90	7.98	8.12	8.03	7.47	8.08
32 Lake-Cook Road, Skokie River	6.88	7.29	7.23	7.75	7.35	7.21	7.75	7.75	7.73	6.67	7.14
105 Frontage Road, Skokie River	8.41	7.40	7.63	7.77	7.61	7.76	9.27	8.79	8.33	7.95	8.15
34 Dempster Street, North Branch Chicago River	8.30	7.28	8.25	7.88	7.01	6.52	8.23	7.16	8.21	7.45	7.75
96 Albany Avenue, North Branch Chicago River	8.02	8.68	8.47	8.64	8.22	8.19	9.18	8.63	9.12	7.77	7.71
35 Central Street, North Shore Channel	8.52	7.91	8.39	9.23	7.30	8.23	8.63	7.50	7.53	8.08	7.34
112 Dempster Street, North Shore Channel	8.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	7.09	7.39	7.02	8.19	7.57	7.76	8.73	7.95	7.26	6.32	6.58
36 Touhy Avenue, North Shore Channel	6.96	7.29	7.15	8.29	7.83	7.65	7.93	7.98	8.10	7.54	6.90
101 Foster Avenue, North Shore Channel	6.53	6.99	7.18	7.67	7.21	7.13	7.20	7.30	7.58	7.42	6.53
37 Wilson Avenue, North Branch Chicago River	7.13	7.23	7.51	8.43	7.43	7.58	7.83	7.03	7.55	7.14	6.74
73 Diversey Parkway, North Branch Chicago River	6.73	6.63	6.91	7.91	6.94	6.75	7.25	6.44	6.71	6.25	5.74
46 Grand Avenue, North Branch Chicago River	6.94	6.28	6.57	7.25	6.73	6.67	6.85	6.30	6.47	6.12	5.86
74 Lake Shore Drive, Chicago River	7.80	8.17	9.05	9.27	8.76	9.00	9.19	9.08	8.50	7.62	9.03
100 Wells Street, Chicago River	6.74	7.36	8.11	8.57	8.03	8.39	8.68	8.96	8.56	7.54	7.83
39 Madison Street, South Branch Chicago River	6.53	7.23	7.36	7.27	7.53	7.45	7.79	7.85	6.86	5.73	6.38
108 Loomis Street, South Branch Chicago River	6.18	6.77	7.51	6.84	6.89	7.21	7.81	7.78	7.23	5.97	5.86
99 Archer Avenue, South Fork South Branch Chicago River	5.47	5.11	5.60	4.76	5.33	6.19	6.00	6.65	5.63	5.29	3.91
40 Damen Avenue, Chicago Sanitary & Ship Canal	5.29	6.18	7.02	6.97	6.49	7.25	7.44	7.59	6.71	5.68	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.60
75 Cicero Avenue, Chicago Sanitary & Ship Canal	5.97	5.89	6.02	6.43	5.32	6.22	6.04	6.11	5.77	5.18	5.18
41 Harlem Avenue, Chicago Sanitary & Ship Canal	6.78	6.38	7.56	6.68	7.13	6.59	7.30	7.29	6.92	6.81	6.95
42 Route 83, Chicago Sanitary & Ship Canal	5.71	5.87	5.93	6.31	6.23	6.00	5.46	5.90	6.06	5.85	6.09
48 Stephen Street, Chicago Sanitary & Ship Canal	6.03	5.89	6.48	7.00	6.78	5.98	5.43	6.25	6.25	5.78	5.73
92 Lockport Forebay, Chicago Sanitary & Ship Canal	5.75	5.54	5.69	6.28	6.19	6.07	5.68	5.86	5.67	5.57	5.32
Calumet River System											
49 Ewing Avenue, Calumet River	9.22	9.43	8.90	9.07	8.84	9.66	9.50	9.99	9.24	9.73	9.65
50 Burnham Avenue, Wolf Lake	8.00	8.67	8.12	8.45	8.58	8.79	9.63	9.25	9.79	8.91	9.77
55 130th Street, Calumet River	8.83	8.86	9.16	8.43	8.22	8.91	8.45	9.26	9.13	8.27	9.17
86 Burnham Avenue, Grand Calumet River	4.23	4.57	4.89	4.66	6.51	4.21	6.20	4.80	4.93	3.94	6.22
56 Indiana Avenue, Little Calumet River	7.72	7.71	8.71	8.45	7.89	7.49	9.61	8.83	7.71	8.40	8.69
76 Halsted Street, Little Calumet River	6.64	6.78	6.89	7.14	6.30	6.35	6.27	6.98	7.13	7.00	6.92
52 Wentworth Avenue, Little Calumet River	7.10	7.21	7.08	7.10	6.22	6.43	7.49	6.45	6.40	6.53	6.47
54 Joe Orr Road, Thorn Creek	7.80	8.08	7.72	8.04	8.21	8.19	7.72	7.65	8.57	8.40	8.54
97 170th Street, Thorn Creek	7.18	7.43	7.87	7.24	7.01	7.34	7.15	7.85	8.37	7.80	8.37
57 Ashland Avenue, Little Calumet River	6.82	7.27	7.46	6.79	6.54	6.50	7.27	6.35	6.99	5.42	7.29
58 Ashland Avenue, Calumet-Sag Channel	6.19	7.19	7.44	7.52	6.63	6.54	7.15	7.23	7.25	6.98	6.48
59 Cicero Avenue, Calumet-Sag Channel	6.54	6.66	6.20	7.02	6.92	6.79	6.24	6.56	6.80	7.23	6.85
43 Route 83, Calumet-Sag Channel	6.58	6.98	6.49	6.72	7.22	6.51	6.70	7.38	6.39	7.88	6.93
Des Plaines River System											
90 Route 19, Poplar Creek	9.17	8.45	8.80	8.58	8.61	9.64	9.78	8.47	10.16	9.16	8.94
110 Springinguth Road, West Branch DuPage River	5.47	5.94	5.34	6.23	6.16	6.17	6.23	6.80	6.31	ND	ND
89 Walnut Lane, West Branch DuPage River	7.99	7.78	8.53	8.75	8.35	8.68	8.28	7.78	8.03	7.48	7.64
64 Lake Street, West Branch DuPage River	ND	ND	8.42	9.03	8.65	8.91	8.68	8.61	7.41	8.05	8.38
111 Arlington Drive, West Branch DuPage River	8.33	8.08	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	7.76	7.09	6.88	7.41	7.18	7.80	8.78	6.24	8.97	7.37	7.59
80 Arlington Heights Road, Salt Creek	8.40	7.94	8.43	8.11	7.83	8.78	8.77	8.48	8.01	7.79	8.07
18 Devon Avenue, Salt Creek	7.82	8.06	8.25	8.09	8.48	8.94	8.89	9.04	8.33	7.59	7.96
24 Wolf Road, Salt Creek	8.17	8.64	7.41	8.82	8.27	8.23	8.51	8.61	8.19	8.64	7.79
109 Brookfield Avenue, Salt Creek	7.98	8.07	7.37	8.39	7.35	7.59	7.58	7.81	8.02	8.13	5.98
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.90
77 Elmhurst Road, Higgins Creek	8.71	8.94	8.70	8.55	8.82	8.66	8.43	9.15	8.80	7.48	8.22
78 Wille Road, Higgins Creek	8.88	8.65	8.98	8.81	8.46	8.76	9.04	8.88	9.15	8.16	8.55
12 Lake-Cook Road, Buffalo Creek	9.28	9.44	7.31	9.26	8.84	8.83	8.69	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	8.79	8.35	8.11	8.43	8.00	8.55	8.76	8.59	8.83	8.30	9.35
17 Oakton Street, Des Plaines River	8.24	8.83	8.58	9.38	8.34	8.39	8.35	8.39	8.83	7.57	8.17
19 Belmont Avenue, Des Plaines River	7.82	8.44	8.41	8.34	7.50	7.67	8.43	7.55	7.91	7.64	7.74
20 Roosevelt Road, Des Plaines River	8.66	8.26	7.91	8.60	7.55	7.62	8.16	7.57	8.13	7.16	7.96
22 Ogden Avenue, Des Plaines River	8.40	9.19	7.89	9.14	8.24	8.94	9.00	9.13	9.27	12.06	9.34
23 Willow Springs Road, Des Plaines River	8.73	9.05	8.07	8.80	8.00	8.65	8.24	9.08	9.19	8.66	8.99
29 Stephen Street, Des Plaines River	9.80	9.18	8.37	9.97	8.94	8.56	8.90	9.91	9.62	9.95	9.53
91 Material Service Road, Des Plaines River	9.68	9.05	9.04	9.33	8.78	9.38	9.68	10.31	10.65	9.65	10.31

ND = No Data.

TABLE AII-49: TEMPERATURE MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (°C)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	11.9	12.7	13.1	11.3	13.6	9.8	13.2	12.4	12.1	19.4	10.8
103 Golf Road, West Fork North Branch Chicago River	14.6	14.8	15.7	13.4	13.8	15.4	13.4	15.2	16.7	15.2	12.5
31 Lake-Cook Road, Middle Fork North Branch	16.9	14.2	14.8	12.4	12.7	15.7	12.6	16.1	15.3	16.7	11.7
104 Glenview Road, North Branch Chicago River	14.2	13.4	12.7	12.5	11.5	14.8	12.9	15.1	13.9	16.5	10.4
32 Lake-Cook Road, Skokie River	14.1	15.2	15.2	13.4	12.3	16.2	12.9	17.1	15.2	16.1	11.9
105 Frontage Road, Skokie River	15.2	13.8	13.5	12.3	12.3	14.9	13.1	14.4	13.9	15.1	12.7
34 Dempster Street, North Branch Chicago River	13.3	13.7	12.7	11.9	13.5	14.7	12.8	16.7	15.3	14.3	12.3
96 Albany Avenue, North Branch Chicago River	14.7	14.1	14.5	12.1	12.6	15.1	13.0	15.5	14.3	15.2	12.9
35 Central Street, North Shore Channel	19.5	17.2	16.9	14.9	15.9	15.5	18.6	17.9	17.4	17.9	14.3
112 Dempster Street, North Shore Channel	12.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	16.5	15.0	15.4	13.2	14.7	14.3	15.0	16.1	12.8	16.2	14.9
36 Touhy Avenue, North Shore Channel	16.9	15.1	16.2	13.9	14.8	17.0	15.6	16.4	14.7	17.0	16.5
101 Foster Avenue, North Shore Channel	16.0	15.3	15.3	14.8	14.7	16.7	15.8	16.8	15.8	17.9	15.3
37 Wilson Avenue, North Branch Chicago River	15.4	14.7	15.7	13.7	14.2	15.7	15.2	17.5	17.3	17.1	15.1
73 Diversey Parkway, North Branch Chicago River	15.7	15.3	15.0	13.8	13.5	15.5	15.0	17.4	16.9	16.0	15.2
46 Grand Avenue, North Branch Chicago River	16.5	14.8	14.6	13.4	13.6	16.5	14.9	17.5	16.7	14.5	15.3
74 Lake Shore Drive, Chicago River	15.0	13.9	13.5	13.7	14.6	14.5	14.0	15.2	17.5	15.5	12.8
100 Wells Street, Chicago River	16.4	14.2	13.9	13.7	12.8	14.5	13.9	13.4	14.4	14.1	14.0
39 Madison Street, South Branch Chicago River	15.9	10.7	13.9	13.7	12.4	14.1	14.0	13.3	14.3	12.7	14.1
108 Loomis Street, South Branch Chicago River	17.8	15.4	15.7	16.4	15.3	16.3	16.7	15.5	18.4	17.1	17.8
99 Archer Avenue, South Fork South Branch Chicago River	16.8	14.9	12.8	15.4	14.6	16.6	18.9	15.8	16.5	16.1	17.2
40 Damen Avenue, Chicago Sanitary & Ship Canal	18.1	15.1	16.1	15.4	14.4	16.3	16.6	15.5	16.9	16.8	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17.1
75 Cicero Avenue, Chicago Sanitary & Ship Canal	17.8	18.4	19.3	17.3	17.9	20.2	17.7	20.0	18.1	20.8	18.8
41 Harlem Avenue, Chicago Sanitary & Ship Canal	18.4	16.6	17.2	16.4	16.8	16.3	16.4	17.3	17.6	17.5	16.9
42 Route 83, Chicago Sanitary & Ship Canal	18.7	17.2	16.1	16.5	17.7	18.7	18.4	17.7	15.3	17.5	16.6
48 Stephen Street, Chicago Sanitary & Ship Canal	17.3	15.8	16.5	15.8	16.8	17.4	16.3	16.1	15.8	15.6	16.4
92 Lockport Forebay, Chicago Sanitary & Ship Canal	18.4	17.0	18.0	17.4	17.9	19.8	19.4	19.3	18.1	17.9	18.7
Calumet River System											
49 Ewing Avenue, Calumet River	14.8	12.1	17.3	14.0	15.0	16.3	14.0	16.2	14.2	12.4	12.7
50 Burnham Avenue, Wolf Lake	15.0	13.7	15.6	17.0	11.5	16.3	13.9	14.5	13.0	14.2	12.1
55 130th Street, Calumet River	14.5	14.2	16.0	16.6	14.6	17.6	13.5	15.8	15.6	14.4	12.3
86 Burnham Avenue, Grand Calumet River	13.7	14.2	18.0	17.8	11.9	16.8	13.7	16.2	15.4	15.6	12.9
56 Indiana Avenue, Little Calumet River	15.1	15.4	17.6	17.1	16.2	18.6	14.6	16.0	16.7	16.2	13.6
76 Halsted Street, Little Calumet River	16.3	14.6	16.6	14.4	14.1	17.2	15.3	16.4	13.5	15.7	14.8
52 Wentworth Avenue, Little Calumet River	13.7	14.4	15.2	15.9	13.2	14.9	14.1	14.5	14.3	16.2	13.1
54 Joe Orr Road, Thorn Creek	15.2	15.0	15.0	16.7	13.9	16.3	15.1	15.0	15.3	14.9	15.0
97 170th Street, Thorn Creek	14.2	14.5	15.0	16.4	12.1	15.4	14.7	13.4	14.7	15.3	14.4
57 Ashland Avenue, Little Calumet River	14.8	14.5	14.4	16.5	15.4	15.3	15.7	15.7	16.2	17.1	12.9
58 Ashland Avenue, Calumet-Sag Channel	15.9	14.4	15.5	14.3	13.8	16.3	14.3	15.8	14.2	15.1	14.5
59 Cicero Avenue, Calumet-Sag Channel	15.2	15.0	16.0	15.9	14.2	16.5	16.6	15.0	16.6	16.9	16.3
43 Route 83, Calumet-Sag Channel	17.2	15.6	15.8	16.2	15.4	17.3	15.1	16.7	20.0	16.8	14.9
Des Plaines River System											
90 Route 19, Poplar Creek	11.8	14.0	15.4	13.6	14.5	14.3	13.2	15.1	15.0	13.8	16.3
110 Springinguth Road, West Branch DuPage River	13.9	15.9	17.9	13.7	13.5	14.9	13.2	15.1	15.3	ND	ND
89 Walnut Lane, West Branch DuPage River	14.3	15.6	16.3	15.7	16.3	15.7	13.8	16.9	16.1	16.6	15.5
64 Lake Street, West Branch DuPage River	ND	ND	12.1	13.5	15.3	14.8	14.5	16.5	15.9	14.4	14.2
111 Arlington Drive, West Branch DuPage River	15.5	15.9	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	15.7	16.0	18.9	16.7	18.2	15.8	18.6	19.2	15.0	15.1	18.9
80 Arlington Heights Road, Salt Creek	13.8	15.3	15.0	13.6	15.0	15.0	14.6	16.4	15.9	14.9	14.2
18 Devon Avenue, Salt Creek	15.2	14.9	13.4	14.0	14.6	14.3	14.0	15.3	15.4	16.0	14.6
24 Wolf Road, Salt Creek	13.4	14.5	11.3	12.1	14.6	14.6	13.5	14.8	16.2	12.9	12.3
109 Brookfield Avenue, Salt Creek	14.9	14.7	13.8	12.3	15.2	14.5	12.8	14.9	15.1	14.1	15.9
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4
77 Elmhurst Road, Higgins Creek	13.2	14.6	14.8	12.2	10.5	14.0	13.3	12.3	12.7	15.4	15.0
78 Wille Road, Higgins Creek	15.4	16.3	17.7	13.8	17.6	16.2	16.1	17.1	15.6	15.4	16.0
12 Lake-Cook Road, Buffalo Creek	11.0	12.9	14.9	10.5	13.9	14.2	11.1	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	11.8	14.0	14.1	11.1	14.7	13.1	12.9	15.8	14.1	12.4	12.2
17 Oakton Street, Des Plaines River	13.5	14.5	15.1	12.8	15.8	14.4	13.6	15.9	15.2	15.5	14.4
19 Belmont Avenue, Des Plaines River	15.5	14.3	15.0	11.8	15.3	14.8	14.2	15.3	16.2	13.6	12.1
20 Roosevelt Road, Des Plaines River	14.4	15.1	15.3	13.4	15.7	15.2	13.8	15.4	15.7	15.3	12.2
22 Ogden Avenue, Des Plaines River	14.5	14.5	13.0	11.8	14.9	14.4	13.0	15.1	16.5	6.0	11.3
23 Willow Springs Road, Des Plaines River	15.5	14.5	14.1	12.1	15.2	15.7	12.7	14.7	16.1	15.0	14.4
29 Stephen Street, Des Plaines River	13.5	15.1	13.5	12.6	14.3	15.5	13.4	15.1	17.2	13.8	12.3
91 Material Service Road, Des Plaines River	15.7	15.2	14.0	11.7	14.7	15.8	13.8	15.0	17.1	13.2	12.5

ND = No Data.

TABLE AII-50: pH MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	6.95	7.14	7.25	7.18	7.52	7.64	7.22	7.53	7.33	7.57	7.54
103 Golf Road, West Fork North Branch Chicago River	7.40	7.59	7.63	7.49	7.44	7.50	7.47	7.42	7.72	7.65	7.77
31 Lake-Cook Road, Middle Fork North Branch	7.40	7.54	7.61	7.60	7.64	7.67	7.47	7.26	7.32	7.59	7.44
104 Glenview Road, North Branch Chicago River	7.89	7.73	7.71	7.76	7.86	7.85	7.71	7.22	7.45	7.97	7.73
32 Lake-Cook Road, Skokie River	7.59	7.69	7.70	7.66	7.74	7.85	7.66	7.19	7.34	7.59	7.43
105 Frontage Road, Skokie River	7.73	7.66	7.56	7.64	7.77	7.88	7.68	7.19	7.47	7.65	7.69
34 Dempster Street, North Branch Chicago River	7.77	7.72	7.70	7.78	7.61	7.67	7.74	7.45	7.72	7.72	7.59
96 Albany Avenue, North Branch Chicago River	7.64	7.67	7.94	7.88	7.80	7.77	7.59	7.30	7.53	7.69	7.81
35 Central Street, North Shore Channel	7.71	7.73	7.62	7.83	7.80	7.78	7.70	7.65	7.89	7.31	7.90
112 Dempster Street, North Shore Channel	6.71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	7.34	7.49	7.57	7.67	7.69	7.58	7.56	7.35	7.73	7.13	7.36
36 Touhy Avenue, North Shore Channel	7.09	7.21	7.30	7.33	7.40	7.40	7.23	7.14	7.41	7.25	7.38
101 Foster Avenue, North Shore Channel	7.12	7.14	7.11	7.33	7.31	7.25	7.13	7.18	7.27	7.13	7.28
37 Wilson Avenue, North Branch Chicago River	7.43	7.38	7.35	7.54	7.40	7.44	7.39	7.32	7.59	7.50	7.44
73 Diversey Parkway, North Branch Chicago River	7.30	7.26	7.31	7.30	7.42	7.21	7.36	7.23	7.37	7.26	7.45
46 Grand Avenue, North Branch Chicago River	7.38	7.42	7.39	7.49	7.43	7.45	7.37	7.21	7.47	7.41	7.36
74 Lake Shore Drive, Chicago River	6.96	7.10	7.39	7.49	7.64	7.60	7.75	7.52	7.73	7.33	7.43
100 Wells Street, Chicago River	6.98	7.13	7.38	7.68	7.62	7.68	7.72	7.44	7.49	7.30	7.23
39 Madison Street, South Branch Chicago River	7.32	7.10	7.23	7.45	7.42	7.65	7.49	7.41	7.31	7.25	7.23
108 Loomis Street, South Branch Chicago River	7.34	7.40	7.33	7.42	7.59	7.50	7.46	7.44	7.30	7.36	7.25
99 Archer Avenue, South Fork South Branch Chicago River	7.25	7.28	7.34	7.25	7.42	7.45	7.38	7.27	7.27	7.35	7.13
40 Damen Avenue, Chicago Sanitary & Ship Canal	7.38	7.40	7.40	7.46	7.54	7.49	7.46	7.39	7.40	7.38	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.10
75 Cicero Avenue, Chicago Sanitary & Ship Canal	6.93	7.13	7.04	7.14	7.19	7.29	7.22	7.23	7.47	7.27	7.16
41 Harlem Avenue, Chicago Sanitary & Ship Canal	7.10	7.15	7.23	7.24	7.41	7.27	7.20	7.11	7.47	7.23	7.17
42 Route 83, Chicago Sanitary & Ship Canal	7.01	6.81	7.02	6.96	7.10	7.13	6.92	7.08	7.40	7.12	7.22
48 Stephen Street, Chicago Sanitary & Ship Canal	7.12	7.01	7.24	7.28	7.57	7.32	7.08	7.03	7.34	7.25	7.26
92 Lockport Forebay, Chicago Sanitary & Ship Canal	7.22	7.27	7.33	7.39	7.40	7.31	7.29	7.20	7.38	7.33	7.27
Calumet River System											
49 Ewing Avenue, Calumet River	7.28	7.08	7.57	7.45	7.45	7.77	7.72	7.48	8.01	7.65	7.55
50 Burnham Avenue, Wolf Lake	7.91	7.65	7.74	7.81	8.04	8.29	8.26	7.65	7.82	8.18	7.91
55 130th Street, Calumet River	7.76	7.77	7.86	7.84	7.92	7.85	7.94	7.64	7.78	7.86	7.87
86 Burnham Avenue, Grand Calumet River	7.19	7.34	7.27	7.35	7.69	7.64	7.43	7.30	7.51	7.58	7.73
56 Indiana Avenue, Little Calumet River	7.28	7.22	7.57	7.49	7.49	7.65	7.81	7.06	7.67	7.73	7.63
76 Halsted Street, Little Calumet River	7.22	7.09	7.30	7.31	7.34	7.40	7.51	7.11	7.40	7.36	7.35
52 Wentworth Avenue, Little Calumet River	7.67	7.42	7.63	7.77	7.86	7.77	7.75	7.16	7.43	7.63	7.56
54 Joe Orr Road, Thorn Creek	7.03	7.05	7.27	7.03	7.32	7.17	7.32	7.10	7.38	7.37	7.37
97 170th Street, Thorn Creek	7.59	7.45	7.66	7.76	7.83	7.71	7.70	6.96	7.44	7.61	7.58
57 Ashland Avenue, Little Calumet River	7.75	7.58	7.60	7.78	7.79	7.71	7.74	7.07	7.42	7.39	7.55
58 Ashland Avenue, Calumet-Sag Channel	7.40	7.28	7.38	7.48	7.44	7.42	7.40	6.91	7.33	7.47	7.37
59 Cicero Avenue, Calumet-Sag Channel	7.04	7.32	7.48	7.42	7.46	7.39	7.38	7.04	7.40	7.54	7.07
43 Route 83, Calumet-Sag Channel	7.19	7.41	7.47	7.55	7.70	7.51	7.55	7.25	7.46	7.66	6.99
Des Plaines River System											
90 Route 19, Poplar Creek	7.76	7.95	7.83	7.91	7.88	7.95	7.80	7.70	7.65	7.58	7.64
110 Springinguth Road, West Branch DuPage River	7.35	7.61	7.41	7.53	7.40	7.76	7.54	7.43	7.49	ND	ND
89 Walnut Lane, West Branch DuPage River	7.54	7.54	7.51	7.48	7.58	7.59	7.43	7.40	7.44	7.37	7.46
64 Lake Street, West Branch DuPage River	ND	ND	7.71	7.77	7.74	7.81	7.64	7.57	7.48	7.48	7.66
111 Arlington Drive, West Branch DuPage River	7.69	7.73	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	7.38	7.42	7.51	7.77	7.57	7.80	7.94	7.39	7.54	7.54	7.74
80 Arlington Heights Road, Salt Creek	7.44	7.54	7.52	7.46	7.39	7.59	7.50	7.45	7.42	7.34	7.56
18 Devon Avenue, Salt Creek	7.34	7.62	7.60	7.55	7.51	7.63	7.55	7.44	7.35	7.39	7.26
24 Wolf Road, Salt Creek	7.00	7.28	7.48	7.30	7.41	7.52	7.31	7.30	7.67	7.31	7.45
109 Brookfield Avenue, Salt Creek	7.28	7.68	7.58	7.69	7.54	7.72	7.40	7.32	7.56	7.44	7.13
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.40
77 Elmhurst Road, Higgins Creek	7.70	7.51	7.68	7.76	7.88	7.80	7.40	7.39	7.80	7.54	7.35
78 Wille Road, Higgins Creek	7.58	7.65	7.61	7.58	7.63	7.67	7.54	7.37	7.66	7.58	7.14
12 Lake-Cook Road, Buffalo Creek	7.49	7.56	7.47	7.37	7.80	7.70	7.73	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	7.91	7.73	7.58	7.72	7.89	7.69	7.68	7.44	7.77	7.62	7.52
17 Oakton Street, Des Plaines River	7.81	7.85	7.74	7.78	8.01	7.79	7.57	7.44	7.63	7.67	7.34
19 Belmont Avenue, Des Plaines River	7.70	7.88	7.82	7.82	7.98	7.83	7.67	7.45	7.62	7.68	7.40
20 Roosevelt Road, Des Plaines River	7.91	7.86	7.85	7.91	8.02	7.84	7.89	7.49	7.67	7.71	7.32
22 Ogden Avenue, Des Plaines River	7.66	7.88	7.81	7.72	7.62	7.96	7.50	7.49	7.63	7.46	7.49
23 Willow Springs Road, Des Plaines River	7.75	7.93	7.86	7.91	7.86	7.79	7.62	7.62	7.63	7.59	7.60
29 Stephen Street, Des Plaines River	8.03	7.78	7.86	7.90	7.92	7.72	7.64	7.55	7.51	7.67	7.82
91 Material Service Road, Des Plaines River	8.12	7.89	7.97	8.13	8.04	7.98	7.87	7.74	7.65	7.80	7.85

ND = No Data.

TABLE AII-51: TOTAL ALKALINITY MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	181	178	158	173	171	163	147	152	178	138	187
103 Golf Road, West Fork North Branch Chicago River	204	192	181	180	165	186	178	172	179	168	185
31 Lake-Cook Road, Middle Fork North Branch	215	191	192	196	177	205	185	199	196	194	213
104 Glenview Road, North Branch Chicago River	195	169	171	184	168	173	165	156	182	170	183
32 Lake-Cook Road, Skokie River	218	204	196	203	188	215	184	183	209	191	210
105 Frontage Road, Skokie River	196	166	170	187	170	168	164	154	178	160	178
34 Dempster Street, North Branch Chicago River	207	179	183	180	165	175	170	164	175	159	180
96 Albany Avenue, North Branch Chicago River	177	187	172	186	164	174	173	167	169	170	176
35 Central Street, North Shore Channel	141	121	118	119	113	121	117	115	116	117	119
112 Dempster Street, North Shore Channel	139	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	144	133	131	136	120	133	134	126	137	128	130
36 Touhy Avenue, North Shore Channel	135	149	136	156	145	142	144	136	151	140	149
101 Foster Avenue, North Shore Channel	143	146	139	149	145	142	145	135	144	137	149
37 Wilson Avenue, North Branch Chicago River	145	152	139	149	146	145	146	138	159	139	148
73 Diversey Parkway, North Branch Chicago River	139	153	149	152	147	147	146	135	156	139	144
46 Grand Avenue, North Branch Chicago River	157	155	145	150	141	147	147	144	156	145	147
74 Lake Shore Drive, Chicago River	113	123	110	118	111	124	120	120	119	116	120
100 Wells Street, Chicago River	133	136	119	130	125	125	127	123	125	130	130
39 Madison Street, South Branch Chicago River	149	149	134	150	134	135	142	137	137	140	141
108 Loomis Street, South Branch Chicago River	138	144	135	149	134	136	143	142	136	138	154
99 Archer Avenue, South Fork South Branch Chicago River	134	152	146	149	143	135	147	138	142	133	148
40 Damen Avenue, Chicago Sanitary & Ship Canal	149	146	136	152	136	136	142	138	138	136	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	150
75 Cicero Avenue, Chicago Sanitary & Ship Canal	135	147	140	145	141	137	158	140	142	132	153
41 Harlem Avenue, Chicago Sanitary & Ship Canal	126	144	138	144	134	131	130	126	132	117	137
42 Route 83, Chicago Sanitary & Ship Canal	141	151	143	149	132	138	139	138	137	126	140
48 Stephen Street, Chicago Sanitary & Ship Canal	147	156	145	146	137	142	146	142	143	138	158
92 Lockport Forebay, Chicago Sanitary & Ship Canal	143	150	146	149	137	146	143	138	140	133	141
Calumet River System											
49 Ewing Avenue, Calumet River	109	110	107	113	104	113	113	109	111	110	110
50 Burnham Avenue, Wolf Lake	106	99	103	102	98	104	100	109	111	104	96
55 130th Street, Calumet River	117	112	108	117	105	114	112	112	116	111	117
86 Burnham Avenue, Grand Calumet River	260	232	250	225	243	262	248	170	203	196	176
56 Indiana Avenue, Little Calumet River	130	131	120	136	125	137	127	125	129	127	138
76 Halsted Street, Little Calumet River	157	159	147	162	155	162	162	153	159	146	156
52 Wentworth Avenue, Little Calumet River	229	171	184	204	216	208	222	175	206	208	225
54 Joe Orr Road, Thorn Creek	193	163	178	190	185	177	189	152	183	158	183
97 170th Street, Thorn Creek	214	167	163	204	195	176	205	172	186	172	190
57 Ashland Avenue, Little Calumet River	181	166	166	193	192	174	208	168	180	182	194
58 Ashland Avenue, Calumet-Sag Channel	172	159	159	163	158	156	167	154	158	155	167
59 Cicero Avenue, Calumet-Sag Channel	160	163	153	165	154	154	171	150	150	151	157
43 Route 83, Calumet-Sag Channel	151	155	158	160	154	151	168	151	153	150	152
Des Plaines River System											
90 Route 19, Poplar Creek	240	218	222	227	211	210	190	188	216	185	209
110 Springinsguth Road, West Branch DuPage River	199	238	209	226	203	191	191	179	183	ND	ND
89 Walnut Lane, West Branch DuPage River	168	175	154	179	147	152	160	150	148	135	158
64 Lake Street, West Branch DuPage River	ND	ND	180	170	145	150	184	133	147	129	157
111 Arlington Drive, West Branch DuPage River	137	162	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	158	180	135	183	176	159	155	142	197	127	166
80 Arlington Heights Road, Salt Creek	165	144	148	152	126	133	142	136	149	133	151
18 Devon Avenue, Salt Creek	139	146	154	149	125	132	142	135	149	132	147
24 Wolf Road, Salt Creek	170	157	154	172	141	140	145	134	156	126	154
109 Brookfield Avenue, Salt Creek	148	159	150	169	142	139	144	133	160	125	128
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	185
77 Elmhurst Road, Higgins Creek	159	142	114	149	128	118	121	120	158	102	139
78 Wille Road, Higgins Creek	164	195	176	204	165	175	179	150	192	159	181
12 Lake-Cook Road, Buffalo Creek	230	200	204	211	197	188	181	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	210	189	192	201	199	201	189	179	196	168	214
17 Oakton Street, Des Plaines River	205	188	180	194	192	187	179	171	192	167	206
19 Belmont Avenue, Des Plaines River	174	186	171	196	180	179	177	167	189	155	192
20 Roosevelt Road, Des Plaines River	198	184	170	189	185	182	172	166	190	153	199
22 Ogden Avenue, Des Plaines River	168	176	169	182	170	164	163	151	176	155	181
23 Willow Springs Road, Des Plaines River	173	175	165	184	171	168	162	154	180	141	177
29 Stephen Street, Des Plaines River	193	173	170	180	173	172	169	159	180	149	181
91 Material Service Road, Des Plaines River	175	173	175	184	170	175	173	163	184	146	185

ND = No Data.

TABLE AII-52: CHLORIDE MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	589	555	470	403	388	297	339	456	552	181	293
103 Golf Road, West Fork North Branch Chicago River	440	402	400	321	330	329	344	501	298	270	244
31 Lake-Cook Road, Middle Fork North Branch	324	266	304	219	293	286	258	318	205	217	185
104 Glenview Road, North Branch Chicago River	305	231	257	222	287	258	222	258	265	215	171
32 Lake-Cook Road, Skokie River	295	215	251	196	265	290	214	310	239	220	190
105 Frontage Road, Skokie River	243	207	217	208	275	228	207	236	203	177	162
34 Dempster Street, North Branch Chicago River	400	247	316	246	265	277	254	337	322	205	205
96 Albany Avenue, North Branch Chicago River	294	273	319	274	345	283	256	346	236	230	223
35 Central Street, North Shore Channel	128	63	30	44	90	51	37	35	31	47	64
112 Dempster Street, North Shore Channel	148	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	152	150	106	107	138	133	90	135	104	80	99
36 Touhy Avenue, North Shore Channel	146	221	155	210	168	212	116	150	172	143	105
101 Foster Avenue, North Shore Channel	199	214	170	199	175	231	134	165	143	123	111
37 Wilson Avenue, North Branch Chicago River	227	223	222	218	216	249	145	209	183	159	133
73 Diversey Parkway, North Branch Chicago River	148	182	199	248	235	190	140	196	193	168	136
46 Grand Avenue, North Branch Chicago River	217	182	175	195	248	204	154	186	219	174	133
74 Lake Shore Drive, Chicago River	167	150	78	48	60	106	64	62	62	73	69
100 Wells Street, Chicago River	129	155	122	84	148	127	89	109	103	108	88
39 Madison Street, South Branch Chicago River	187	247	168	152	191	174	125	156	129	136	102
108 Loomis Street, South Branch Chicago River	151	182	188	152	193	207	143	158	141	137	122
99 Archer Avenue, South Fork South Branch Chicago River	169	177	171	146	194	190	110	150	148	134	127
40 Damen Avenue, Chicago Sanitary & Ship Canal	218	179	185	154	190	218	137	153	142	137	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	122
75 Cicero Avenue, Chicago Sanitary & Ship Canal	167	180	161	155	211	228	136	156	161	150	130
41 Harlem Avenue, Chicago Sanitary & Ship Canal	162	187	188	187	195	267	146	162	167	149	124
42 Route 83, Chicago Sanitary & Ship Canal	210	202	196	174	214	187	151	170	221	156	144
48 Stephen Street, Chicago Sanitary & Ship Canal	168	194	202	163	199	165	152	164	179	160	156
92 Lockport Forebay, Chicago Sanitary & Ship Canal	151	200	181	170	230	194	158	181	195	166	151
Calumet River System											
49 Ewing Avenue, Calumet River	39	52	35	38	33	46	44	38	31	35	40
50 Burnham Avenue, Wolf Lake	103	90	86	79	66	68	47	59	55	42	43
55 130th Street, Calumet River	133	107	83	98	104	88	83	75	69	64	68
86 Burnham Avenue, Grand Calumet River	118	59	80	148	134	144	155	137	138	176	200
56 Indiana Avenue, Little Calumet River	110	120	104	100	116	109	98	82	82	88	109
76 Halsted Street, Little Calumet River	150	175	159	150	202	181	153	174	154	133	127
52 Wentworth Avenue, Little Calumet River	154	101	122	110	150	132	122	140	160	179	189
54 Joe Orr Road, Thorn Creek	195	144	210	145	171	176	183	212	235	94	191
97 170th Street, Thorn Creek	234	147	192	163	183	158	182	228	222	217	194
57 Ashland Avenue, Little Calumet River	179	161	182	135	176	171	174	205	200	193	173
58 Ashland Avenue, Calumet-Sag Channel	189	173	159	147	207	161	161	180	167	155	147
59 Cicero Avenue, Calumet-Sag Channel	171	190	160	136	170	167	155	171	167	150	145
43 Route 83, Calumet-Sag Channel	153	169	178	139	164	164	150	144	156	142	144
Des Plaines River System											
90 Route 19, Poplar Creek	279	251	273	215	282	277	279	278	241	201	220
110 Springinguth Road, West Branch DuPage River	318	271	239	254	340	267	466	355	310	ND	ND
89 Walnut Lane, West Branch DuPage River	171	204	171	170	196	187	193	181	207	205	169
64 Lake Street, West Branch DuPage River	ND	ND	340	188	232	235	201	211	198	186	190
111 Arlington Drive, West Branch DuPage River	175	216	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	346	319	266	258	385	353	287	409	363	235	260
80 Arlington Heights Road, Salt Creek	272	298	289	248	389	268	280	323	225	241	213
18 Devon Avenue, Salt Creek	199	293	327	231	384	287	283	320	236	250	204
24 Wolf Road, Salt Creek	251	279	313	244	346	275	241	261	250	241	254
109 Brookfield Avenue, Salt Creek	239	279	293	231	321	271	257	258	264	208	135
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	654
77 Elmhurst Road, Higgins Creek	276	285	583	305	548	259	571	478	514	424	460
78 Wille Road, Higgins Creek	181	235	220	233	274	247	217	220	190	213	259
12 Lake-Cook Road, Buffalo Creek	297	258	310	218	357	272	259	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	181	175	185	148	220	184	210	221	176	202	188
17 Oakton Street, Des Plaines River	200	196	221	154	238	195	245	251	197	202	224
19 Belmont Avenue, Des Plaines River	187	207	231	173	279	208	250	230	225	255	236
20 Roosevelt Road, Des Plaines River	200	214	232	164	285	214	249	260	211	173	265
22 Ogden Avenue, Des Plaines River	202	227	250	173	270	228	244	255	218	261	269
23 Willow Springs Road, Des Plaines River	209	231	239	177	275	238	234	268	222	197	226
29 Stephen Street, Des Plaines River	232	225	235	172	290	242	236	255	212	210	267
91 Material Service Road, Des Plaines River	212	226	242	185	284	225	242	249	212	200	251

ND = No Data.

TABLE AII-53: TURBIDITY MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (NTU)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	27.3	25.4	18.0	26.9	31.4	29.0	66.6	30.1	49.5	32.2	19.2
103 Golf Road, West Fork North Branch Chicago River	18.3	14.2	12.4	24.1	18.4	14.1	32.2	25.6	20.1	16.9	20.7
31 Lake-Cook Road, Middle Fork North Branch	5.0	9.9	10.6	18.3	18.3	14.9	46.2	16.7	22.8	13.1	16.6
104 Glenview Road, North Branch Chicago River	14.7	14.8	7.6	15.0	16.9	13.7	32.9	15.2	18.2	14.7	15.3
32 Lake-Cook Road, Skokie River	16.3	12.9	9.2	16.2	18.5	14.6	37.0	16.8	19.8	12.6	13.4
105 Frontage Road, Skokie River	8.3	11.9	9.5	14.8	13.1	15.6	16.5	13.4	16.7	12.0	12.5
34 Dempster Street, North Branch Chicago River	13.0	12.5	9.4	17.0	17.8	15.3	28.9	18.9	19.1	14.5	18.0
96 Albany Avenue, North Branch Chicago River	8.0	10.6	13.1	17.4	20.2	14.6	23.5	16.0	18.3	14.1	14.5
35 Central Street, North Shore Channel	11.0	6.3	5.5	8.1	9.7	5.1	9.3	5.9	7.3	8.2	10.6
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	4.3	10.0	14.3	7.9	15.0	10.3	13.2	12.2	11.3	11.6	14.1
36 Touhy Avenue, North Shore Channel	5.0	4.2	4.0	5.1	4.8	4.2	5.8	6.5	7.6	7.1	8.1
101 Foster Avenue, North Shore Channel	4.3	5.5	4.6	4.4	5.4	5.1	5.9	7.0	7.5	8.0	9.5
37 Wilson Avenue, North Branch Chicago River	3.5	6.7	6.6	11.4	8.2	8.2	9.3	9.5	10.5	9.2	11.3
73 Diversey Parkway, North Branch Chicago River	5.7	8.8	6.5	10.6	10.3	8.8	10.4	10.0	11.4	9.5	12.4
46 Grand Avenue, North Branch Chicago River	9.0	8.4	8.0	12.6	10.0	13.2	13.4	11.3	14.9	10.2	13.2
74 Lake Shore Drive, Chicago River	2.7	2.0	2.2	3.8	4.6	3.5	2.8	3.3	3.4	5.5	6.0
100 Wells Street, Chicago River	4.0	6.3	3.8	4.1	7.4	4.0	3.5	4.7	4.7	7.0	6.8
39 Madison Street, South Branch Chicago River	7.3	9.3	8.4	9.7	10.8	10.7	8.0	9.1	11.1	9.8	11.6
108 Loomis Street, South Branch Chicago River	7.3	10.2	8.5	9.7	11.6	10.1	11.3	9.6	10.7	9.1	10.0
99 Archer Avenue, South Fork South Branch Chicago River	18.3	9.9	7.6	8.4	10.8	7.4	8.8	8.7	9.9	9.3	10.4
40 Damen Avenue, Chicago Sanitary & Ship Canal	8.0	10.2	8.9	11.1	10.3	11.8	11.4	10.4	11.5	10.3	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11.0
75 Cicero Avenue, Chicago Sanitary & Ship Canal	8.0	12.6	8.9	11.5	10.7	8.6	13.1	11.6	13.7	10.5	10.6
41 Harlem Avenue, Chicago Sanitary & Ship Canal	5.0	7.8	5.0	6.1	6.0	6.0	6.9	6.4	6.9	7.2	8.3
42 Route 83, Chicago Sanitary & Ship Canal	4.7	5.6	4.2	5.5	8.3	6.9	5.4	5.8	6.6	8.0	8.6
48 Stephen Street, Chicago Sanitary & Ship Canal	13.3	9.6	6.9	11.0	13.9	10.2	11.6	11.5	11.4	9.9	9.9
92 Lockport Forebay, Chicago Sanitary & Ship Canal	8.8	8.9	6.0	11.1	14.4	9.0	11.2	10.6	10.6	9.5	10.0
Calumet River System											
49 Ewing Avenue, Calumet River	8.0	7.7	2.9	3.6	4.2	4.0	7.2	5.6	7.7	6.9	7.5
50 Burnham Avenue, Wolf Lake	3.0	3.5	3.5	3.5	4.2	3.8	2.9	5.3	3.8	5.3	5.2
55 130th Street, Calumet River	2.7	5.4	2.7	4.3	6.0	6.3	6.3	5.9	6.4	7.8	9.4
86 Burnham Avenue, Grand Calumet River	10.0	9.1	13.0	6.0	11.9	10.3	12.8	25.3	11.5	9.4	9.3
56 Indiana Avenue, Little Calumet River	9.5	10.2	8.9	18.2	25.2	20.3	19.6	24.8	19.6	16.8	18.9
76 Halsted Street, Little Calumet River	4.0	8.9	4.9	8.9	11.5	8.4	9.3	10.2	11.1	8.4	10.3
52 Wentworth Avenue, Little Calumet River	30.7	71.6	61.2	38.2	17.7	31.2	33.6	32.2	30.9	16.1	22.6
54 Joe Orr Road, Thorn Creek	16.3	36.9	24.1	15.8	5.8	9.8	5.8	63.6	17.8	29.4	8.0
97 170th Street, Thorn Creek	23.0	64.3	51.5	21.5	16.3	25.4	26.5	46.2	29.2	19.8	14.9
57 Ashland Avenue, Little Calumet River	13.0	47.5	42.1	25.9	16.0	28.2	24.3	42.5	27.5	20.1	16.6
58 Ashland Avenue, Calumet-Sag Channel	9.0	26.2	19.7	12.9	13.6	16.6	11.5	13.4	14.7	14.5	12.0
59 Cicero Avenue, Calumet-Sag Channel	13.3	18.5	14.1	12.9	14.9	18.8	14.3	14.2	17.8	14.3	14.6
43 Route 83, Calumet-Sag Channel	9.3	17.9	9.2	13.6	12.8	14.5	18.6	14.2	15.7	20.7	16.2
Des Plaines River System											
90 Route 19, Poplar Creek	5.3	9.2	12.0	10.4	14.1	7.9	20.3	14.7	10.0	17.1	11.9
110 Springinguth Road, West Branch DuPage River	18.5	13.4	10.1	25.1	22.2	16.2	19.1	25.2	32.9	ND	ND
89 Walnut Lane, West Branch DuPage River	16.3	6.1	7.0	5.5	13.5	7.5	7.4	7.6	8.3	10.2	7.5
64 Lake Street, West Branch DuPage River	ND	ND	18.5	17.7	22.9	19.2	25.4	26.3	22.5	19.0	18.6
111 Arlington Drive, West Branch DuPage River	8.0	13.7	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	12.0	18.2	25.4	21.1	23.8	25.1	30.4	42.9	23.2	30.3	24.6
80 Arlington Heights Road, Salt Creek	5.5	7.7	6.0	12.5	5.8	9.1	9.8	6.5	5.7	8.1	6.9
18 Devon Avenue, Salt Creek	5.9	6.8	6.9	12.4	7.5	10.1	11.1	10.1	11.6	9.6	9.2
24 Wolf Road, Salt Creek	7.3	11.1	14.2	17.0	19.4	24.0	28.7	20.1	16.2	22.6	13.8
109 Brookfield Avenue, Salt Creek	6.3	10.8	19.4	18.9	18.9	21.1	32.5	23.3	17.0	27.8	13.0
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.9
77 Elmhurst Road, Higgins Creek	9.0	21.4	19.3	18.9	44.3	23.9	32.5	29.3	29.5	23.0	22.2
78 Wille Road, Higgins Creek	3.7	1.9	3.1	4.0	7.1	4.5	4.8	3.9	5.1	7.1	6.9
12 Lake-Cook Road, Buffalo Creek	7.3	14.8	23.9	21.4	20.4	26.7	25.6	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	11.0	10.2	12.9	20.9	17.0	16.5	20.7	19.4	18.5	18.7	15.8
17 Oakton Street, Des Plaines River	9.7	12.1	13.5	21.5	20.0	16.9	19.5	15.1	18.4	21.7	15.6
19 Belmont Avenue, Des Plaines River	8.7	10.6	12.7	21.6	25.6	18.6	20.7	17.6	17.1	20.8	17.1
20 Roosevelt Road, Des Plaines River	7.3	11.6	16.6	22.7	22.0	19.0	21.3	17.5	16.8	21.3	16.1
22 Ogden Avenue, Des Plaines River	8.7	11.7	15.3	23.8	20.6	21.7	28.3	23.8	16.3	24.2	15.0
23 Willow Springs Road, Des Plaines River	7.7	12.8	13.1	23.7	21.5	21.2	26.3	20.9	19.1	19.6	15.8
29 Stephen Street, Des Plaines River	7.7	12.4	16.6	24.8	18.5	18.0	26.2	23.0	20.2	20.9	15.9
91 Material Service Road, Des Plaines River	6.3	12.8	15.0	22.0	17.6	21.7	22.1	25.8	20.5	22.4	16.9

ND = No Data.

**TABLE AII-54: TOTAL KJELDAHL NITROGEN MEAN HISTORY
2002 THROUGH 2012**

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	1.40	2.06	1.24	1.40	1.59	1.30	1.90	1.31	1.58	1.88	1.52
103 Golf Road, West Fork North Branch Chicago River	1.14	1.26	1.15	1.10	1.05	1.34	1.36	1.41	1.04	1.25	2.01
31 Lake-Cook Road, Middle Fork North Branch	1.00	0.87	0.95	0.94	1.16	1.20	1.09	1.36	1.05	1.24	1.26
104 Glenview Road, North Branch Chicago River	1.29	1.38	0.88	0.99	1.14	1.27	1.54	1.22	0.99	1.33	1.21
32 Lake-Cook Road, Skokie River	1.06	1.21	0.81	0.88	0.86	1.08	1.29	1.67	1.08	0.97	1.18
105 Frontage Road, Skokie River	1.00	0.94	1.01	1.01	1.06	1.31	1.32	1.25	0.96	1.16	1.26
34 Dempster Street, North Branch Chicago River	1.14	1.05	1.53	1.08	1.14	1.23	1.43	1.22	1.04	1.12	1.58
96 Albany Avenue, North Branch Chicago River	1.00	0.97	0.94	0.86	1.03	1.16	1.27	1.31	0.94	1.17	1.40
35 Central Street, North Shore Channel	1.20	0.56	0.32	0.45	0.43	0.58	0.57	0.39	0.54	0.84	1.02
112 Dempster Street, North Shore Channel	1.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	2.14	1.32	1.46	0.85	1.08	1.27	1.41	1.54	1.45	1.91	1.81
36 Touhy Avenue, North Shore Channel	2.17	2.35	2.06	1.38	1.59	2.07	1.99	3.08	2.35	2.75	2.60
101 Foster Avenue, North Shore Channel	2.43	2.42	2.10	1.37	1.82	2.39	2.07	3.53	3.31	3.02	2.98
37 Wilson Avenue, North Branch Chicago River	2.17	2.10	1.84	1.32	1.60	1.92	1.97	3.19	3.07	2.63	2.60
73 Diversey Parkway, North Branch Chicago River	1.92	2.20	1.77	1.19	1.36	1.79	1.71	2.25	2.20	2.39	2.33
46 Grand Avenue, North Branch Chicago River	2.14	2.03	1.96	1.49	1.56	1.94	1.85	2.82	2.26	2.16	2.51
74 Lake Shore Drive, Chicago River	1.00	0.84	0.29	0.26	0.43	0.55	0.48	0.73	0.66	0.73	0.67
100 Wells Street, Chicago River	1.36	1.31	0.65	0.54	0.88	0.85	0.87	1.15	1.25	1.59	1.10
39 Madison Street, South Branch Chicago River	1.67	2.24	1.29	1.12	1.33	1.44	1.46	2.32	1.93	2.35	2.46
108 Loomis Street, South Branch Chicago River	1.50	1.46	1.29	1.11	1.36	1.47	1.71	2.33	2.00	1.69	2.03
99 Archer Avenue, South Fork South Branch Chicago River	2.50	2.19	1.98	1.66	1.97	1.57	1.49	2.46	2.07	2.07	2.62
40 Damen Avenue, Chicago Sanitary & Ship Canal	1.86	1.61	1.57	1.27	1.41	1.45	1.64	2.31	1.99	1.97	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.20
75 Cicero Avenue, Chicago Sanitary & Ship Canal	1.75	1.63	1.40	1.12	1.55	1.47	1.70	2.10	1.80	1.96	2.15
41 Harlem Avenue, Chicago Sanitary & Ship Canal	1.50	1.74	1.51	1.41	1.49	1.75	1.55	1.93	1.20	1.51	1.68
42 Route 83, Chicago Sanitary & Ship Canal	1.86	1.91	1.83	1.33	1.48	1.79	1.61	1.81	1.45	1.62	1.97
48 Stephen Street, Chicago Sanitary & Ship Canal	1.58	1.65	1.54	1.27	1.33	1.56	1.74	1.76	1.32	1.57	1.91
92 Lockport Forebay, Chicago Sanitary & Ship Canal	1.37	1.61	1.49	1.29	1.40	1.55	1.61	1.67	1.38	1.58	1.66
Calumet River System											
49 Ewing Avenue, Calumet River	1.00	0.48	0.07	0.18	0.19	0.34	0.38	0.25	0.18	0.23	0.35
50 Burnham Avenue, Wolf Lake	1.43	0.62	0.52	0.77	0.71	0.85	0.74	0.73	0.57	0.52	0.49
55 130th Street, Calumet River	1.00	0.60	0.25	0.53	0.63	0.77	0.76	0.70	0.45	0.58	0.71
86 Burnham Avenue, Grand Calumet River	4.91	3.11	4.57	2.31	5.15	4.57	3.19	4.31	2.65	3.85	2.89
56 Indiana Avenue, Little Calumet River	1.00	0.74	0.64	0.99	1.00	1.13	1.09	0.84	0.88	1.02	1.02
76 Halsted Street, Little Calumet River	1.18	1.35	1.30	1.22	1.42	1.34	1.35	1.26	1.00	1.16	1.39
52 Wentworth Avenue, Little Calumet River	1.00	1.16	1.39	1.34	1.28	1.51	1.64	1.61	1.45	1.58	1.58
54 Joe Orr Road, Thorn Creek	1.29	1.45	1.24	1.39	1.39	1.50	1.42	1.55	1.27	1.19	1.47
97 170th Street, Thorn Creek	1.00	0.97	1.21	1.18	1.11	1.43	1.28	1.34	1.11	1.28	1.46
57 Ashland Avenue, Little Calumet River	1.00	1.01	1.11	1.03	1.10	1.39	1.43	1.58	1.15	1.23	1.42
58 Ashland Avenue, Calumet-Sag Channel	1.14	1.18	1.28	1.09	1.32	1.40	1.47	1.30	1.03	1.22	1.35
59 Cicero Avenue, Calumet-Sag Channel	1.60	1.26	1.33	1.17	1.31	1.28	1.50	1.41	1.19	1.26	1.49
43 Route 83, Calumet-Sag Channel	1.55	1.28	1.29	1.20	1.24	1.41	1.37	1.25	1.15	1.32	1.50
Des Plaines River System											
90 Route 19, Poplar Creek	1.00	0.81	0.86	0.81	0.86	0.99	1.13	0.94	0.68	1.03	0.87
110 Springinsguth Road, West Branch DuPage River	2.09	1.64	1.64	2.28	2.10	2.04	2.35	2.49	2.35	ND	ND
89 Walnut Lane, West Branch DuPage River	1.71	1.60	1.68	1.53	1.60	1.85	1.72	1.93	1.56	2.28	1.83
64 Lake Street, West Branch DuPage River	ND	ND	1.97	1.55	1.68	2.01	1.84	2.09	1.93	2.37	2.05
111 Arlington Drive, West Branch DuPage River	1.54	1.58	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	1.00	1.20	1.30	1.22	1.19	1.51	1.45	1.41	1.07	1.47	1.60
80 Arlington Heights Road, Salt Creek	1.28	1.21	1.30	1.19	1.04	1.24	1.37	1.16	1.27	1.84	1.83
18 Devon Avenue, Salt Creek	1.21	1.17	1.46	1.11	0.96	1.12	1.38	1.42	1.35	1.86	1.87
24 Wolf Road, Salt Creek	1.00	1.01	2.00	1.09	1.07	1.19	1.38	1.25	0.91	1.48	1.44
109 Brookfield Avenue, Salt Creek	1.00	0.89	1.02	1.11	1.08	1.18	1.53	1.23	0.88	1.48	1.41
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.56
77 Elmhurst Road, Higgins Creek	1.13	0.95	0.72	0.93	0.96	0.96	1.38	1.29	0.74	1.40	1.31
78 Wille Road, Higgins Creek	1.27	1.15	1.28	1.22	1.59	1.60	1.84	1.51	1.45	1.49	1.65
12 Lake-Cook Road, Buffalo Creek	1.17	0.98	1.11	1.12	1.10	1.37	1.21	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	1.00	1.00	1.07	1.10	1.09	1.38	1.40	1.34	0.98	1.51	1.78
17 Oakton Street, Des Plaines River	1.14	1.11	1.04	1.16	1.19	1.27	1.39	1.31	1.02	1.54	1.52
19 Belmont Avenue, Des Plaines River	1.17	1.10	1.09	1.07	1.27	1.45	1.46	1.28	0.96	1.66	1.42
20 Roosevelt Road, Des Plaines River	1.29	1.08	1.05	1.11	1.17	1.28	1.37	1.20	1.03	1.65	1.35
22 Ogden Avenue, Des Plaines River	1.17	0.95	1.04	1.11	1.23	1.27	1.45	1.25	0.92	2.00	1.36
23 Willow Springs Road, Des Plaines River	1.00	0.93	0.92	1.19	1.10	1.22	1.50	1.23	0.99	1.26	1.57
29 Stephen Street, Des Plaines River	1.29	1.00	1.15	1.01	1.06	1.26	1.42	1.29	1.02	1.52	1.50
91 Material Service Road, Des Plaines River	1.00	0.96	0.99	1.08	1.11	1.20	1.49	1.29	1.02	1.62	1.49

ND = No Data.

TABLE AII-55: AMMONIUM NITROGEN MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.600	1.028	0.346	0.475	0.487	0.323	0.714	0.228	0.565	0.327	0.145
103 Golf Road, West Fork North Branch Chicago River	0.271	0.264	0.181	0.251	0.200	0.221	0.251	0.265	0.232	0.215	0.797
31 Lake-Cook Road, Middle Fork North Branch	0.125	0.120	0.064	0.094	0.181	0.145	0.119	0.190	0.205	0.178	0.124
104 Glenview Road, North Branch Chicago River	0.200	0.298	0.048	0.126	0.171	0.175	0.198	0.144	0.223	0.113	0.086
32 Lake-Cook Road, Skokie River	0.242	0.393	0.080	0.109	0.126	0.198	0.213	0.320	0.166	0.221	0.110
105 Frontage Road, Skokie River	0.129	0.179	0.068	0.108	0.121	0.121	0.114	0.152	0.166	0.103	0.058
34 Dempster Street, North Branch Chicago River	0.186	0.167	0.190	0.170	0.185	0.164	0.201	0.154	0.191	0.167	0.361
96 Albany Avenue, North Branch Chicago River	0.125	0.169	0.082	0.097	0.149	0.110	0.108	0.153	0.158	0.153	0.241
35 Central Street, North Shore Channel	0.120	0.120	0.125	0.164	0.114	0.166	0.139	0.071	0.310	0.331	0.313
112 Dempster Street, North Shore Channel	0.140	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	1.014	0.638	0.589	0.303	0.347	0.521	0.553	0.773	0.885	0.930	0.696
36 Touhy Avenue, North Shore Channel	1.100	1.313	0.826	0.396	0.584	0.837	0.685	1.718	1.348	1.548	0.987
101 Foster Avenue, North Shore Channel	1.471	1.522	1.061	0.485	0.758	1.210	0.876	2.104	2.176	1.828	1.428
37 Wilson Avenue, North Branch Chicago River	0.917	1.231	0.807	0.433	0.574	0.879	0.770	1.881	2.005	1.365	1.153
73 Diversey Parkway, North Branch Chicago River	1.042	1.086	0.900	0.312	0.427	0.698	0.643	1.091	1.276	1.197	0.959
46 Grand Avenue, North Branch Chicago River	1.014	1.088	1.021	0.519	0.613	0.710	0.638	1.617	1.415	1.216	1.171
74 Lake Shore Drive, Chicago River	0.350	0.370	0.145	0.092	0.088	0.185	0.105	0.400	0.339	0.348	0.238
100 Wells Street, Chicago River	0.500	0.651	0.338	0.175	0.297	0.297	0.229	0.583	0.686	0.798	0.500
39 Madison Street, South Branch Chicago River	0.917	1.208	0.532	0.450	0.491	0.574	0.541	1.361	1.197	1.270	1.142
108 Loomis Street, South Branch Chicago River	0.725	0.696	0.579	0.413	0.522	0.513	0.730	1.360	1.251	0.819	0.988
99 Archer Avenue, South Fork South Branch Chicago River	1.325	1.018	0.937	0.715	0.771	0.637	0.620	1.320	1.136	1.062	1.123
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.871	0.748	0.613	0.484	0.580	0.563	0.618	1.277	1.185	0.969	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.968
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.925	0.767	0.562	0.436	0.660	0.590	0.617	1.175	1.107	0.941	0.869
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.483	0.763	0.521	0.583	0.505	0.556	0.364	0.941	0.508	0.499	0.534
42 Route 83, Chicago Sanitary & Ship Canal	0.729	0.888	0.799	0.497	0.573	0.687	0.482	0.816	0.649	0.643	0.655
48 Stephen Street, Chicago Sanitary & Ship Canal	0.633	0.693	0.536	0.441	0.465	0.478	0.544	0.797	0.564	0.598	0.718
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.594	0.716	0.573	0.418	0.471	0.516	0.479	0.654	0.635	0.588	0.502
Calumet River System											
49 Ewing Avenue, Calumet River	0.117	0.125	0.038	0.016	0.023	0.087	0.057	0.109	0.114	0.124	0.063
50 Burnham Avenue, Wolf Lake	0.514	0.110	0.080	0.093	0.102	0.132	0.098	0.183	0.203	0.118	0.018
55 130th Street, Calumet River	0.171	0.213	0.071	0.106	0.162	0.161	0.180	0.235	0.240	0.249	0.098
86 Burnham Avenue, Grand Calumet River	3.673	2.076	3.121	1.014	2.198	2.218	1.434	1.659	1.399	1.735	0.952
56 Indiana Avenue, Little Calumet River	0.180	0.275	0.202	0.324	0.261	0.306	0.193	0.199	0.256	0.317	0.115
76 Halsted Street, Little Calumet River	0.309	0.465	0.368	0.323	0.343	0.295	0.259	0.284	0.298	0.268	0.188
52 Wentworth Avenue, Little Calumet River	0.271	0.259	0.264	0.364	0.262	0.290	0.178	0.365	0.360	0.319	0.230
54 Joe Orr Road, Thorn Creek	0.300	0.466	0.166	0.252	0.227	0.295	0.153	0.240	0.324	0.127	0.116
97 170th Street, Thorn Creek	0.183	0.180	0.134	0.134	0.182	0.191	0.135	0.315	0.304	0.248	0.253
57 Ashland Avenue, Little Calumet River	0.209	0.215	0.196	0.191	0.203	0.232	0.154	0.355	0.379	0.330	0.182
58 Ashland Avenue, Calumet-Sag Channel	0.329	0.383	0.334	0.301	0.354	0.301	0.302	0.320	0.298	0.294	0.186
59 Cicero Avenue, Calumet-Sag Channel	0.440	0.480	0.428	0.258	0.389	0.263	0.278	0.360	0.356	0.256	0.252
43 Route 83, Calumet-Sag Channel	0.409	0.499	0.407	0.314	0.335	0.310	0.261	0.321	0.438	0.260	0.317
Des Plaines River System											
90 Route 19, Poplar Creek	0.143	0.186	0.094	0.052	0.062	0.094	0.113	0.108	0.107	0.149	0.034
110 Springinguth Road, West Branch DuPage River	1.018	0.262	0.313	0.563	0.616	0.344	0.555	0.454	0.541	ND	ND
89 Walnut Lane, West Branch DuPage River	0.129	0.190	0.118	0.081	0.152	0.242	0.122	0.273	0.332	0.482	0.117
64 Lake Street, West Branch DuPage River	ND	ND	0.755	0.153	0.249	0.340	0.252	0.482	0.552	0.596	0.287
111 Arlington Drive, West Branch DuPage River	0.208	0.248	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.127	0.111	0.098	0.063	0.039	0.129	0.111	0.100	0.140	0.214	0.090
80 Arlington Heights Road, Salt Creek	0.157	0.117	0.202	0.028	0.055	0.107	0.114	0.157	0.382	0.465	0.299
18 Devon Avenue, Salt Creek	0.183	0.147	0.221	0.045	0.046	0.112	0.124	0.193	0.313	0.501	0.360
24 Wolf Road, Salt Creek	0.186	0.154	0.180	0.117	0.160	0.162	0.153	0.163	0.195	0.241	0.218
109 Brookfield Avenue, Salt Creek	0.183	0.149	0.224	0.116	0.196	0.174	0.154	0.166	0.186	0.211	0.178
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.347
77 Elmhurst Road, Higgins Creek	0.225	0.224	0.000	0.135	0.214	0.172	0.199	0.123	0.180	0.240	0.107
78 Wille Road, Higgins Creek	0.327	0.256	0.221	0.268	0.373	0.353	0.405	0.269	0.437	0.331	0.211
12 Lake-Cook Road, Buffalo Creek	0.117	0.159	0.084	0.060	0.083	0.110	0.117	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.129	0.166	0.040	0.097	0.068	0.103	0.086	0.190	0.179	0.162	0.091
17 Oakton Street, Des Plaines River	0.114	0.141	0.065	0.071	0.061	0.099	0.115	0.145	0.192	0.150	0.071
19 Belmont Avenue, Des Plaines River	0.142	0.137	0.086	0.086	0.107	0.117	0.124	0.143	0.273	0.198	0.118
20 Roosevelt Road, Des Plaines River	0.214	0.169	0.065	0.057	0.098	0.088	0.107	0.143	0.188	0.166	0.097
22 Ogden Avenue, Des Plaines River	0.125	0.141	0.107	0.079	0.073	0.130	0.122	0.161	0.134	0.144	0.107
23 Willow Springs Road, Des Plaines River	0.167	0.149	0.088	0.113	0.059	0.131	0.147	0.124	0.155	0.162	0.072
29 Stephen Street, Des Plaines River	0.114	0.138	0.069	0.054	0.064	0.105	0.133	0.111	0.109	0.166	0.100
91 Material Service Road, Des Plaines River	0.117	0.142	0.028	0.080	0.047	0.085	0.137	0.122	0.119	0.161	0.057

ND = No Data.

TABLE AII-56: UN-IONIZED AMMONIA MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.001	0.005	0.002	0.002	0.005	0.002	0.002	0.002	0.006	0.006	0.001
103 Golf Road, West Fork North Branch Chicago River	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.003	0.005	0.003	0.008
31 Lake-Cook Road, Middle Fork North Branch	0.001	0.002	0.001	0.001	0.003	0.003	0.001	0.002	0.002	0.003	0.001
104 Glenview Road, North Branch Chicago River	0.005	0.004	0.001	0.002	0.003	0.004	0.003	0.002	0.002	0.003	0.001
32 Lake-Cook Road, Skokie River	0.003	0.007	0.001	0.001	0.002	0.005	0.003	0.011	0.002	0.003	0.001
105 Frontage Road, Skokie River	0.003	0.003	0.001	0.001	0.002	0.002	0.003	0.001	0.002	0.001	0.001
34 Dempster Street, North Branch Chicago River	0.003	0.003	0.002	0.002	0.002	0.002	0.005	0.002	0.003	0.002	0.003
96 Albany Avenue, North Branch Chicago River	0.003	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.004
35 Central Street, North Shore Channel	0.004	0.003	0.001	0.001	0.002	0.002	0.002	0.002	0.009	0.003	0.008
112 Dempster Street, North Shore Channel	0.000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.006	0.005	0.005	0.003	0.004	0.005	0.004	0.005	0.011	0.007	0.006
36 Touhy Avenue, North Shore Channel	0.007	0.006	0.005	0.002	0.004	0.007	0.005	0.012	0.010	0.009	0.013
101 Foster Avenue, North Shore Channel	0.007	0.006	0.005	0.004	0.004	0.009	0.005	0.019	0.011	0.007	0.011
37 Wilson Avenue, North Branch Chicago River	0.008	0.008	0.007	0.004	0.004	0.008	0.007	0.021	0.035	0.017	0.010
73 Diversey Parkway, North Branch Chicago River	0.007	0.005	0.006	0.002	0.004	0.004	0.016	0.009	0.012	0.008	0.007
46 Grand Avenue, North Branch Chicago River	0.010	0.008	0.006	0.005	0.005	0.007	0.005	0.012	0.017	0.010	0.011
74 Lake Shore Drive, Chicago River	0.001	0.001	0.000	0.001	0.001	0.002	0.002	0.004	0.005	0.002	0.002
100 Wells Street, Chicago River	0.003	0.003	0.003	0.002	0.003	0.004	0.003	0.005	0.006	0.004	0.003
39 Madison Street, South Branch Chicago River	0.006	0.006	0.004	0.003	0.004	0.008	0.007	0.014	0.007	0.006	0.007
108 Loomis Street, South Branch Chicago River	0.006	0.005	0.005	0.004	0.008	0.006	0.009	0.017	0.012	0.007	0.014
99 Archer Avenue, South Fork South Branch Chicago River	0.007	0.006	0.006	0.004	0.006	0.006	0.006	0.009	0.008	0.008	0.010
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.007	0.007	0.006	0.005	0.005	0.007	0.007	0.011	0.011	0.007	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.009
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.003	0.005	0.003	0.002	0.004	0.006	0.005	0.023	0.011	0.008	0.019
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.003	0.004	0.003	0.004	0.005	0.004	0.002	0.007	0.006	0.003	0.003
42 Route 83, Chicago Sanitary & Ship Canal	0.003	0.003	0.003	0.002	0.004	0.004	0.002	0.006	0.006	0.003	0.004
48 Stephen Street, Chicago Sanitary & Ship Canal	0.004	0.003	0.004	0.003	0.011	0.004	0.003	0.003	0.004	0.003	0.005
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.005	0.006	0.006	0.004	0.005	0.005	0.005	0.007	0.007	0.006	0.005
Calumet River System											
49 Ewing Avenue, Calumet River	0.003	0.001	0.001	0.000	0.000	0.002	0.001	0.001	0.004	0.002	0.002
50 Burnham Avenue, Wolf Lake	0.173	0.003	0.004	0.002	0.012	0.022	0.012	0.003	0.004	0.008	0.001
55 130th Street, Calumet River	0.006	0.004	0.001	0.003	0.003	0.004	0.005	0.004	0.005	0.006	0.004
86 Burnham Avenue, Grand Calumet River	0.031	0.022	0.034	0.007	0.020	0.044	0.012	0.015	0.016	0.048	0.024
56 Indiana Avenue, Little Calumet River	0.001	0.001	0.002	0.005	0.002	0.005	0.008	0.001	0.003	0.004	0.002
76 Halsted Street, Little Calumet River	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.002	0.002	0.002
52 Wentworth Avenue, Little Calumet River	0.005	0.003	0.004	0.011	0.005	0.006	0.004	0.002	0.004	0.005	0.003
54 Joe Orr Road, Thorn Creek	0.001	0.003	0.001	0.001	0.001	0.003	0.003	0.001	0.002	0.001	0.001
97 170th Street, Thorn Creek	0.005	0.002	0.003	0.003	0.005	0.003	0.003	0.001	0.003	0.003	0.004
57 Ashland Avenue, Little Calumet River	0.027	0.003	0.003	0.004	0.009	0.003	0.004	0.002	0.009	0.004	0.002
58 Ashland Avenue, Calumet-Sag Channel	0.003	0.003	0.002	0.003	0.003	0.004	0.002	0.001	0.002	0.003	0.002
59 Cicero Avenue, Calumet-Sag Channel	0.003	0.003	0.004	0.002	0.003	0.003	0.003	0.002	0.003	0.003	0.001
43 Route 83, Calumet-Sag Channel	0.004	0.005	0.004	0.003	0.005	0.004	0.004	0.002	0.006	0.004	0.001
Des Plaines River System											
90 Route 19, Poplar Creek	0.002	0.005	0.002	0.002	0.001	0.003	0.003	0.002	0.002	0.002	0.001
110 Springinguth Road, West Branch DuPage River	0.007	0.004	0.006	0.006	0.005	0.007	0.007	0.005	0.006	ND	ND
89 Walnut Lane, West Branch DuPage River	0.001	0.002	0.001	0.001	0.002	0.003	0.001	0.003	0.003	0.004	0.001
64 Lake Street, West Branch DuPage River	ND	ND	0.007	0.001	0.005	0.007	0.003	0.005	0.005	0.005	0.006
111 Arlington Drive, West Branch DuPage River	0.004	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.002	0.002	0.002	0.001	0.000	0.003	0.004	0.002	0.001	0.002	0.004
80 Arlington Heights Road, Salt Creek	0.002	0.002	0.001	0.000	0.000	0.002	0.001	0.006	0.003	0.004	0.002
18 Devon Avenue, Salt Creek	0.002	0.002	0.002	0.000	0.000	0.002	0.002	0.006	0.002	0.005	0.002
24 Wolf Road, Salt Creek	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.003	0.002	0.003
109 Brookfield Avenue, Salt Creek	0.002	0.002	0.002	0.001	0.002	0.003	0.002	0.002	0.002	0.002	0.000
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001
77 Elmhurst Road, Higgins Creek	0.003	0.003	0.000	0.003	0.005	0.004	0.002	0.003	0.003	0.003	0.001
78 Wille Road, Higgins Creek	0.004	0.005	0.004	0.004	0.006	0.006	0.005	0.003	0.007	0.005	0.001
12 Lake-Cook Road, Buffalo Creek	0.001	0.002	0.001	0.000	0.002	0.002	0.003	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.003	0.003	0.001	0.002	0.003	0.002	0.001	0.003	0.004	0.002	0.002
17 Oakton Street, Des Plaines River	0.002	0.004	0.001	0.002	0.001	0.002	0.002	0.002	0.003	0.003	0.001
19 Belmont Avenue, Des Plaines River	0.002	0.005	0.001	0.001	0.003	0.003	0.002	0.002	0.004	0.004	0.001
20 Roosevelt Road, Des Plaines River	0.006	0.013	0.001	0.001	0.001	0.002	0.003	0.001	0.004	0.004	0.001
22 Ogden Avenue, Des Plaines River	0.003	0.003	0.001	0.001	0.001	0.004	0.002	0.002	0.002	0.001	0.001
23 Willow Springs Road, Des Plaines River	0.005	0.004	0.001	0.010	0.001	0.003	0.003	0.003	0.002	0.003	0.001
29 Stephen Street, Des Plaines River	0.008	0.002	0.001	0.004	0.001	0.002	0.002	0.002	0.001	0.003	0.002
91 Material Service Road, Des Plaines River	0.007	0.003	0.000	0.001	0.001	0.002	0.004	0.003	0.002	0.003	0.002

ND = No Data.

TABLE AII-57: ORGANIC NITROGEN MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.80	1.03	0.89	0.92	1.11	0.98	1.19	1.08	1.01	1.56	1.38
103 Golf Road, West Fork North Branch Chicago River	0.87	1.00	0.97	0.85	0.85	1.12	1.11	1.15	0.81	1.04	1.21
31 Lake-Cook Road, Middle Fork North Branch	0.88	0.75	0.88	0.84	0.98	1.06	0.97	1.17	0.85	1.06	1.14
104 Glenview Road, North Branch Chicago River	1.09	1.08	0.83	0.86	0.97	1.10	1.34	1.07	0.77	1.22	1.12
32 Lake-Cook Road, Skokie River	0.82	0.81	0.73	0.77	0.73	0.88	1.08	1.35	0.91	0.75	1.07
105 Frontage Road, Skokie River	0.87	0.76	0.95	0.90	0.94	1.19	1.20	1.10	0.80	1.05	1.20
34 Dempster Street, North Branch Chicago River	0.96	0.88	1.34	0.91	0.96	1.07	1.23	1.06	0.85	0.95	1.22
96 Albany Avenue, North Branch Chicago River	0.88	0.80	0.86	0.76	0.88	1.05	1.16	1.16	0.78	1.01	1.15
35 Central Street, North Shore Channel	1.08	0.45	0.21	0.28	0.34	0.41	0.44	0.32	0.24	0.51	0.71
102 Dempster Street, North Shore Channel	0.86	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
112 Oakton Street, North Shore Channel	1.13	0.68	0.88	0.56	0.74	0.75	0.86	0.77	0.57	0.98	1.11
36 Touhy Avenue, North Shore Channel	1.07	1.04	1.24	0.98	1.00	1.24	1.32	1.37	1.00	1.21	1.61
101 Foster Avenue, North Shore Channel	0.96	0.90	1.04	0.89	1.06	1.18	1.20	1.43	1.14	1.19	1.55
37 Wilson Avenue, North Branch Chicago River	1.25	0.87	1.04	0.89	1.03	1.04	1.20	1.31	1.06	1.27	1.45
73 Diversey Parkway, North Branch Chicago River	0.88	1.12	0.87	0.88	0.93	1.09	1.07	1.16	0.92	1.20	1.37
46 Grand Avenue, North Branch Chicago River	1.13	0.94	0.94	0.97	0.95	1.23	1.22	1.20	0.84	0.94	1.34
74 Lake Shore Drive, Chicago River	0.65	0.47	0.15	0.18	0.35	0.37	0.37	0.34	0.31	0.38	0.43
100 Wells Street, Chicago River	0.86	0.66	0.41	0.37	0.58	0.55	0.64	0.57	0.56	0.79	0.60
39 Madison Street, South Branch Chicago River	0.75	1.03	0.76	0.67	0.84	0.86	0.92	0.95	0.73	1.08	1.32
108 Loomis Street, South Branch Chicago River	0.78	0.76	0.71	0.70	0.84	0.96	0.98	0.97	0.75	0.87	1.04
99 Archer Avenue, South Fork South Branch Chicago River	1.18	1.17	1.05	0.95	1.20	0.93	0.87	1.14	0.94	1.01	1.50
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.99	0.86	0.96	0.79	0.83	0.88	1.03	1.03	0.81	1.00	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.23
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.83	0.87	0.84	0.68	0.89	0.88	1.08	0.92	0.70	1.02	1.28
41 Harlem Avenue, Chicago Sanitary & Ship Canal	1.02	0.98	0.99	0.83	0.98	1.19	1.18	0.99	0.69	1.01	1.15
42 Route 83, Chicago Sanitary & Ship Canal	1.13	1.02	1.03	0.83	0.90	1.11	1.13	0.99	0.80	0.98	1.31
48 Stephen Street, Chicago Sanitary & Ship Canal	0.95	0.95	1.01	0.83	0.86	1.08	1.20	0.96	0.76	0.98	1.19
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.78	0.90	0.91	0.87	0.93	1.04	1.13	1.02	0.75	0.99	1.16
Calumet River System											
49 Ewing Avenue, Calumet River	0.88	0.36	0.07	0.16	0.16	0.25	0.32	0.15	0.09	0.12	0.29
50 Burnham Avenue, Wolf Lake	0.91	0.51	0.46	0.67	0.61	0.71	0.64	0.55	0.37	0.40	0.47
55 130th Street, Calumet River	0.83	0.40	0.18	0.43	0.47	0.61	0.58	0.47	0.20	0.33	0.61
86 Burnham Avenue, Grand Calumet River	1.24	1.04	1.45	1.29	2.95	2.35	1.76	2.65	1.25	2.12	1.94
56 Indiana Avenue, Little Calumet River	0.82	0.47	0.45	0.67	0.74	0.83	0.90	0.64	0.69	0.69	0.90
76 Halsted Street, Little Calumet River	0.87	0.89	0.93	0.90	1.07	1.04	1.10	0.98	0.70	0.89	1.20
52 Wentworth Avenue, Little Calumet River	0.73	0.90	1.13	0.98	1.01	1.22	1.46	1.25	1.09	1.26	1.35
54 Joe Orr Road, Thorn Creek	0.99	0.98	1.07	1.13	1.16	1.21	1.27	1.31	0.94	1.06	1.36
97 170th Street, Thorn Creek	0.82	0.79	1.08	1.05	0.93	1.24	1.14	1.02	0.81	1.03	1.21
57 Ashland Avenue, Little Calumet River	0.79	0.80	0.92	0.84	0.90	1.16	1.28	1.23	0.77	0.90	1.24
58 Ashland Avenue, Calumet-Sag Channel	0.81	0.80	0.97	0.79	0.96	1.09	1.17	0.98	0.73	0.93	1.16
59 Cicero Avenue, Calumet-Sag Channel	1.16	0.78	0.90	0.92	0.92	1.02	1.22	1.05	0.83	1.01	1.24
43 Route 83, Calumet-Sag Channel	1.14	0.78	0.88	0.88	0.91	1.10	1.11	0.93	0.72	1.06	1.19
Des Plaines River System											
90 Route 19, Poplar Creek	0.86	0.63	0.76	0.76	0.80	0.90	1.02	0.83	0.57	0.88	0.83
110 Springinsguth Road, West Branch DuPage River	1.07	1.37	1.33	1.72	1.48	1.70	1.80	2.04	1.81	ND	ND
89 Walnut Lane, West Branch DuPage River	1.59	1.41	1.56	1.45	1.45	1.61	1.59	1.66	1.23	1.79	1.71
64 Lake Street, West Branch DuPage River	ND	ND	1.22	1.40	1.43	1.67	1.59	1.61	1.37	1.77	1.77
111 Arlington Drive, West Branch DuPage River	1.33	1.33	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.87	1.08	1.20	1.16	1.15	1.38	1.33	1.31	0.93	1.25	1.51
80 Arlington Heights Road, Salt Creek	1.12	1.10	1.10	1.16	0.98	1.13	1.26	1.01	0.88	1.37	1.53
18 Devon Avenue, Salt Creek	1.02	1.02	1.24	1.07	0.91	1.01	1.26	1.22	1.04	1.36	1.51
24 Wolf Road, Salt Creek	0.81	0.86	1.82	0.98	0.91	1.03	1.22	1.09	0.71	1.23	1.23
109 Brookfield Avenue, Salt Creek	0.82	0.74	0.81	1.00	0.89	1.00	1.38	1.07	0.70	1.27	1.23
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.22
77 Elmhurst Road, Higgins Creek	0.90	0.73	0.72	0.79	0.75	0.79	1.18	1.17	0.56	1.16	1.20
78 Wille Road, Higgins Creek	0.95	0.89	1.06	0.95	1.22	1.25	1.43	1.24	1.01	1.16	1.44
12 Lake-Cook Road, Buffalo Creek	1.05	0.82	1.03	1.06	1.02	1.26	1.09	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.87	0.83	1.03	1.00	1.02	1.27	1.32	1.15	0.80	1.35	1.69
17 Oakton Street, Des Plaines River	1.03	0.97	0.98	1.09	1.13	1.17	1.27	1.16	0.83	1.39	1.45
19 Belmont Avenue, Des Plaines River	1.03	0.96	1.00	0.99	1.16	1.33	1.33	1.13	0.68	1.47	1.30
20 Roosevelt Road, Des Plaines River	1.07	0.91	0.99	1.05	1.08	1.19	1.26	1.06	0.84	1.48	1.25
22 Ogden Avenue, Des Plaines River	1.04	0.81	0.93	1.04	1.15	1.14	1.33	1.09	0.79	1.86	1.26
23 Willow Springs Road, Des Plaines River	0.83	0.78	0.84	1.08	1.04	1.09	1.35	1.11	0.83	1.10	1.50
29 Stephen Street, Des Plaines River	1.17	0.86	1.08	0.96	0.99	1.16	1.28	1.18	0.91	1.35	1.40
91 Material Service Road, Des Plaines River	0.88	0.82	0.97	1.00	1.06	1.12	1.36	1.17	0.90	1.45	1.44

ND = No Data.

TABLE AII-58: NITRITE PLUS NITRATE NITROGEN MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	6.16	8.14	8.56	6.78	5.90	4.63	3.68	7.14	9.95	5.27	4.00
103 Golf Road, West Fork North Branch Chicago River	3.44	3.82	3.72	3.04	2.12	3.49	3.11	3.88	2.86	2.97	4.03
31 Lake-Cook Road, Middle Fork North Branch	0.23	0.22	0.17	0.23	0.78	0.24	0.42	0.24	0.33	0.35	0.38
104 Glenview Road, North Branch Chicago River	5.82	4.94	5.88	3.95	3.31	4.52	3.92	5.93	4.79	3.81	4.67
32 Lake-Cook Road, Skokie River	0.47	0.96	0.35	0.35	0.62	0.46	3.15	3.41	0.77	1.07	0.46
105 Frontage Road, Skokie River	7.58	6.98	7.07	5.15	4.03	5.58	5.33	7.00	5.74	6.42	5.83
34 Dempster Street, North Branch Chicago River	4.33	4.39	4.02	3.43	3.00	3.97	3.74	5.06	4.24	5.10	4.57
96 Albany Avenue, North Branch Chicago River	4.40	4.20	4.50	3.60	2.84	4.07	3.83	4.64	4.75	4.24	4.24
35 Central Street, North Shore Channel	0.22	0.30	0.31	0.33	0.28	0.31	0.34	0.23	0.35	1.00	0.34
112 Dempster Street, North Shore Channel	4.30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	5.01	3.75	3.29	2.73	2.72	3.33	3.81	2.44	2.13	2.25	3.66
36 Touhy Avenue, North Shore Channel	6.87	6.25	6.53	6.47	6.76	6.53	6.01	5.24	5.37	5.90	5.58
101 Foster Avenue, North Shore Channel	7.95	6.67	7.75	7.44	7.23	7.58	7.19	5.97	5.93	6.72	6.11
37 Wilson Avenue, North Branch Chicago River	7.59	5.66	7.12	6.93	6.26	7.29	6.94	6.29	6.26	6.50	5.84
73 Diversey Parkway, North Branch Chicago River	6.81	5.98	7.18	6.69	6.47	6.47	6.41	6.04	6.50	6.02	5.29
46 Grand Avenue, North Branch Chicago River	7.36	6.42	6.66	5.79	5.70	6.43	6.22	5.77	5.36	5.86	5.47
74 Lake Shore Drive, Chicago River	2.84	2.66	1.28	0.57	0.93	1.31	1.04	1.07	1.50	1.38	1.38
100 Wells Street, Chicago River	4.88	4.38	2.83	1.94	2.60	2.29	2.15	2.22	2.52	3.41	2.31
39 Madison Street, South Branch Chicago River	5.33	5.76	5.05	4.58	4.31	4.41	4.03	4.37	4.68	5.19	4.37
108 Loomis Street, South Branch Chicago River	5.98	5.31	5.12	4.71	4.40	4.39	4.30	4.35	4.76	4.40	4.27
99 Archer Avenue, South Fork South Branch Chicago River	4.25	4.16	4.80	3.32	3.63	3.91	3.67	4.05	4.17	4.52	3.55
40 Damen Avenue, Chicago Sanitary & Ship Canal	5.72	5.18	5.11	4.56	4.22	4.15	4.25	4.22	4.64	4.73	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.24
75 Cicero Avenue, Chicago Sanitary & Ship Canal	6.06	4.51	5.15	3.95	4.49	4.50	3.84	4.06	4.63	4.49	4.30
41 Harlem Avenue, Chicago Sanitary & Ship Canal	8.29	6.29	8.12	6.35	7.25	7.11	7.41	7.67	7.64	7.84	6.81
42 Route 83, Chicago Sanitary & Ship Canal	8.10	6.23	6.10	5.29	6.33	6.08	6.00	5.97	6.93	7.17	6.24
48 Stephen Street, Chicago Sanitary & Ship Canal	7.07	5.33	5.83	4.92	5.64	5.59	5.59	5.51	6.27	6.36	5.77
92 Lockport Forebay, Chicago Sanitary & Ship Canal	6.65	5.78	5.91	5.34	5.52	5.45	5.90	6.01	5.74	6.24	5.94
Calumet River System											
49 Ewing Avenue, Calumet River	0.35	0.38	0.30	0.33	0.39	0.37	0.38	0.37	0.36	0.35	0.50
50 Burnham Avenue, Wolf Lake	0.15	0.10	0.07	0.06	0.09	0.16	0.09	0.13	0.11	0.09	0.10
55 130th Street, Calumet River	0.55	0.50	0.42	0.55	0.65	0.68	0.71	0.60	0.52	0.48	0.57
86 Burnham Avenue, Grand Calumet River	0.18	0.38	0.29	4.45	1.96	1.81	4.68	5.19	5.00	5.91	8.56
56 Indiana Avenue, Little Calumet River	1.87	1.85	1.12	0.86	1.25	1.40	1.86	1.37	1.36	1.78	2.39
76 Halsted Street, Little Calumet River	6.18	5.53	5.38	4.56	5.16	5.17	5.91	5.33	4.79	4.57	5.36
52 Wentworth Avenue, Little Calumet River	5.34	2.64	4.34	3.83	4.85	4.18	4.25	4.27	3.57	4.16	5.39
54 Joe Orr Road, Thorn Creek	11.18	7.31	7.39	9.28	10.15	9.18	9.88	6.39	7.33	7.67	9.86
97 170th Street, Thorn Creek	6.44	4.35	4.53	5.30	6.26	5.49	5.32	5.97	5.67	6.76	7.13
57 Ashland Avenue, Little Calumet River	4.49	2.80	3.41	3.22	4.22	3.25	4.08	3.67	3.06	4.01	4.35
58 Ashland Avenue, Calumet-Sag Channel	5.38	4.67	4.38	4.02	4.84	4.26	5.66	5.17	4.51	4.57	5.39
59 Cicero Avenue, Calumet-Sag Channel	5.11	4.69	4.55	3.54	5.02	3.92	5.32	5.22	4.58	4.48	5.39
43 Route 83, Calumet-Sag Channel	5.25	4.18	4.90	3.76	4.48	4.69	4.78	5.35	4.38	4.11	4.67
Des Plaines River System											
90 Route 19, Poplar Creek	0.26	0.34	0.28	0.28	0.31	0.29	0.53	0.39	0.34	0.61	0.28
110 Springinsguth Road, West Branch DuPage River	0.42	2.23	0.36	0.64	0.59	0.62	0.96	0.69	1.22	ND	ND
89 Walnut Lane, West Branch DuPage River	10.96	10.25	11.83	10.32	9.38	7.98	8.57	8.85	9.43	7.58	7.13
64 Lake Street, West Branch DuPage River	ND	ND	6.82	8.91	9.11	7.34	8.38	8.64	8.83	7.32	6.70
111 Arlington Drive, West Branch DuPage River	12.65	10.43	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.21	1.77	0.12	1.28	0.23	0.23	0.26	0.27	0.25	0.45	0.23
80 Arlington Heights Road, Salt Creek	7.75	5.97	7.81	7.72	8.84	7.10	6.77	7.98	6.01	6.22	7.69
18 Devon Avenue, Salt Creek	10.19	7.18	8.31	7.60	8.69	7.01	6.92	8.19	6.40	6.46	7.32
24 Wolf Road, Salt Creek	6.40	6.26	6.98	6.08	7.06	6.47	6.22	8.12	6.54	6.71	7.66
109 Brookfield Avenue, Salt Creek	7.84	5.48	6.17	5.18	6.20	5.56	5.67	6.98	5.78	5.42	8.16
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.10
77 Elmhurst Road, Higgins Creek	0.30	0.32	0.35	0.41	0.54	0.40	0.57	0.44	0.47	0.55	0.41
78 Wille Road, Higgins Creek	8.62	8.86	7.90	8.26	7.98	5.83	5.46	9.44	5.42	4.85	5.67
12 Lake-Cook Road, Buffalo Creek	0.26	0.39	0.36	0.40	0.33	0.31	0.56	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	5.98	4.83	6.45	4.68	5.70	5.26	6.56	7.69	6.53	6.79	6.05
17 Oakton Street, Des Plaines River	5.54	4.17	6.08	3.90	4.52	4.09	5.24	6.43	5.46	4.97	4.84
19 Belmont Avenue, Des Plaines River	7.31	4.28	5.71	4.27	4.59	3.95	4.86	5.93	4.69	4.56	4.62
20 Roosevelt Road, Des Plaines River	4.50	4.09	5.65	3.84	4.47	3.81	4.54	5.49	4.38	4.40	4.50
22 Ogden Avenue, Des Plaines River	7.02	4.36	5.52	4.04	4.80	3.95	4.89	5.79	4.70	5.91	5.21
23 Willow Springs Road, Des Plaines River	6.38	4.23	5.25	3.74	4.88	4.13	4.82	5.69	4.67	4.30	4.93
29 Stephen Street, Des Plaines River	4.39	4.07	5.01	3.66	5.05	4.40	5.08	6.04	4.69	5.03	5.18
91 Material Service Road, Des Plaines River	5.95	3.83	4.78	3.78	4.65	4.28	4.86	6.26	4.39	4.83	4.98

ND = No Data.

TABLE AII-59: TOTAL SOLIDS MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	1471	1292	1160	988	1027	1603	900	1050	1300	645	926
103 Golf Road, West Fork North Branch Chicago River	1176	1057	1052	861	863	1146	919	1232	776	790	749
31 Lake-Cook Road, Middle Fork North Branch	890	759	845	659	809	797	794	888	646	687	693
104 Glenview Road, North Branch Chicago River	814	711	781	695	799	761	704	756	711	733	631
32 Lake-Cook Road, Skokie River	926	708	780	637	726	823	709	858	712	682	661
105 Frontage Road, Skokie River	771	670	713	664	775	696	654	696	622	637	606
34 Dempster Street, North Branch Chicago River	1015	734	897	720	763	850	752	885	808	880	688
96 Albany Avenue, North Branch Chicago River	797	785	883	773	913	854	802	934	684	651	724
35 Central Street, North Shore Channel	570	315	255	269	328	260	229	244	250	292	321
112 Dempster Street, North Shore Channel	519	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	513	497	423	407	441	443	381	423	344	359	416
36 Touhy Avenue, North Shore Channel	509	645	534	628	556	646	475	511	511	491	461
101 Foster Avenue, North Shore Channel	572	627	567	600	584	704	491	546	493	469	478
37 Wilson Avenue, North Branch Chicago River	660	658	686	630	661	750	527	613	565	561	520
73 Diversey Parkway, North Branch Chicago River	529	589	638	691	703	613	522	570	543	565	514
46 Grand Avenue, North Branch Chicago River	658	596	595	592	706	674	555	597	591	610	503
74 Lake Shore Drive, Chicago River	514	463	310	244	273	365	256	274	300	312	314
100 Wells Street, Chicago River	462	508	411	330	437	409	337	369	382	409	366
39 Madison Street, South Branch Chicago River	595	696	532	496	561	548	456	483	464	500	469
108 Loomis Street, South Branch Chicago River	449	579	591	505	549	592	497	476	459	495	476
99 Archer Avenue, South Fork South Branch Chicago River	531	578	565	491	591	560	425	474	471	484	476
40 Damen Avenue, Chicago Sanitary & Ship Canal	644	560	572	501	556	616	481	477	487	485	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	482
75 Cicero Avenue, Chicago Sanitary & Ship Canal	549	577	546	502	604	647	481	495	514	502	498
41 Harlem Avenue, Chicago Sanitary & Ship Canal	580	627	621	579	619	764	529	530	550	531	506
42 Route 83, Chicago Sanitary & Ship Canal	676	656	635	568	628	616	548	578	597	568	557
48 Stephen Street, Chicago Sanitary & Ship Canal	629	664	665	545	640	606	584	591	607	602	580
92 Lockport Forebay, Chicago Sanitary & Ship Canal	598	665	669	604	729	647	584	618	622	610	576
Calumet River System											
49 Ewing Avenue, Calumet River	262	280	229	234	227	242	245	223	234	241	268
50 Burnham Avenue, Wolf Lake	385	348	327	304	301	295	241	279	275	245	247
55 130th Street, Calumet River	472	406	363	396	405	395	354	300	340	334	341
86 Burnham Avenue, Grand Calumet River	608	532	570	782	794	747	865	665	787	911	874
56 Indiana Avenue, Little Calumet River	540	465	420	440	488	478	428	370	410	405	475
76 Halsted Street, Little Calumet River	620	626	586	579	714	648	590	559	579	547	547
52 Wentworth Avenue, Little Calumet River	806	594	646	611	761	679	700	612	745	828	838
54 Joe Orr Road, Thorn Creek	1590	1089	1383	1267	1600	1417	1490	1293	1530	979	1602
97 170th Street, Thorn Creek	1152	980	1073	983	1187	1009	1099	1252	1165	1308	1285
57 Ashland Avenue, Little Calumet River	948	788	829	743	853	830	877	925	885	951	913
58 Ashland Avenue, Calumet-Sag Channel	759	680	682	574	730	605	638	632	626	609	700
59 Cicero Avenue, Calumet-Sag Channel	686	705	617	577	695	622	683	625	666	633	618
43 Route 83, Calumet-Sag Channel	626	643	679	583	668	628	642	626	630	625	621
Des Plaines River System											
90 Route 19, Poplar Creek	795	738	817	666	829	784	804	766	756	662	711
110 Springinsguth Road, West Branch DuPage River	867	872	763	786	961	902	1173	1077	986	ND	ND
89 Walnut Lane, West Branch DuPage River	648	685	653	606	649	647	656	619	650	608	591
64 Lake Street, West Branch DuPage River	ND	ND	939	664	757	670	683	701	697	632	661
111 Arlington Drive, West Branch DuPage River	663	719	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	936	860	757	725	1012	974	804	1075	960	701	746
80 Arlington Heights Road, Salt Creek	846	787	828	721	965	789	788	733	679	668	666
18 Devon Avenue, Salt Creek	750	800	891	674	983	782	806	866	751	714	648
24 Wolf Road, Salt Creek	840	817	877	752	926	814	737	823	762	739	774
109 Brookfield Avenue, Salt Creek	733	805	845	715	887	786	765	809	812	707	565
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1387
77 Elmhurst Road, Higgins Creek	825	737	1183	721	1212	650	1163	1110	1213	908	958
78 Wille Road, Higgins Creek	694	801	760	788	833	786	712	716	707	672	764
12 Lake-Cook Road, Buffalo Creek	862	784	919	717	952	816	819	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	686	641	687	569	746	664	736	742	699	713	707
17 Oakton Street, Des Plaines River	697	682	738	571	763	657	777	779	689	663	733
19 Belmont Avenue, Des Plaines River	671	688	744	617	844	688	779	783	749	749	758
20 Roosevelt Road, Des Plaines River	686	703	747	608	834	704	771	775	732	648	774
22 Ogden Avenue, Des Plaines River	697	724	771	617	813	720	759	778	732	712	813
23 Willow Springs Road, Des Plaines River	712	730	757	621	828	743	744	773	724	670	732
29 Stephen Street, Des Plaines River	764	714	750	623	851	728	758	772	702	667	754
91 Material Service Road, Des Plaines River	713	709	762	636	827	720	771	805	731	708	788

ND = No Data.

TABLE AII-60: TOTAL SUSPENDED SOLIDS MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	25.4	33.9	25.1	33.3	61.5	25.5	93.4	31.5	56.1	50.7	39.8
103 Golf Road, West Fork North Branch Chicago River	22.7	18.1	16.6	28.1	23.3	12.2	34.0	29.7	23.6	25.6	28.5
31 Lake-Cook Road, Middle Fork North Branch	4.5	11.4	11.4	21.9	33.0	16.4	69.3	24.2	22.0	21.2	30.6
104 Glenview Road, North Branch Chicago River	12.0	30.8	11.3	19.4	28.2	14.2	50.1	18.8	22.8	30.3	25.9
32 Lake-Cook Road, Skokie River	12.0	18.3	12.7	21.4	26.7	16.4	47.9	21.6	21.0	18.7	18.1
105 Frontage Road, Skokie River	14.6	18.9	13.8	20.9	24.3	18.5	23.8	18.4	25.2	19.4	21.6
34 Dempster Street, North Branch Chicago River	16.3	16.2	13.4	21.4	27.5	17.2	39.8	25.3	21.8	20.9	30.2
96 Albany Avenue, North Branch Chicago River	11.1	18.3	14.3	22.3	29.7	16.8	28.3	16.8	22.5	20.3	24.4
35 Central Street, North Shore Channel	11.4	9.6	7.1	10.3	12.6	5.3	9.4	8.5	11.3	9.9	12.8
112 Dempster Street, North Shore Channel	13.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	17.1	13.8	20.8	13.8	16.5	11.8	16.5	11.6	15.2	19.7	20.5
36 Touhy Avenue, North Shore Channel	7.2	9.2	7.0	8.4	10.4	5.0	11.7	10.9	15.4	9.4	15.3
101 Foster Avenue, North Shore Channel	10.0	8.8	7.7	9.3	14.8	5.7	12.3	12.2	12.7	9.6	15.4
37 Wilson Avenue, North Branch Chicago River	9.0	13.3	9.9	15.9	19.0	8.3	14.3	15.0	13.9	12.3	18.5
73 Diversey Parkway, North Branch Chicago River	13.7	12.6	9.5	14.4	15.7	10.6	15.3	13.2	15.1	14.1	19.3
46 Grand Avenue, North Branch Chicago River	12.4	12.9	10.8	16.9	16.0	16.3	17.3	14.5	21.3	13.5	18.3
74 Lake Shore Drive, Chicago River	4.3	3.6	1.2	4.7	5.8	5.6	7.1	5.3	4.9	2.5	4.0
100 Wells Street, Chicago River	7.2	7.2	4.1	5.7	9.0	4.7	9.0	4.5	6.3	6.4	6.3
39 Madison Street, South Branch Chicago River	11.3	10.7	9.5	12.6	13.8	18.3	14.5	8.7	14.0	11.6	18.4
108 Loomis Street, South Branch Chicago River	11.2	13.1	11.4	13.1	17.7	18.5	16.2	12.6	11.8	12.5	12.2
99 Archer Avenue, South Fork South Branch Chicago River	17.1	15.3	11.7	12.0	14.8	10.1	12.4	12.5	13.2	11.8	14.4
40 Damen Avenue, Chicago Sanitary & Ship Canal	12.9	12.8	12.0	15.4	15.6	17.9	17.8	12.7	14.6	13.7	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.3
75 Cicero Avenue, Chicago Sanitary & Ship Canal	13.4	23.3	12.8	16.8	16.8	16.6	19.2	13.0	17.8	13.9	15.1
41 Harlem Avenue, Chicago Sanitary & Ship Canal	9.0	12.1	7.7	9.7	10.3	15.3	12.3	9.6	8.5	8.1	11.6
42 Route 83, Chicago Sanitary & Ship Canal	8.3	8.4	6.8	10.7	13.3	21.8	11.7	7.5	9.0	10.6	11.5
48 Stephen Street, Chicago Sanitary & Ship Canal	10.9	13.4	9.3	14.0	19.7	23.8	18.2	15.0	15.8	16.2	13.4
92 Lockport Forebay, Chicago Sanitary & Ship Canal	8.7	11.2	10.4	15.8	22.6	12.9	15.8	14.5	14.6	14.7	15.1
Calumet River System											
49 Ewing Avenue, Calumet River	9.8	9.2	4.8	5.0	5.7	5.8	7.3	6.7	9.7	8.7	7.1
50 Burnham Avenue, Wolf Lake	9.0	5.8	4.3	6.6	5.3	5.2	6.1	5.3	5.4	5.8	3.6
55 130th Street, Calumet River	4.3	6.0	5.1	8.4	7.7	6.8	8.5	6.5	7.7	9.3	12.5
86 Burnham Avenue, Grand Calumet River	12.7	16.5	14.4	13.8	23.9	18.5	21.0	49.9	18.9	17.0	16.2
56 Indiana Avenue, Little Calumet River	10.3	11.9	12.9	19.3	33.7	21.6	24.4	25.0	22.0	29.9	27.8
76 Halsted Street, Little Calumet River	8.6	15.1	7.6	12.5	18.8	10.6	12.9	11.3	14.8	10.5	15.2
52 Wentworth Avenue, Little Calumet River	25.4	89.0	74.3	51.0	30.5	44.7	44.1	37.9	32.4	28.7	30.5
54 Joe Orr Road, Thorn Creek	12.4	34.7	27.4	20.1	8.0	7.1	9.9	115.4	17.6	42.0	7.4
97 170th Street, Thorn Creek	25.2	81.1	53.4	40.3	23.8	35.5	32.4	55.4	40.5	30.2	24.1
57 Ashland Avenue, Little Calumet River	25.9	65.2	55.1	35.3	19.9	34.6	26.5	45.7	30.5	33.0	23.0
58 Ashland Avenue, Calumet-Sag Channel	11.7	34.5	25.3	17.4	17.7	17.5	16.6	15.0	18.8	24.4	17.3
59 Cicero Avenue, Calumet-Sag Channel	13.3	26.2	18.5	22.0	22.8	20.3	24.9	14.3	20.3	24.0	21.1
43 Route 83, Calumet-Sag Channel	15.9	20.5	14.0	23.5	17.4	16.6	20.1	15.5	20.1	35.9	25.9
Des Plaines River System											
90 Route 19, Poplar Creek	18.3	12.5	17.6	14.1	21.9	13.9	25.2	15.9	15.3	30.4	18.9
110 Springinsguth Road, West Branch DuPage River	19.0	17.5	11.0	22.8	29.1	22.3	17.9	30.5	49.2	ND	ND
89 Walnut Lane, West Branch DuPage River	15.6	10.8	20.1	11.8	21.6	15.3	10.8	12.3	15.4	18.3	16.1
64 Lake Street, West Branch DuPage River	ND	ND	26.7	26.3	34.5	27.5	34.0	38.5	32.5	40.3	33.2
111 Arlington Drive, West Branch DuPage River	33.1	24.8	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	13.2	21.9	31.4	24.4	32.1	33.0	31.2	41.4	25.5	44.6	38.0
80 Arlington Heights Road, Salt Creek	7.6	9.5	8.5	13.8	8.4	10.2	10.2	9.8	9.0	8.8	8.3
18 Devon Avenue, Salt Creek	8.8	9.7	11.1	16.7	12.4	16.3	14.1	14.2	19.0	19.9	15.7
24 Wolf Road, Salt Creek	27.3	17.5	23.5	24.1	31.6	30.6	39.4	28.9	23.1	43.3	23.4
109 Brookfield Avenue, Salt Creek	17.4	16.3	18.3	25.5	30.1	25.1	42.7	25.1	19.9	56.1	18.7
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.7
77 Elmhurst Road, Higgins Creek	28.5	25.2	21.0	18.8	50.8	26.4	45.3	29.3	29.2	34.8	36.0
78 Wille Road, Higgins Creek	7.0	4.2	2.4	7.0	8.8	6.5	5.4	3.4	7.6	5.9	7.0
12 Lake-Cook Road, Buffalo Creek	18.5	19.7	27.7	27.1	29.3	41.1	29.4	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	15.6	16.2	17.4	20.1	23.3	21.8	27.3	24.0	23.2	36.8	28.7
17 Oakton Street, Des Plaines River	11.7	17.4	16.8	22.3	26.1	22.9	26.1	17.9	23.0	42.1	28.8
19 Belmont Avenue, Des Plaines River	16.8	15.8	18.5	23.0	31.6	26.5	29.4	23.2	22.3	41.8	28.5
20 Roosevelt Road, Des Plaines River	16.1	15.9	22.0	24.3	27.6	26.5	26.9	23.8	21.7	43.4	31.0
22 Ogden Avenue, Des Plaines River	25.8	17.5	20.5	27.6	29.5	29.7	36.3	30.6	21.3	52.6	23.2
23 Willow Springs Road, Des Plaines River	21.1	18.5	17.4	26.2	27.5	23.9	27.8	22.3	24.0	33.4	24.0
29 Stephen Street, Des Plaines River	28.4	18.5	23.6	29.5	28.6	22.8	29.3	29.8	26.5	41.6	28.3
91 Material Service Road, Des Plaines River	18.7	20.8	23.1	26.3	26.4	25.9	27.7	35.0	28.2	46.1	30.1

ND = No Data.

**TABLE AII-61: VOLATILE SUSPENDED SOLIDS MEAN HISTORY
2002 THROUGH 2012**

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	6.60	6.70	3.60	7.55	11.36	2.25	13.60	6.75	9.38	13.33	6.50
103 Golf Road, West Fork North Branch Chicago River	5.71	4.09	2.40	7.82	5.80	2.91	7.42	7.40	7.30	5.63	5.64
31 Lake-Cook Road, Middle Fork North Branch	2.25	2.78	1.56	4.50	6.40	3.90	11.91	5.10	4.30	4.78	6.00
104 Glenview Road, North Branch Chicago River	4.57	7.67	1.22	5.58	6.17	3.55	11.67	5.50	5.42	7.33	5.22
32 Lake-Cook Road, Skokie River	4.33	5.00	1.33	4.80	6.00	3.20	9.08	6.00	5.20	4.56	4.70
105 Frontage Road, Skokie River	4.00	3.92	1.33	6.75	5.67	4.64	8.50	5.75	5.50	5.33	4.58
34 Dempster Street, North Branch Chicago River	5.00	3.36	1.88	5.92	5.91	2.55	11.75	6.55	5.25	4.91	6.08
96 Albany Avenue, North Branch Chicago River	3.75	4.00	1.82	4.83	5.50	3.73	6.25	5.55	5.27	5.10	5.33
35 Central Street, North Shore Channel	5.20	2.50	1.13	2.89	2.56	2.00	3.11	3.38	1.67	2.56	3.78
112 Dempster Street, North Shore Channel	4.80	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	5.29	3.67	3.18	4.09	4.27	3.75	5.33	3.58	3.75	4.10	5.27
36 Touhy Avenue, North Shore Channel	4.17	4.67	1.45	4.44	4.58	2.58	5.08	4.92	4.92	4.33	5.08
101 Foster Avenue, North Shore Channel	4.00	3.17	0.83	4.50	6.00	1.83	5.33	4.23	4.75	3.33	5.50
37 Wilson Avenue, North Branch Chicago River	3.67	3.33	0.67	4.83	5.08	3.08	5.58	4.75	3.92	3.83	4.75
73 Diversey Parkway, North Branch Chicago River	4.50	3.42	0.00	3.33	3.92	3.25	4.83	3.50	3.67	3.83	5.08
46 Grand Avenue, North Branch Chicago River	3.86	3.17	0.92	3.67	4.33	4.27	5.83	3.92	4.58	3.42	4.50
74 Lake Shore Drive, Chicago River	2.50	0.92	0.00	0.67	1.70	1.55	4.82	1.40	0.33	0.90	1.25
100 Wells Street, Chicago River	3.36	1.83	0.00	1.55	2.83	1.45	6.83	1.42	0.67	2.17	1.67
39 Madison Street, South Branch Chicago River	3.67	3.33	0.92	3.73	3.42	3.36	6.92	1.50	1.92	3.09	4.25
108 Loomis Street, South Branch Chicago River	4.08	3.08	2.00	3.42	4.36	3.50	6.83	2.60	2.50	2.92	2.33
99 Archer Avenue, South Fork South Branch Chicago River	7.50	6.83	3.40	5.91	6.75	2.55	6.29	4.36	4.75	3.83	4.25
40 Damen Avenue, Chicago Sanitary & Ship Canal	4.29	3.42	2.25	4.55	4.17	3.42	8.00	3.00	3.00	3.33	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.50
75 Cicero Avenue, Chicago Sanitary & Ship Canal	4.33	6.58	1.92	4.75	4.75	4.08	7.00	2.50	4.17	3.67	3.00
41 Harlem Avenue, Chicago Sanitary & Ship Canal	3.75	3.58	0.89	4.08	3.67	3.67	5.83	3.50	1.67	2.50	2.92
42 Route 83, Chicago Sanitary & Ship Canal	3.29	2.92	0.67	3.80	3.25	3.91	6.67	2.09	1.83	3.00	2.42
48 Stephen Street, Chicago Sanitary & Ship Canal	3.67	3.25	0.58	4.40	4.92	5.36	7.50	2.91	2.17	3.58	2.58
92 Lockport Forebay, Chicago Sanitary & Ship Canal	3.65	2.80	1.08	3.82	4.96	3.00	4.88	3.21	2.94	3.69	3.48
Calumet River System											
49 Ewing Avenue, Calumet River	3.00	1.50	0.00	1.00	0.33	1.20	2.09	3.09	0.40	1.25	1.42
50 Burnham Avenue, Wolf Lake	3.71	2.27	1.27	3.50	2.42	2.91	4.00	2.50	1.58	2.83	1.58
55 130th Street, Calumet River	2.00	0.80	0.00	1.78	1.67	1.90	2.55	2.27	0.45	1.70	2.67
86 Burnham Avenue, Grand Calumet River	8.00	7.30	8.00	4.40	12.60	8.70	9.18	20.90	8.67	8.20	7.09
56 Indiana Avenue, Little Calumet River	3.90	1.90	1.10	3.13	6.00	3.56	5.27	4.67	3.67	5.00	4.58
76 Halsted Street, Little Calumet River	3.64	4.27	0.40	3.82	5.33	2.27	4.91	3.58	2.00	2.55	3.67
52 Wentworth Avenue, Little Calumet River	4.71	12.20	8.82	8.50	6.60	6.82	7.27	7.55	5.89	5.50	5.45
54 Joe Orr Road, Thorn Creek	3.00	5.20	2.44	4.44	1.67	1.70	2.89	19.13	2.71	6.67	2.71
97 170th Street, Thorn Creek	4.00	11.20	7.55	6.67	4.18	4.09	5.82	7.64	6.45	5.60	4.17
57 Ashland Avenue, Little Calumet River	5.73	9.60	6.70	6.56	4.80	5.18	6.18	9.00	5.10	6.30	4.75
58 Ashland Avenue, Calumet-Sag Channel	3.86	5.82	3.00	3.73	4.75	3.09	5.73	2.58	3.92	5.00	3.58
59 Cicero Avenue, Calumet-Sag Channel	3.70	4.64	2.30	4.20	4.45	3.64	6.55	3.00	3.08	4.91	4.25
43 Route 83, Calumet-Sag Channel	4.64	3.91	1.55	3.80	3.70	4.00	4.36	4.55	4.30	5.64	5.50
Des Plaines River System											
90 Route 19, Poplar Creek	5.14	3.18	3.50	3.64	4.73	3.36	6.17	4.91	3.60	6.20	4.78
110 Springinguth Road, West Branch DuPage River	7.64	4.70	3.00	7.22	9.45	8.40	5.91	13.55	10.44	ND	ND
89 Walnut Lane, West Branch DuPage River	7.00	5.17	5.42	5.42	5.75	3.67	4.33	5.58	5.18	6.36	4.58
64 Lake Street, West Branch DuPage River	ND	ND	6.67	7.58	8.42	8.33	8.58	10.08	8.09	8.75	7.33
111 Arlington Drive, West Branch DuPage River	6.92	5.92	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	5.45	6.10	8.25	7.50	8.78	9.70	9.00	11.11	8.50	9.56	9.38
80 Arlington Heights Road, Salt Creek	3.86	3.64	2.58	4.83	3.25	3.17	5.08	4.75	3.55	3.67	3.30
18 Devon Avenue, Salt Creek	3.75	3.45	2.20	5.18	4.25	5.83	6.00	4.50	4.82	5.50	4.10
24 Wolf Road, Salt Creek	6.29	3.45	3.90	4.92	6.08	6.91	9.42	6.58	5.20	8.00	5.25
109 Brookfield Avenue, Salt Creek	4.50	3.73	2.55	5.64	6.00	6.00	9.25	5.17	5.80	9.80	3.67
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.00
77 Elmhurst Road, Higgins Creek	6.13	4.80	6.00	7.25	9.80	5.20	11.00	9.50	7.60	7.00	6.83
78 Wille Road, Higgins Creek	3.55	1.45	1.33	2.92	3.50	3.25	3.17	1.17	3.40	2.50	2.58
12 Lake-Cook Road, Buffalo Creek	3.67	4.78	5.14	6.33	6.91	8.67	7.44	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	3.71	3.82	3.27	5.42	6.08	5.50	8.33	5.75	6.80	7.58	7.50
17 Oakton Street, Des Plaines River	3.71	4.91	3.45	5.45	7.18	5.73	7.58	6.08	5.30	8.70	7.09
19 Belmont Avenue, Des Plaines River	4.17	3.82	3.36	5.83	6.58	6.82	8.17	5.83	5.50	7.75	5.75
20 Roosevelt Road, Des Plaines River	4.71	4.45	4.00	5.45	6.58	5.36	8.00	7.00	5.40	7.86	6.08
22 Ogden Avenue, Des Plaines River	5.58	4.27	3.33	6.27	6.36	7.09	8.75	7.00	4.70	11.00	5.33
23 Willow Springs Road, Des Plaines River	5.42	4.45	3.45	6.45	6.18	5.73	7.75	6.17	5.90	7.00	6.00
29 Stephen Street, Des Plaines River	8.86	4.73	5.08	7.45	6.17	4.64	8.83	7.75	7.20	8.82	6.58
91 Material Service Road, Des Plaines River	4.83	5.18	5.17	7.75	6.08	5.64	7.50	8.92	8.00	9.83	7.50

ND = No Data.

TABLE AII-62: TOTAL DISSOLVED SOLIDS MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	1446	1258	1135	955	965	1577	807	1018	1244	595	886
103 Golf Road, West Fork North Branch Chicago River	1154	1039	1036	833	840	1134	885	1202	753	764	721
31 Lake-Cook Road, Middle Fork North Branch	885	747	834	637	776	780	724	864	624	666	663
104 Glenview Road, North Branch Chicago River	802	680	770	676	771	747	654	737	689	703	605
32 Lake-Cook Road, Skokie River	914	690	767	615	699	806	661	836	691	664	643
105 Frontage Road, Skokie River	757	651	699	643	750	677	630	677	596	617	584
34 Dempster Street, North Branch Chicago River	999	718	883	699	735	832	712	860	786	859	658
96 Albany Avenue, North Branch Chicago River	786	766	868	751	883	837	773	917	662	630	700
35 Central Street, North Shore Channel	559	305	248	258	316	254	219	236	239	282	309
112 Dempster Street, North Shore Channel	506	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	495	483	403	394	425	432	364	412	329	339	395
36 Touhy Avenue, North Shore Channel	502	636	527	614	545	641	464	500	496	481	446
101 Foster Avenue, North Shore Channel	562	618	559	591	569	698	479	534	480	460	463
37 Wilson Avenue, North Branch Chicago River	651	645	676	614	642	741	513	598	551	548	501
73 Diversey Parkway, North Branch Chicago River	515	576	628	676	687	603	507	557	528	551	495
46 Grand Avenue, North Branch Chicago River	645	583	584	575	690	658	538	582	570	597	485
74 Lake Shore Drive, Chicago River	509	459	309	240	267	359	249	269	295	309	310
100 Wells Street, Chicago River	455	501	407	324	428	404	328	364	376	403	360
39 Madison Street, South Branch Chicago River	584	685	522	483	547	530	441	474	450	488	450
108 Loomis Street, South Branch Chicago River	438	566	580	492	531	573	481	463	448	482	463
99 Archer Avenue, South Fork South Branch Chicago River	514	563	553	479	576	549	413	461	458	473	462
40 Damen Avenue, Chicago Sanitary & Ship Canal	631	548	560	485	541	599	463	464	472	471	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	463
75 Cicero Avenue, Chicago Sanitary & Ship Canal	536	554	533	485	587	630	462	482	496	488	483
41 Harlem Avenue, Chicago Sanitary & Ship Canal	571	615	614	570	608	749	517	520	541	523	495
42 Route 83, Chicago Sanitary & Ship Canal	668	648	629	557	615	594	536	571	588	558	546
48 Stephen Street, Chicago Sanitary & Ship Canal	618	651	656	531	620	583	565	576	591	586	566
92 Lockport Forebay, Chicago Sanitary & Ship Canal	589	650	658	588	706	634	568	604	602	595	561
Calumet River System											
49 Ewing Avenue, Calumet River	252	270	224	229	221	236	237	217	225	232	261
50 Burnham Avenue, Wolf Lake	376	342	323	297	295	289	235	273	269	239	243
55 130th Street, Calumet River	468	400	357	387	397	388	345	293	332	325	329
86 Burnham Avenue, Grand Calumet River	595	516	556	768	770	728	844	615	768	894	858
56 Indiana Avenue, Little Calumet River	530	453	407	421	454	457	404	345	388	375	447
76 Halsted Street, Little Calumet River	611	611	579	566	695	637	577	548	564	536	532
52 Wentworth Avenue, Little Calumet River	780	505	572	560	731	634	656	574	712	800	808
54 Joe Orr Road, Thorn Creek	1577	1055	1356	1247	1592	1409	1480	1178	1512	937	1594
97 170th Street, Thorn Creek	1127	899	1020	943	1163	974	1066	1196	1124	1277	1261
57 Ashland Avenue, Little Calumet River	923	723	774	708	833	795	851	879	854	918	890
58 Ashland Avenue, Calumet-Sag Channel	747	645	657	557	712	588	621	617	608	585	683
59 Cicero Avenue, Calumet-Sag Channel	673	679	598	555	672	602	658	611	646	609	597
43 Route 83, Calumet-Sag Channel	610	623	665	559	651	612	622	610	610	589	595
Des Plaines River System											
90 Route 19, Poplar Creek	777	726	799	652	807	770	779	750	740	631	692
110 Springinguth Road, West Branch DuPage River	848	854	752	763	932	879	1155	1047	915	ND	ND
89 Walnut Lane, West Branch DuPage River	633	674	633	594	627	631	645	607	635	590	575
64 Lake Street, West Branch DuPage River	ND	ND	912	638	723	643	649	663	654	592	627
111 Arlington Drive, West Branch DuPage River	630	694	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	923	838	726	701	980	941	773	1034	903	656	708
80 Arlington Heights Road, Salt Creek	838	777	820	708	957	779	778	723	663	659	658
18 Devon Avenue, Salt Creek	741	790	880	657	970	766	792	851	721	694	632
24 Wolf Road, Salt Creek	813	799	853	728	895	783	698	794	723	696	750
109 Brookfield Avenue, Salt Creek	715	789	827	690	857	761	722	784	772	650	547
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1366
77 Elmhurst Road, Higgins Creek	797	712	1162	703	1161	623	1118	1081	1040	873	922
78 Wille Road, Higgins Creek	687	797	758	781	824	780	706	713	688	666	757
12 Lake-Cook Road, Buffalo Creek	844	764	891	690	923	775	790	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	670	624	670	549	723	642	709	718	664	677	678
17 Oakton Street, Des Plaines River	685	665	721	549	737	634	751	761	651	620	704
19 Belmont Avenue, Des Plaines River	654	672	726	594	812	662	749	760	707	708	730
20 Roosevelt Road, Des Plaines River	670	687	725	584	807	677	744	752	691	605	743
22 Ogden Avenue, Des Plaines River	671	707	750	590	783	690	723	747	691	660	790
23 Willow Springs Road, Des Plaines River	691	712	739	595	801	719	716	751	675	637	708
29 Stephen Street, Des Plaines River	735	696	727	593	822	705	729	743	648	625	726
91 Material Service Road, Des Plaines River	694	688	739	610	801	694	743	770	679	662	758

ND = No Data.

TABLE AII-63: PHENOLS MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means ($\mu\text{g/L}$)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	5.0	5.0	0.5	0.5	0.0	1.0	0.8	6.8	8.9	9.0	5.5
103 Golf Road, West Fork North Branch Chicago River	5.0	5.0	0.6	0.5	0.0	1.7	1.1	9.9	8.7	5.6	7.6
31 Lake-Cook Road, Middle Fork North Branch	5.0	5.0	0.0	0.0	0.0	1.5	0.3	11.4	11.5	9.4	11.6
104 Glenview Road, North Branch Chicago River	5.0	5.4	0.0	0.0	0.0	0.0	0.3	6.3	7.6	4.3	5.2
32 Lake-Cook Road, Skokie River	5.0	5.1	0.6	0.0	0.0	0.3	0.3	8.0	11.6	7.9	9.1
105 Frontage Road, Skokie River	5.0	5.0	0.6	0.4	0.0	1.1	1.2	5.6	5.7	3.2	5.4
34 Dempster Street, North Branch Chicago River	5.0	5.0	0.0	0.0	0.0	0.9	0.3	8.4	6.8	5.5	7.3
96 Albany Avenue, North Branch Chicago River	5.0	5.0	0.0	0.0	0.0	0.0	0.3	8.3	8.9	6.4	6.6
35 Central Street, North Shore Channel	5.0	5.0	0.0	0.0	0.0	0.3	0.3	4.3	6.6	2.8	4.5
112 Dempster Street, North Shore Channel	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	5.0	5.0	0.0	0.0	0.0	1.5	1.0	7.1	7.8	6.5	6.0
36 Touhy Avenue, North Shore Channel	5.0	5.0	0.0	0.0	0.0	1.0	0.5	9.1	9.4	7.3	9.0
101 Foster Avenue, North Shore Channel	5.0	5.0	0.0	0.0	0.0	0.5	1.0	9.8	9.8	6.2	9.0
37 Wilson Avenue, North Branch Chicago River	5.0	5.0	0.0	0.0	0.0	1.2	1.0	8.5	8.9	6.5	8.3
73 Diversey Parkway, North Branch Chicago River	5.0	5.0	0.0	0.0	0.0	1.1	1.0	10.8	8.4	6.8	8.6
46 Grand Avenue, North Branch Chicago River	5.0	5.0	0.0	0.0	0.0	0.8	1.3	9.8	10.3	5.3	8.5
74 Lake Shore Drive, Chicago River	5.0	5.1	0.0	0.0	0.0	0.4	0.0	4.3	4.4	3.0	2.7
100 Wells Street, Chicago River	5.0	5.0	0.0	0.0	0.0	0.6	0.3	4.8	7.6	3.8	3.8
39 Madison Street, South Branch Chicago River	5.0	5.0	0.0	0.0	0.0	0.5	0.0	7.6	9.1	7.6	6.7
108 Loomis Street, South Branch Chicago River	5.0	5.0	0.0	0.0	0.0	1.0	0.5	7.7	8.6	5.5	7.4
99 Archer Avenue, South Fork South Branch Chicago River	5.7	5.6	0.7	0.5	0.0	0.3	0.7	8.7	9.5	5.8	9.5
40 Damen Avenue, Chicago Sanitary & Ship Canal	5.0	5.0	0.5	0.0	0.0	0.6	0.7	8.3	8.3	5.6	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.5
75 Cicero Avenue, Chicago Sanitary & Ship Canal	5.0	5.1	0.0	0.0	0.0	1.5	0.9	6.8	7.9	5.0	7.7
41 Harlem Avenue, Chicago Sanitary & Ship Canal	5.0	5.0	0.7	0.0	0.0	0.8	0.5	6.6	8.5	5.6	6.8
42 Route 83, Chicago Sanitary & Ship Canal	5.0	5.0	0.5	0.0	0.0	0.5	0.3	9.5	9.7	6.2	8.7
48 Stephen Street, Chicago Sanitary & Ship Canal	5.0	5.3	0.5	0.0	0.0	0.0	0.0	9.2	9.0	6.6	8.3
92 Lockport Forebay, Chicago Sanitary & Ship Canal	4.9	5.0	0.2	0.0	0.0	1.2	0.8	8.8	8.6	5.7	7.5
Calumet River System											
49 Ewing Avenue, Calumet River	5.0	5.0	0.0	0.0	0.0	0.4	0.9	2.0	2.7	1.6	1.7
50 Burnham Avenue, Wolf Lake	5.0	5.0	0.0	0.0	0.0	0.0	0.0	5.8	7.4	3.2	3.8
55 130th Street, Calumet River	5.0	5.0	0.0	0.0	0.0	0.0	0.4	4.9	3.6	1.1	1.8
86 Burnham Avenue, Grand Calumet River	8.7	5.5	0.7	1.4	1.1	2.3	1.9	16.1	11.9	7.6	6.1
56 Indiana Avenue, Little Calumet River	5.0	5.0	0.0	0.0	0.0	1.0	0.3	5.0	5.6	2.5	4.1
76 Halsted Street, Little Calumet River	5.0	5.0	0.0	0.0	0.0	1.6	0.9	9.9	8.9	7.2	9.4
52 Wentworth Avenue, Little Calumet River	5.0	5.0	0.0	0.0	0.0	1.3	0.8	14.4	22.4	12.6	16.5
54 Joe Orr Road, Thorn Creek	5.0	5.0	0.0	0.0	0.0	1.2	0.0	13.3	9.3	6.0	9.0
97 170th Street, Thorn Creek	5.0	5.0	0.0	0.0	0.0	1.0	0.0	9.0	9.7	6.2	8.0
57 Ashland Avenue, Little Calumet River	5.0	5.0	0.6	0.0	0.0	0.4	0.3	10.2	10.9	7.5	8.4
58 Ashland Avenue, Calumet-Sag Channel	5.0	5.0	0.5	0.0	0.0	1.1	0.3	9.1	9.3	7.8	8.8
59 Cicero Avenue, Calumet-Sag Channel	5.0	5.0	5.9	0.0	0.0	0.3	0.5	10.5	10.3	7.9	9.3
43 Route 83, Calumet-Sag Channel	5.0	5.0	0.0	0.0	0.0	0.0	0.4	10.0	9.7	5.5	10.2
Des Plaines River System											
90 Route 19, Poplar Creek	5.0	5.0	0.6	0.0	0.0	1.0	0.0	10.4	8.6	6.5	5.3
110 Springinguth Road, West Branch DuPage River	5.0	5.0	0.0	0.0	0.0	1.2	1.3	15.7	18.0	ND	ND
89 Walnut Lane, West Branch DuPage River	5.0	5.0	0.0	0.0	0.0	1.0	0.0	9.5	13.3	8.8	7.8
64 Lake Street, West Branch DuPage River	ND	ND	0.0	0.0	0.0	0.6	0.3	8.2	9.1	7.9	6.3
111 Arlington Drive, West Branch DuPage River	5.0	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	5.0	5.0	0.0	0.0	0.0	1.5	0.4	10.6	8.4	7.9	6.1
80 Arlington Heights Road, Salt Creek	5.0	5.0	0.0	0.0	0.0	0.6	0.5	6.0	9.3	5.0	6.6
18 Devon Avenue, Salt Creek	5.0	5.0	0.0	0.0	0.0	1.2	0.0	5.5	10.4	6.3	5.1
24 Wolf Road, Salt Creek	5.0	5.0	0.6	0.4	0.4	0.6	1.2	5.8	6.7	6.0	5.7
109 Brookfield Avenue, Salt Creek	5.0	5.0	0.0	0.0	0.0	0.5	0.9	8.6	7.6	5.4	5.7
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.7
77 Elmhurst Road, Higgins Creek	5.0	5.0	0.0	0.0	0.0	0.0	1.9	11.3	13.0	12.2	5.8
78 Wille Road, Higgins Creek	5.0	5.0	0.6	0.0	0.4	1.6	1.0	8.1	15.5	8.8	11.3
12 Lake-Cook Road, Buffalo Creek	5.0	5.0	0.0	0.0	0.0	0.3	0.9	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	5.1	5.0	0.5	0.0	0.5	0.7	0.0	6.2	7.6	4.4	4.6
17 Oakton Street, Des Plaines River	5.0	5.0	0.0	0.0	0.0	1.1	0.3	6.8	7.9	5.0	6.4
19 Belmont Avenue, Des Plaines River	5.0	5.0	0.0	0.0	0.0	0.6	1.3	6.5	9.5	5.8	5.3
20 Roosevelt Road, Des Plaines River	5.0	5.0	0.0	0.0	0.5	0.5	0.6	8.4	9.7	6.0	5.3
22 Ogden Avenue, Des Plaines River	5.0	5.0	0.0	0.0	0.0	0.6	0.7	7.6	8.8	7.6	5.0
23 Willow Springs Road, Des Plaines River	5.0	5.0	0.0	0.0	0.6	0.7	2.1	7.6	8.7	4.5	5.6
29 Stephen Street, Des Plaines River	5.0	5.0	0.4	0.0	0.4	0.3	0.9	6.1	8.4	5.3	5.2
91 Material Service Road, Des Plaines River	5.0	5.0	0.0	0.0	0.0	0.3	1.3	10.5	7.5	5.5	5.1

ND = No Data.

TABLE AII-64: TOTAL NONYLPHENOLS MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means ($\mu\text{g/L}$)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
103 Golf Road, West Fork North Branch Chicago River	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
104 Glenview Road, North Branch Chicago River	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
105 Frontage Road, Skokie River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
34 Dempster Street, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
96 Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	ND	0.00	0.00	0.00	0.00	ND	ND	ND	ND	ND	ND
36 Touhy Avenue, North Shore Channel	ND	0.00	0.00	0.00	0.00	ND	ND	ND	ND	ND	ND
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
73 Diversey Parkway, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
46 Grand Avenue, North Branch Chicago River	ND	0.00	0.00	0.00	0.00	ND	ND	ND	ND	ND	ND
74 Lake Shore Drive, Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
100 Wells Street, Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
39 Madison Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
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	ND	0.00	0.00	0.00	0.65	ND	ND	ND	ND	ND	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	ND	0.00	0.00	0.00	0.67	ND	ND	ND	ND	ND	ND
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	0.00	0.00	0.00	0.35	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	0.00	0.00	0.00	0.22	ND	ND	ND	ND	ND	ND
Calumet River System											
49 Ewing Avenue, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
50 Burnham Avenue, Wolf Lake	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
55 130th Street, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
56 Indiana Avenue, Little Calumet River	ND	0.00	0.00	0.00	0.60	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Calumet River	ND	0.00	0.00	0.00	0.00	ND	ND	ND	ND	ND	ND
52 Wentworth Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
97 170th Street, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
57 Ashland Avenue, Little Calumet River	ND	ND	ND	0.00	ND	ND	ND	ND	ND	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	ND	0.00	0.00	0.00	0.00	ND	ND	ND	ND	ND	ND
43 Route 83, Calumet-Sag Channel	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
110 Springinsguth Road, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
89 Walnut Lane, West Branch DuPage River	ND	0.00	0.00	0.00	0.00	ND	ND	ND	ND	ND	ND
64 Lake Street, West Branch DuPage River	ND	ND	0.00	0.00	0.00	ND	ND	ND	ND	ND	ND
111 Arlington Drive, West Branch DuPage River	ND	0.00	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	ND	0.00	0.00	0.00	0.00	ND	ND	ND	ND	ND	ND
80 Arlington Heights Road, Salt Creek	ND	0.00	0.00	0.00	0.00	ND	ND	ND	ND	ND	ND
18 Devon Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
24 Wolf Road, Salt Creek	ND	0.00	0.00	0.00	0.00	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	ND	0.00	0.00	0.00	0.00	ND	ND	ND	ND	ND	ND
78 Wille Road, Higgins Creek	ND	0.00	0.00	0.00	0.25	ND	ND	ND	ND	ND	ND
12 Lake-Cook Road, Buffalo Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
17 Oakton Street, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
19 Belmont Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
20 Roosevelt Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
22 Ogden Avenue, Des Plaines River	ND	0.00	0.00	0.00	0.00	ND	ND	ND	ND	ND	ND
23 Willow Springs Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
29 Stephen Street, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
91 Material Service Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No Data.

TABLE AII-65: BISPHENOL *a* MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means ($\mu\text{g/L}$)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
103 Golf Road, West Fork North Branch Chicago River	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
104 Glenview Road, North Branch Chicago River	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
105 Frontage Road, Skokie River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
34 Dempster Street, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
96 Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	ND	0.00	ND	ND	ND	ND	ND	ND	ND	ND	ND
36 Touhy Avenue, North Shore Channel	ND	0.00	ND	ND	ND	ND	ND	ND	ND	ND	ND
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
73 Diversey Parkway, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
46 Grand Avenue, North Branch Chicago River	ND	0.00	ND	ND	ND	ND	ND	ND	ND	ND	ND
74 Lake Shore Drive, Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
100 Wells Street, Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
39 Madison Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
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	ND	0.00	ND	ND	ND	ND	ND	ND	ND	ND	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	ND	0.00	ND	ND	ND	ND	ND	ND	ND	ND	ND
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	0.17	ND	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	0.00	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calumet River System											
49 Ewing Avenue, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
50 Burnham Avenue, Wolf Lake	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
55 130th Street, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
56 Indiana Avenue, Little Calumet River	ND	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Calumet River	ND	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND
52 Wentworth Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
97 170th Street, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
57 Ashland Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
58 Ashland Avenue, Calumet-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
59 Cicero Avenue, Calumet-Sag Channel	ND	0.00	ND	ND	ND	ND	ND	ND	ND	ND	ND
43 Route 83, Calumet-Sag Channel	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
110 Springinsguth Road, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
89 Walnut Lane, West Branch DuPage River	ND	0.00	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
111 Arlington Drive, West Branch DuPage River	ND	0.00	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	ND	0.00	ND	ND	ND	ND	ND	ND	ND	ND	ND
80 Arlington Heights Road, Salt Creek	ND	0.00	ND	ND	ND	ND	ND	ND	ND	ND	ND
18 Devon Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
24 Wolf Road, Salt Creek	ND	0.00	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	ND	0.00	ND	ND	ND	ND	ND	ND	ND	ND	ND
78 Wille Road, Higgins Creek	ND	0.00	ND	ND	ND	ND	ND	ND	ND	ND	ND
12 Lake-Cook Road, Buffalo Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
17 Oakton Street, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
19 Belmont Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
20 Roosevelt Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
22 Ogden Avenue, Des Plaines River	ND	0.00	ND	ND	ND	ND	ND	ND	ND	ND	ND
23 Willow Springs Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
29 Stephen Street, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
91 Material Service Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No Data.

TABLE AII-66: SULFATE MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	55.4	56.8	49.2	47.4	52.9	46.6	53.3	63.0	76.5	64.3	61.8
103 Golf Road, West Fork North Branch Chicago River	64.4	62.0	58.0	56.2	63.1	68.9	77.9	75.4	75.3	76.4	64.5
31 Lake-Cook Road, Middle Fork North Branch	71.0	48.6	46.7	45.1	52.7	57.1	68.0	86.3	76.3	76.4	72.3
104 Glenview Road, North Branch Chicago River	63.0	52.8	54.4	53.0	62.7	60.3	66.8	65.1	69.8	67.8	64.1
32 Lake-Cook Road, Skokie River	60.9	52.6	50.9	51.0	60.0	53.3	61.6	65.4	76.6	80.4	62.3
105 Frontage Road, Skokie River	63.3	54.3	54.2	55.0	62.0	52.7	67.8	63.4	67.4	64.9	64.8
34 Dempster Street, North Branch Chicago River	65.1	56.0	54.6	51.9	60.6	60.3	71.5	68.6	72.4	71.6	61.9
96 Albany Avenue, North Branch Chicago River	56.0	56.4	53.0	54.3	63.6	59.7	73.1	68.3	72.3	74.0	69.0
35 Central Street, North Shore Channel	49.8	30.0	25.3	27.2	34.6	30.4	28.7	26.8	33.8	36.6	34.9
112 Dempster Street, North Shore Channel	46.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	46.0	40.3	36.7	38.0	44.1	39.9	43.8	40.9	41.7	43.0	43.3
36 Touhy Avenue, North Shore Channel	44.4	45.5	41.9	47.9	52.1	49.1	50.8	46.6	51.7	53.4	53.3
101 Foster Avenue, North Shore Channel	48.4	45.4	43.2	46.8	52.9	50.6	51.3	59.6	56.8	53.2	50.6
37 Wilson Avenue, North Branch Chicago River	49.0	46.5	47.3	46.7	54.8	54.1	58.0	50.8	59.9	57.3	57.1
73 Diversey Parkway, North Branch Chicago River	46.7	46.9	47.3	47.9	56.1	52.3	55.8	50.9	62.2	59.0	55.6
46 Grand Avenue, North Branch Chicago River	53.1	47.5	44.2	45.8	54.9	53.6	57.4	54.1	60.6	58.9	56.3
74 Lake Shore Drive, Chicago River	37.5	33.5	25.8	26.3	30.0	31.7	36.6	29.7	36.8	35.6	32.0
100 Wells Street, Chicago River	40.9	40.7	31.2	32.0	40.9	36.8	39.1	35.4	40.5	44.3	36.6
39 Madison Street, South Branch Chicago River	47.7	48.1	39.8	42.1	47.8	44.9	49.6	47.6	51.8	54.8	49.1
108 Loomis Street, South Branch Chicago River	45.0	44.4	41.4	43.9	52.2	47.2	52.2	49.8	55.2	53.2	49.3
99 Archer Avenue, South Fork South Branch Chicago River	41.4	44.8	44.0	41.8	55.1	46.1	51.1	56.0	52.8	55.1	51.6
40 Damen Avenue, Chicago Sanitary & Ship Canal	48.6	45.1	41.2	43.1	49.2	46.3	52.0	49.5	53.0	53.1	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	49.6
75 Cicero Avenue, Chicago Sanitary & Ship Canal	46.8	45.7	43.0	41.9	53.6	48.5	51.9	50.1	55.4	52.5	54.3
41 Harlem Avenue, Chicago Sanitary & Ship Canal	59.3	62.5	61.0	56.2	69.4	67.3	72.1	70.7	76.4	72.9	69.5
42 Route 83, Chicago Sanitary & Ship Canal	71.1	69.6	65.0	60.9	67.5	72.8	75.1	74.2	80.8	82.5	78.5
48 Stephen Street, Chicago Sanitary & Ship Canal	84.8	75.8	75.5	65.8	78.7	83.8	89.6	85.6	91.7	94.6	88.1
92 Lockport Forebay, Chicago Sanitary & Ship Canal	87.8	80.9	82.5	76.2	86.0	85.7	86.9	88.1	89.8	96.7	88.7
Calumet River System											
49 Ewing Avenue, Calumet River	27.7	25.5	24.5	26.6	30.2	32.1	29.9	27.0	28.3	29.2	28.4
50 Burnham Avenue, Wolf Lake	47.6	46.1	41.4	47.5	47.8	42.6	39.4	41.0	43.5	35.2	36.6
55 130th Street, Calumet River	64.3	53.1	52.7	61.9	63.2	82.7	60.7	55.2	57.2	54.2	54.7
86 Burnham Avenue, Grand Calumet River	70.6	93.0	96.1	145.6	162.3	196.1	262.4	176.9	204.9	260.1	219.9
56 Indiana Avenue, Little Calumet River	60.5	60.3	61.2	64.4	72.4	90.1	74.7	64.1	70.4	74.3	78.9
76 Halsted Street, Little Calumet River	81.4	82.7	75.2	76.4	97.7	87.7	91.0	91.3	91.6	100.7	91.2
52 Wentworth Avenue, Little Calumet River	123.9	77.7	96.3	98.1	134.9	118.4	130.0	116.2	143.9	180.2	146.0
54 Joe Orr Road, Thorn Creek	723.7	450.9	509.8	506.7	716.6	596.3	620.0	494.6	620.8	460.4	724.5
97 170th Street, Thorn Creek	437.7	267.2	318.3	298.3	422.5	352.0	419.3	465.3	403.1	498.3	445.9
57 Ashland Avenue, Little Calumet River	269.0	171.3	182.2	166.0	270.8	223.0	241.5	289.4	235.0	293.1	241.9
58 Ashland Avenue, Calumet-Sag Channel	111.6	104.2	138.1	88.7	107.4	91.4	107.7	118.2	116.5	142.4	146.2
59 Cicero Avenue, Calumet-Sag Channel	120.0	103.0	96.1	99.3	134.4	94.2	123.1	120.4	126.6	136.4	118.2
43 Route 83, Calumet-Sag Channel	99.7	94.4	103.5	93.7	113.0	104.5	117.1	130.0	122.7	128.4	109.3
Des Plaines River System											
90 Route 19, Poplar Creek	48.3	44.3	41.6	42.0	52.7	53.9	71.5	54.6	66.7	46.9	62.8
110 Springinsguth Road, West Branch DuPage River	67.6	74.3	48.0	64.2	77.9	85.1	112.4	80.5	98.7	ND	ND
89 Walnut Lane, West Branch DuPage River	61.1	60.9	57.7	60.0	70.8	65.7	81.8	68.1	77.2	68.1	65.4
64 Lake Street, West Branch DuPage River	ND	ND	59.1	61.0	68.0	65.3	81.9	71.4	78.0	68.1	68.0
111 Arlington Drive, West Branch DuPage River	63.1	60.7	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	59.9	65.2	46.3	62.4	71.1	62.5	81.7	79.4	93.3	72.8	76.0
80 Arlington Heights Road, Salt Creek	75.6	61.9	68.0	62.5	75.1	76.8	85.0	82.9	84.9	77.7	79.3
18 Devon Avenue, Salt Creek	72.0	65.9	72.1	61.6	75.0	75.7	84.5	83.2	84.6	76.4	79.5
24 Wolf Road, Salt Creek	81.1	73.5	75.7	77.3	82.8	84.6	87.0	92.2	96.7	84.1	95.0
109 Brookfield Avenue, Salt Creek	76.8	71.8	72.5	71.7	79.2	79.9	85.2	88.4	97.9	82.4	84.5
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	95.8
77 Elmhurst Road, Higgins Creek	46.9	38.7	39.4	36.3	48.7	37.5	47.1	46.7	66.3	44.8	47.8
78 Wille Road, Higgins Creek	76.7	85.7	77.7	81.7	90.0	91.0	91.7	103.6	100.2	90.4	97.1
12 Lake-Cook Road, Buffalo Creek	84.0	73.4	76.8	69.5	87.6	70.8	111.5	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	64.6	57.7	58.7	49.4	72.3	75.7	97.0	84.7	88.9	91.6	84.9
17 Oakton Street, Des Plaines River	64.3	59.0	59.7	52.0	69.8	69.8	92.5	112.2	89.9	88.4	86.3
19 Belmont Avenue, Des Plaines River	69.3	61.3	61.5	57.5	75.3	70.6	90.7	88.0	91.2	85.4	85.6
20 Roosevelt Road, Des Plaines River	65.3	60.9	61.3	54.4	75.5	70.5	89.7	100.1	90.6	85.7	87.4
22 Ogden Avenue, Des Plaines River	71.7	63.0	63.6	56.9	74.7	68.8	90.9	85.1	87.9	89.1	87.5
23 Willow Springs Road, Des Plaines River	74.6	64.2	65.2	58.0	77.7	73.1	88.2	89.3	92.8	92.2	90.0
29 Stephen Street, Des Plaines River	68.7	63.6	65.0	57.3	76.7	76.9	91.1	90.5	91.4	95.6	90.6
91 Material Service Road, Des Plaines River	73.3	62.7	66.8	61.0	75.8	74.9	93.7	105.3	94.3	97.5	95.8

ND = No Data.

TABLE AII-67: FATS, OILS, AND GREASES MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)											
	12	11	10	09	08	07	06	05	04	03	02	
Chicago River System												
106 Dundee Road, West Fork North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
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
104 Glenview Road, North Branch Chicago River	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	ND
105 Frontage Road, Skokie River	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	ND
96 Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	0.00	ND	ND	ND	ND
112 Dempster Street, North Shore Channel	5.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	5.00	5.00	0.00	0.00	0.00	0.42	0.42	0.73	2.48	ND	ND	ND
36 Touhy Avenue, North Shore Channel	5.00	5.00	0.00	0.00	0.00	0.30	0.27	2.14	2.37	4.47	5.54	5.54
101 Foster Avenue, North Shore Channel	5.00	5.00	0.00	0.00	0.00	0.33	0.67	2.02	1.94	2.73	4.84	4.84
37 Wilson Avenue, North Branch Chicago River	5.00	5.00	0.00	0.00	0.00	0.67	0.42	2.45	1.85	3.38	5.45	5.45
73 Diversey Parkway, North Branch Chicago River	5.00	5.00	0.00	0.00	0.00	0.00	0.83	0.86	2.33	3.38	3.85	3.85
46 Grand Avenue, North Branch Chicago River	5.00	5.00	0.00	0.00	0.00	0.27	0.42	1.85	2.97	2.59	4.72	4.72
74 Lake Shore Drive, Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
100 Wells Street, Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
39 Madison Street, South Branch Chicago River	5.00	5.00	0.00	0.00	0.00	0.27	0.00	0.68	1.93	3.56	5.70	5.70
108 Loomis Street, South Branch Chicago River	5.00	5.00	0.00	0.00	0.00	0.00	0.00	0.80	1.64	2.87	4.68	4.68
99 Archer Avenue, South Fork South Branch Chicago River	5.11	5.19	0.00	0.00	0.00	0.00	0.00	0.55	2.77	2.96	4.41	4.41
40 Damen Avenue, Chicago Sanitary & Ship Canal	11.71	5.00	0.00	0.00	0.00	0.67	0.00	0.73	3.03	3.16	ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.37	4.37
75 Cicero Avenue, Chicago Sanitary & Ship Canal	5.00	5.00	0.00	0.00	0.00	0.25	0.00	1.24	1.59	2.89	5.57	5.57
41 Harlem Avenue, Chicago Sanitary & Ship Canal	5.00	5.00	0.00	0.00	1.17	0.00	0.00	0.65	2.03	2.73	5.16	5.16
42 Route 83, Chicago Sanitary & Ship Canal	5.00	5.00	0.00	0.00	0.00	0.55	0.00	0.93	2.64	2.06	5.31	5.31
48 Stephen Street, Chicago Sanitary & Ship Canal	5.00	6.00	0.00	0.00	0.00	0.00	0.00	1.18	4.29	2.74	4.10	4.10
92 Lockport Forebay, Chicago Sanitary & Ship Canal	4.90	5.00	0.00	0.22	0.10	0.14	0.37	1.52	1.95	3.85	4.76	4.76
Calumet River System												
49 Ewing Avenue, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
50 Burnham Avenue, Wolf Lake	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
55 130th Street, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	5.00	5.00	0.00	0.00	0.50	0.60	1.00	1.77	1.46	6.40	5.76	5.76
56 Indiana Avenue, Little Calumet River	5.00	5.00	0.00	0.00	0.56	0.00	1.18	0.00	1.41	3.66	4.87	4.87
76 Halsted Street, Little Calumet River	5.00	5.00	0.00	0.00	0.42	0.00	1.18	0.43	1.28	2.91	4.39	4.39
52 Wentworth Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
97 170th Street, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
57 Ashland Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
58 Ashland Avenue, Calumet-Sag Channel	5.00	5.00	0.00	0.00	0.42	0.00	0.73	0.58	1.98	3.36	5.33	5.33
59 Cicero Avenue, Calumet-Sag Channel	5.00	5.00	0.00	0.00	0.45	0.00	0.55	0.78	1.78	2.58	4.45	4.45
43 Route 83, Calumet-Sag Channel	5.00	5.00	0.00	9.80	0.50	0.00	0.73	0.79	2.29	3.41	4.38	4.38
Des Plaines River System												
90 Route 19, Poplar Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
110 Springinguth Road, West Branch DuPage River	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	ND
64 Lake Street, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
111 Arlington Drive, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
80 Arlington Heights Road, Salt Creek	ND	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
24 Wolf Road, Salt Creek	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	ND
21 First Avenue, Salt Creek	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	ND
78 Wille Road, Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12 Lake-Cook Road, Buffalo Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	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	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	ND
23 Willow Springs Road, Des Plaines River	ND	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
91 Material Service Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No Data.

TABLE AII-68: TOTAL PHOSPHORUS MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	1.160	1.232	1.366	1.260	1.198	1.038	0.964	1.508	2.120	1.620	0.963
103 Golf Road, West Fork North Branch Chicago River	0.586	0.515	0.523	0.397	0.422	0.669	0.572	0.834	0.550	0.614	0.752
31 Lake-Cook Road, Middle Fork North Branch	0.125	0.139	0.128	0.016	0.136	0.183	0.158	0.210	0.145	0.112	0.155
104 Glenview Road, North Branch Chicago River	0.757	0.712	0.866	0.659	0.643	1.028	0.936	1.413	1.014	1.033	1.256
32 Lake-Cook Road, Skokie River	0.168	0.248	0.126	0.019	0.058	0.175	0.599	0.863	0.237	0.331	0.187
105 Frontage Road, Skokie River	0.943	0.936	1.053	0.883	0.815	1.246	1.174	1.538	1.223	1.708	1.477
34 Dempster Street, North Branch Chicago River	0.614	0.616	0.494	0.550	0.602	0.879	0.840	1.199	0.925	1.269	1.153
96 Albany Avenue, North Branch Chicago River	0.608	0.494	0.695	0.538	0.507	0.808	0.760	1.155	0.795	1.002	1.037
35 Central Street, North Shore Channel	0.140	0.135	0.078	0.077	0.000	0.062	0.056	0.016	0.088	0.213	0.101
112 Dempster Street, North Shore Channel	0.760	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.857	0.618	0.530	0.442	0.432	0.538	0.632	0.444	0.489	0.548	0.655
36 Touhy Avenue, North Shore Channel	1.308	1.251	1.154	1.054	1.040	1.388	1.033	1.241	1.170	1.377	1.057
101 Foster Avenue, North Shore Channel	1.286	1.118	1.207	1.113	1.082	1.450	1.384	1.248	1.328	1.287	1.148
37 Wilson Avenue, North Branch Chicago River	1.167	0.974	1.024	1.031	0.961	1.287	1.191	1.130	1.227	1.143	1.043
73 Diversey Parkway, North Branch Chicago River	1.192	0.954	1.048	0.931	0.897	1.112	0.986	0.870	1.065	1.055	0.905
46 Grand Avenue, North Branch Chicago River	1.029	0.847	0.950	0.836	0.788	1.115	1.004	1.121	0.923	0.982	0.953
74 Lake Shore Drive, Chicago River	0.333	0.335	0.153	0.003	0.053	0.152	0.125	0.158	0.228	0.226	0.191
100 Wells Street, Chicago River	0.691	0.568	0.336	0.150	0.320	0.308	0.309	0.355	0.443	0.639	0.429
39 Madison Street, South Branch Chicago River	0.867	0.825	0.649	0.669	0.658	0.709	0.661	0.830	0.908	1.089	0.756
108 Loomis Street, South Branch Chicago River	0.850	0.728	0.657	0.574	0.591	0.678	0.723	0.722	0.860	0.775	0.732
99 Archer Avenue, South Fork South Branch Chicago River	0.658	0.671	0.682	0.485	0.580	0.609	0.590	0.767	0.804	0.857	0.719
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.814	0.697	0.670	0.611	0.630	0.686	0.702	0.755	0.843	0.884	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.738
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.942	0.598	0.681	0.493	0.637	0.763	0.661	0.746	0.803	0.867	0.723
41 Harlem Avenue, Chicago Sanitary & Ship Canal	1.083	0.479	0.791	0.673	0.829	1.008	0.825	0.988	0.953	1.100	0.984
42 Route 83, Chicago Sanitary & Ship Canal	0.771	0.546	0.837	0.609	0.862	0.830	0.602	0.725	0.978	0.836	0.918
48 Stephen Street, Chicago Sanitary & Ship Canal	1.350	0.833	1.008	0.823	0.928	0.964	0.901	1.168	1.103	1.083	1.180
92 Lockport Forebay, Chicago Sanitary & Ship Canal	1.263	0.925	1.121	0.864	0.952	0.852	0.935	1.166	1.014	1.138	1.197
Calumet River System											
49 Ewing Avenue, Calumet River	0.183	0.070	0.018	0.000	0.000	0.011	0.044	0.025	0.060	0.032	0.060
50 Burnham Avenue, Wolf Lake	0.100	0.083	0.043	0.004	0.000	0.037	0.045	0.023	0.053	0.029	0.035
55 130th Street, Calumet River	0.100	0.072	0.000	0.004	0.000	0.031	0.038	0.025	0.049	0.035	0.039
86 Burnham Avenue, Grand Calumet River	1.309	0.750	0.919	0.290	0.835	1.209	0.699	0.878	0.584	0.607	0.613
56 Indiana Avenue, Little Calumet River	0.770	0.364	0.369	0.010	0.340	0.189	0.359	0.372	0.538	0.504	0.495
76 Halsted Street, Little Calumet River	2.845	1.660	2.010	1.493	2.035	1.037	1.835	2.083	1.638	2.126	2.038
52 Wentworth Avenue, Little Calumet River	0.700	0.391	0.568	0.493	0.587	0.585	0.645	0.609	0.543	0.561	0.595
54 Joe Orr Road, Thorn Creek	1.429	1.186	1.267	1.743	2.664	2.329	2.038	2.113	2.054	1.650	5.909
97 170th Street, Thorn Creek	1.083	0.757	0.920	1.144	1.383	1.479	1.170	1.574	1.502	2.101	2.607
57 Ashland Avenue, Little Calumet River	1.091	0.494	0.758	0.519	0.993	0.834	0.764	1.061	0.812	1.223	1.481
58 Ashland Avenue, Calumet-Sag Channel	2.529	1.395	1.578	1.412	1.957	0.963	1.755	2.077	1.562	1.898	2.070
59 Cicero Avenue, Calumet-Sag Channel	2.870	1.582	1.917	1.258	1.803	0.989	1.802	2.214	1.646	2.048	2.129
43 Route 83, Calumet-Sag Channel	1.764	1.426	1.824	1.329	1.378	1.037	1.318	2.266	1.483	1.686	1.814
Des Plaines River System											
90 Route 19, Poplar Creek	0.114	0.093	0.097	0.012	0.000	0.100	0.116	0.087	0.075	0.108	0.066
110 Springinguth Road, West Branch DuPage River	0.282	0.392	0.190	0.093	0.111	0.179	0.184	0.325	0.205	ND	ND
89 Walnut Lane, West Branch DuPage River	2.157	1.797	2.310	2.340	2.426	2.460	2.270	2.670	2.745	2.440	2.603
64 Lake Street, West Branch DuPage River	ND	ND	1.148	1.747	2.119	2.062	1.911	2.432	2.400	2.338	2.245
111 Arlington Drive, West Branch DuPage River	2.364	1.666	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.127	0.399	0.120	0.253	0.000	0.132	0.149	0.108	0.097	0.106	0.109
80 Arlington Heights Road, Salt Creek	1.401	1.010	1.533	1.588	0.142	0.513	1.791	2.022	1.850	1.980	1.992
18 Devon Avenue, Salt Creek	2.065	1.286	1.643	1.563	0.133	0.548	1.882	1.981	1.899	2.007	1.955
24 Wolf Road, Salt Creek	1.100	1.015	1.172	1.122	0.761	0.839	1.471	1.896	1.595	1.584	1.773
109 Brookfield Avenue, Salt Creek	1.358	0.915	1.041	0.944	0.733	0.765	1.355	1.603	1.317	1.328	1.943
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.043
77 Elmhurst Road, Higgins Creek	0.163	0.082	0.000	0.035	0.000	0.112	0.123	0.098	0.108	0.290	0.117
78 Wille Road, Higgins Creek	1.400	0.975	1.018	0.936	1.176	0.813	0.663	1.577	0.662	0.478	0.864
12 Lake-Cook Road, Buffalo Creek	0.150	0.113	0.086	0.012	0.000	0.167	0.122	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.700	0.603	0.773	0.566	0.915	0.934	1.075	1.498	0.985	1.333	1.268
17 Oakton Street, Des Plaines River	0.657	0.553	0.802	0.502	0.765	0.772	0.873	1.256	0.889	0.958	1.033
19 Belmont Avenue, Des Plaines River	1.058	0.575	0.801	0.532	0.745	0.738	0.816	1.107	0.688	0.852	0.883
20 Roosevelt Road, Des Plaines River	0.586	0.580	0.734	0.475	0.682	0.700	0.700	1.069	0.631	0.891	0.875
22 Ogden Avenue, Des Plaines River	1.133	0.621	0.787	0.631	0.656	0.697	0.923	1.224	0.811	1.272	1.095
23 Willow Springs Road, Des Plaines River	1.025	0.587	0.733	0.535	0.641	0.647	0.882	1.173	0.796	0.919	1.060
29 Stephen Street, Des Plaines River	0.643	0.575	0.708	0.535	0.699	0.715	0.930	1.201	0.834	1.077	0.998
91 Material Service Road, Des Plaines River	0.842	0.554	0.678	0.552	0.680	0.733	0.915	1.263	0.778	1.104	0.969

ND = No Data.

TABLE AII-69: TOTAL CYANIDE MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.007	0.006	0.003	0.002	0.000	0.005	0.001	0.005	0.005	0.002	0.003
103 Golf Road, West Fork North Branch Chicago River	0.007	0.006	0.001	0.001	0.000	0.002	0.001	0.003	0.002	0.002	0.003
31 Lake-Cook Road, Middle Fork North Branch	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.001	0.002
104 Glenview Road, North Branch Chicago River	0.007	0.006	0.001	0.000	0.000	0.001	0.000	0.002	0.003	0.002	0.003
32 Lake-Cook Road, Skokie River	0.007	0.005	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.002	0.002
105 Frontage Road, Skokie River	0.005	0.005	0.001	0.000	0.000	0.001	0.000	0.002	0.002	0.002	0.002
34 Dempster Street, North Branch Chicago River	0.006	0.005	0.001	0.000	0.000	0.001	0.000	0.002	0.003	0.003	0.008
96 Albany Avenue, North Branch Chicago River	0.006	0.005	0.001	0.000	0.000	0.001	0.001	0.002	0.003	0.002	0.002
35 Central Street, North Shore Channel	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000
112 Dempster Street, North Shore Channel	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.006	0.005	0.000	0.000	0.000	0.001	0.001	0.002	0.002	0.002	0.004
36 Touhy Avenue, North Shore Channel	0.005	0.005	0.001	0.001	0.000	0.002	0.001	0.002	0.004	0.003	0.004
101 Foster Avenue, North Shore Channel	0.005	0.005	0.001	0.001	0.000	0.003	0.001	0.003	0.003	0.003	0.004
37 Wilson Avenue, North Branch Chicago River	0.005	0.005	0.001	0.001	0.000	0.002	0.001	0.003	0.003	0.003	0.004
73 Diversey Parkway, North Branch Chicago River	0.005	0.005	0.001	0.001	0.000	0.002	0.001	0.003	0.003	0.003	0.003
46 Grand Avenue, North Branch Chicago River	0.005	0.005	0.001	0.000	0.000	0.002	0.001	0.003	0.004	0.003	0.004
74 Lake Shore Drive, Chicago River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.001
100 Wells Street, Chicago River	0.005	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002
39 Madison Street, South Branch Chicago River	0.005	0.005	0.001	0.000	0.000	0.001	0.000	0.002	0.003	0.004	0.004
108 Loomis Street, South Branch Chicago River	0.005	0.005	0.001	0.000	0.000	0.001	0.001	0.002	0.003	0.003	0.003
99 Archer Avenue, South Fork South Branch Chicago River	0.005	0.005	0.001	0.000	0.000	0.001	0.001	0.002	0.002	0.003	0.003
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.005	0.005	0.001	0.000	0.000	0.001	0.001	0.002	0.003	0.003	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.005	0.005	0.000	0.001	0.000	0.001	0.001	0.002	0.003	0.003	0.003
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.005	0.005	0.001	0.001	0.000	0.004	0.003	0.003	0.003	0.003	0.005
42 Route 83, Chicago Sanitary & Ship Canal	0.005	0.005	0.001	0.000	0.000	0.002	0.002	0.004	0.003	0.004	0.005
48 Stephen Street, Chicago Sanitary & Ship Canal	0.005	0.005	0.002	0.001	0.000	0.002	0.003	0.004	0.004	0.003	0.006
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.006	0.005	0.001	0.000	0.000	0.002	0.003	0.003	0.004	0.003	0.005
Calumet River System											
49 Ewing Avenue, Calumet River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001
50 Burnham Avenue, Wolf Lake	0.005	0.006	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.000	0.001
55 130th Street, Calumet River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001
86 Burnham Avenue, Grand Calumet River	0.006	0.005	0.002	0.000	0.002	0.004	0.003	0.005	0.005	0.005	0.006
56 Indiana Avenue, Little Calumet River	0.005	0.005	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.001	0.002
76 Halsted Street, Little Calumet River	0.005	0.005	0.001	0.000	0.000	0.002	0.002	0.003	0.003	0.003	0.005
52 Wentworth Avenue, Little Calumet River	0.006	0.005	0.001	0.000	0.001	0.006	0.004	0.006	0.016	0.005	0.006
54 Joe Orr Road, Thorn Creek	0.005	0.005	0.002	0.001	0.000	0.002	0.002	0.003	0.004	0.003	0.006
97 170th Street, Thorn Creek	0.005	0.005	0.001	0.000	0.000	0.001	0.000	0.002	0.002	0.002	0.004
57 Ashland Avenue, Little Calumet River	0.005	0.006	0.002	0.000	0.000	0.003	0.002	0.003	0.005	0.004	0.005
58 Ashland Avenue, Calumet-Sag Channel	0.005	0.005	0.002	0.001	0.000	0.002	0.002	0.003	0.004	0.003	0.005
59 Cicero Avenue, Calumet-Sag Channel	0.005	0.005	0.001	0.000	0.000	0.002	0.002	0.003	0.003	0.003	0.005
43 Route 83, Calumet-Sag Channel	0.005	0.005	0.002	0.000	0.000	0.001	0.001	0.002	0.003	0.002	0.004
Des Plaines River System											
90 Route 19, Poplar Creek	0.005	0.005	0.001	0.000	0.000	0.001	0.000	0.001	0.001	0.001	0.002
110 Springinsguth Road, West Branch DuPage River	0.005	0.006	0.000	0.001	0.002	0.002	0.002	0.003	0.003	ND	ND
89 Walnut Lane, West Branch DuPage River	0.005	0.006	0.003	0.001	0.001	0.005	0.004	0.004	0.006	0.005	0.007
64 Lake Street, West Branch DuPage River	ND	ND	0.003	0.000	0.000	0.003	0.002	0.004	0.004	0.004	0.005
111 Arlington Drive, West Branch DuPage River	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.005	0.006	0.001	0.000	0.000	0.002	0.000	0.001	0.002	0.002	0.002
80 Arlington Heights Road, Salt Creek	0.006	0.005	0.003	0.001	0.000	0.002	0.001	0.003	0.004	0.003	0.005
18 Devon Avenue, Salt Creek	0.005	0.006	0.003	0.001	0.000	0.002	0.001	0.003	0.004	0.003	0.005
24 Wolf Road, Salt Creek	0.005	0.005	0.002	0.000	0.000	0.001	0.000	0.002	0.003	0.003	0.004
109 Brookfield Avenue, Salt Creek	0.005	0.005	0.001	0.000	0.000	0.001	0.001	0.002	0.002	0.003	0.003
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.006
77 Elmhurst Road, Higgins Creek	0.005	0.006	0.000	0.000	0.000	0.000	0.003	0.003	0.004	0.003	0.004
78 Wille Road, Higgins Creek	0.005	0.006	0.003	0.000	0.001	0.004	0.002	0.003	0.004	0.004	0.005
12 Lake-Cook Road, Buffalo Creek	0.005	0.005	0.001	0.000	0.000	0.000	0.000	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.005	0.005	0.001	0.000	0.000	0.000	0.000	0.002	0.001	0.002	0.003
17 Oakton Street, Des Plaines River	0.005	0.005	0.000	0.000	0.002	0.001	0.001	0.005	0.002	0.002	0.003
19 Belmont Avenue, Des Plaines River	0.005	0.005	0.002	0.000	0.003	0.002	0.001	0.009	0.002	0.003	0.003
20 Roosevelt Road, Des Plaines River	0.005	0.005	0.001	0.000	0.002	0.002	0.001	0.009	0.002	0.002	0.004
22 Ogden Avenue, Des Plaines River	0.006	0.005	0.001	0.000	0.002	0.002	0.001	0.003	0.002	0.003	0.003
23 Willow Springs Road, Des Plaines River	0.005	0.005	0.000	0.000	0.001	0.002	0.000	0.002	0.002	0.002	0.003
29 Stephen Street, Des Plaines River	0.006	0.005	0.000	0.000	0.000	0.001	0.000	0.002	0.002	0.002	0.004
91 Material Service Road, Des Plaines River	0.006	0.005	0.000	0.000	0.000	0.001	0.000	0.001	0.002	0.002	0.004

ND = No Data.

**TABLE AII-70: WEAK ACID DISSOCIABLE CYANIDE MEAN HISTORY
2002 THROUGH 2012**

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.002	0.001	0.000	0.000	0.000	0.001	0.001	0.002	0.001	0.001	0.001
103 Golf Road, West Fork North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
31 Lake-Cook Road, Middle Fork North Branch	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.000
104 Glenview Road, North Branch Chicago River	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000
32 Lake-Cook Road, Skokie River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001
105 Frontage Road, Skokie River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.000
34 Dempster Street, North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.000
96 Albany Avenue, North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.000
35 Central Street, North Shore Channel	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000
112 Dempster Street, North Shore Channel	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
36 Touhy Avenue, North Shore Channel	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
101 Foster Avenue, North Shore Channel	0.001	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
37 Wilson Avenue, North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
73 Diversey Parkway, North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
46 Grand Avenue, North Branch Chicago River	0.002	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
74 Lake Shore Drive, Chicago River	0.001	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.000	0.000
100 Wells Street, Chicago River	0.001	0.001	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.001	0.001
39 Madison Street, South Branch Chicago River	0.002	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
108 Loomis Street, South Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
99 Archer Avenue, South Fork South Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
42 Route 83, Chicago Sanitary & Ship Canal	0.002	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
48 Stephen Street, Chicago Sanitary & Ship Canal	0.002	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.001	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
Calumet River System											
49 Ewing Avenue, Calumet River	0.001	0.001	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.000
50 Burnham Avenue, Wolf Lake	0.001	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
55 130th Street, Calumet River	0.001	0.001	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.000	0.000
86 Burnham Avenue, Grand Calumet River	0.002	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
56 Indiana Avenue, Little Calumet River	0.001	0.001	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.001	0.000
76 Halsted Street, Little Calumet River	0.002	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
52 Wentworth Avenue, Little Calumet River	0.002	0.001	0.000	0.000	0.000	0.002	0.001	0.002	0.004	0.001	0.001
54 Joe Orr Road, Thorn Creek	0.001	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
97 170th Street, Thorn Creek	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
57 Ashland Avenue, Little Calumet River	0.002	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.002	0.001	0.001
58 Ashland Avenue, Calumet-Sag Channel	0.002	0.001	0.000	0.000	0.000	0.001	0.001	0.002	0.001	0.001	0.001
59 Cicero Avenue, Calumet-Sag Channel	0.002	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
43 Route 83, Calumet-Sag Channel	0.002	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
Des Plaines River System											
90 Route 19, Poplar Creek	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
110 Springinsguth Road, West Branch DuPage River	0.001	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.001	ND	ND
89 Walnut Lane, West Branch DuPage River	0.002	0.002	0.002	0.000	0.001	0.003	0.002	0.002	0.002	0.002	0.003
64 Lake Street, West Branch DuPage River	ND	ND	0.001	0.000	0.000	0.002	0.001	0.001	0.002	0.002	0.001
111 Arlington Drive, West Branch DuPage River	0.001	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.001	0.001	0.001
80 Arlington Heights Road, Salt Creek	0.002	0.002	0.001	0.000	0.000	0.002	0.001	0.002	0.002	0.001	0.002
18 Devon Avenue, Salt Creek	0.002	0.002	0.001	0.000	0.000	0.001	0.001	0.001	0.002	0.001	0.002
24 Wolf Road, Salt Creek	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
109 Brookfield Avenue, Salt Creek	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001
77 Elmhurst Road, Higgins Creek	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001
78 Wille Road, Higgins Creek	0.001	0.001	0.001	0.000	0.001	0.002	0.001	0.001	0.001	0.001	0.001
12 Lake-Cook Road, Buffalo Creek	0.001	0.001	0.000	0.000	0.000	0.001	0.000	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
17 Oakton Street, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
19 Belmont Avenue, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
20 Roosevelt Road, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
22 Ogden Avenue, Des Plaines River	0.001	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
23 Willow Springs Road, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
29 Stephen Street, Des Plaines River	0.001	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
91 Material Service Road, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001

ND = No Data.

TABLE AII-71: FLUORIDE MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.520	0.499	0.505	0.476	0.428	0.345	0.334	0.520	0.553	0.450	0.433
103 Golf Road, West Fork North Branch Chicago River	0.443	0.388	0.374	0.355	0.339	0.401	0.370	0.469	0.360	0.394	0.425
31 Lake-Cook Road, Middle Fork North Branch	0.275	0.229	0.226	0.202	0.216	0.361	0.296	0.375	0.289	0.334	0.343
104 Glenview Road, North Branch Chicago River	0.486	0.410	0.497	0.418	0.425	0.519	0.457	0.584	0.513	0.460	0.617
32 Lake-Cook Road, Skokie River	0.317	0.314	0.268	0.225	0.229	0.314	0.379	0.483	0.291	0.364	0.354
105 Frontage Road, Skokie River	0.571	0.511	0.528	0.466	0.441	0.569	0.538	0.614	0.557	0.686	0.703
34 Dempster Street, North Branch Chicago River	0.486	0.405	0.395	0.383	0.398	0.485	0.438	0.539	0.473	0.581	0.605
96 Albany Avenue, North Branch Chicago River	0.533	0.381	0.417	0.392	0.332	0.478	0.436	0.516	0.439	0.528	0.567
35 Central Street, North Shore Channel	0.200	0.144	0.134	0.037	0.051	0.198	0.181	0.135	0.136	0.233	0.307
112 Dempster Street, North Shore Channel	0.560	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.557	0.420	0.375	0.272	0.269	0.420	0.456	0.346	0.318	0.376	0.512
36 Touhy Avenue, North Shore Channel	0.733	0.673	0.663	0.614	0.609	0.763	0.662	0.675	0.619	0.721	0.749
101 Foster Avenue, North Shore Channel	0.714	0.636	0.684	0.614	0.618	0.753	0.683	0.685	0.652	0.717	0.745
37 Wilson Avenue, North Branch Chicago River	0.700	0.549	0.614	0.543	0.560	0.710	0.634	0.667	0.617	0.678	0.693
73 Diversey Parkway, North Branch Chicago River	0.708	0.593	0.657	0.575	0.563	0.699	0.615	0.667	0.624	0.688	0.684
46 Grand Avenue, North Branch Chicago River	0.686	0.573	0.623	0.529	0.533	0.688	0.623	0.720	0.601	0.690	0.717
74 Lake Shore Drive, Chicago River	0.283	0.298	0.208	0.066	0.116	0.229	0.196	0.196	0.229	0.250	0.238
100 Wells Street, Chicago River	0.473	0.426	0.316	0.196	0.280	0.312	0.297	0.316	0.322	0.458	0.423
39 Madison Street, South Branch Chicago River	0.567	0.552	0.493	0.461	0.409	0.465	0.462	0.551	0.550	0.665	0.590
108 Loomis Street, South Branch Chicago River	0.583	0.508	0.498	0.463	0.430	0.467	0.489	0.557	0.551	0.596	0.581
99 Archer Avenue, South Fork South Branch Chicago River	0.567	0.503	0.554	0.456	0.443	0.472	0.461	0.565	0.516	0.578	0.565
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.557	0.499	0.505	0.463	0.433	0.467	0.468	0.555	0.525	0.592	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.532
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.567	0.469	0.505	0.418	0.464	0.498	0.479	0.531	0.503	0.578	0.578
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.658	0.591	0.598	0.564	0.562	0.633	0.643	0.740	0.686	0.727	0.743
42 Route 83, Chicago Sanitary & Ship Canal	0.657	0.643	0.643	0.570	0.543	0.685	0.696	0.756	0.768	0.825	0.809
48 Stephen Street, Chicago Sanitary & Ship Canal	0.708	0.582	0.587	0.519	0.519	0.636	0.648	0.701	0.683	0.800	0.809
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.657	0.566	0.584	0.532	0.562	0.634	0.663	0.719	0.634	0.769	0.802
Calumet River System											
49 Ewing Avenue, Calumet River	0.150	0.143	0.102	0.000	0.073	0.170	0.156	0.128	0.115	0.150	0.188
50 Burnham Avenue, Wolf Lake	0.557	0.365	0.362	0.354	0.338	0.334	0.247	0.275	0.228	0.223	0.213
55 130th Street, Calumet River	0.257	0.239	0.212	0.184	0.240	0.264	0.253	0.219	0.220	0.312	0.248
86 Burnham Avenue, Grand Calumet River	0.591	0.594	0.596	0.768	0.814	0.696	0.809	0.722	0.740	0.812	0.873
56 Indiana Avenue, Little Calumet River	0.340	0.314	0.272	0.235	0.394	0.348	0.324	0.317	0.278	0.375	0.394
76 Halsted Street, Little Calumet River	0.609	0.539	0.530	0.521	0.610	0.534	0.602	0.582	0.536	0.665	0.633
52 Wentworth Avenue, Little Calumet River	1.114	1.157	0.487	0.858	2.284	2.539	2.962	3.129	1.764	2.838	12.390
54 Joe Orr Road, Thorn Creek	0.643	0.467	0.482	0.564	0.658	0.549	0.659	0.474	0.626	0.483	0.746
97 170th Street, Thorn Creek	0.500	0.397	0.370	0.471	0.553	0.470	0.539	0.492	0.543	0.634	1.613
57 Ashland Avenue, Little Calumet River	0.555	0.572	0.422	0.766	0.924	0.803	1.115	1.182	0.887	1.107	2.865
58 Ashland Avenue, Calumet-Sag Channel	0.543	0.524	0.492	0.514	0.593	0.514	0.630	0.646	0.563	1.020	1.188
59 Cicero Avenue, Calumet-Sag Channel	0.580	0.541	0.483	0.499	0.575	0.507	0.639	0.637	0.575	0.719	0.935
43 Route 83, Calumet-Sag Channel	0.564	0.484	0.509	0.457	0.534	0.511	0.562	0.662	0.590	0.659	0.925
Des Plaines River System											
90 Route 19, Poplar Creek	0.200	0.179	0.144	0.155	0.150	0.231	0.208	0.209	0.198	0.206	0.234
110 Springinsguth Road, West Branch DuPage River	0.327	0.329	0.239	0.233	0.218	0.265	0.240	0.251	0.302	ND	ND
89 Walnut Lane, West Branch DuPage River	0.614	0.587	0.643	0.610	0.550	0.643	0.629	0.643	0.568	0.625	0.744
64 Lake Street, West Branch DuPage River	ND	ND	0.377	0.483	0.530	0.569	0.529	0.603	0.572	0.601	0.631
111 Arlington Drive, West Branch DuPage River	0.642	0.530	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.245	0.277	0.179	0.155	0.197	0.259	0.213	0.207	0.189	0.191	0.238
80 Arlington Heights Road, Salt Creek	0.557	0.413	0.527	0.458	0.517	0.563	0.523	0.553	0.546	0.547	0.602
18 Devon Avenue, Salt Creek	0.675	0.481	0.566	0.445	0.503	0.564	0.534	0.498	0.549	0.568	0.578
24 Wolf Road, Salt Creek	0.457	0.419	0.433	0.408	0.509	0.498	0.480	0.585	0.565	0.542	0.634
109 Brookfield Avenue, Salt Creek	0.525	0.397	0.424	0.395	0.522	0.474	0.459	0.467	0.511	0.474	0.698
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.447
77 Elmhurst Road, Higgins Creek	0.263	0.204	0.130	0.085	0.244	0.296	0.220	0.190	0.223	0.222	0.208
78 Wille Road, Higgins Creek	0.764	0.654	0.661	0.627	0.715	0.897	0.959	0.879	0.812	0.858	0.788
12 Lake-Cook Road, Buffalo Creek	0.217	0.184	0.120	0.044	0.099	0.234	0.191	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.371	0.331	0.365	0.325	0.401	0.424	0.425	0.438	0.400	0.525	0.508
17 Oakton Street, Des Plaines River	0.357	0.315	0.363	0.292	0.378	0.374	0.369	0.468	0.382	0.459	0.459
19 Belmont Avenue, Des Plaines River	0.550	0.354	0.420	0.355	0.424	0.442	0.468	0.468	0.435	0.541	0.502
20 Roosevelt Road, Des Plaines River	0.386	0.343	0.415	0.335	0.416	0.453	0.452	0.449	0.417	0.496	0.516
22 Ogden Avenue, Des Plaines River	0.508	0.352	0.403	0.345	0.443	0.437	0.447	0.440	0.429	0.592	0.541
23 Willow Springs Road, Des Plaines River	0.492	0.350	0.396	0.332	0.417	0.440	0.440	0.530	0.431	0.488	0.557
29 Stephen Street, Des Plaines River	0.357	0.338	0.383	0.328	0.390	0.470	0.453	0.510	0.427	0.536	0.516
91 Material Service Road, Des Plaines River	0.492	0.326	0.373	0.313	0.408	0.421	0.443	0.540	0.419	0.545	0.518

ND = No Data.

TABLE AII-72: TOTAL ORGANIC CARBON MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	4.60	5.24	4.89	4.75	3.97	3.90	4.58	6.43	8.88	10.67	9.50
103 Golf Road, West Fork North Branch Chicago River	4.29	4.79	4.70	4.53	3.53	4.05	4.08	6.88	8.40	8.88	9.36
31 Lake-Cook Road, Middle Fork North Branch	5.75	6.64	6.79	6.01	5.13	6.75	6.17	9.02	10.10	11.00	11.40
104 Glenview Road, North Branch Chicago River	4.43	7.39	4.66	4.65	4.08	4.40	4.63	5.98	8.33	9.00	8.00
32 Lake-Cook Road, Skokie River	4.70	7.34	5.60	5.09	4.36	4.96	5.43	7.62	9.30	9.89	10.60
105 Frontage Road, Skokie River	4.29	4.69	4.58	4.37	3.73	4.29	4.43	5.64	7.17	7.75	8.92
34 Dempster Street, North Branch Chicago River	4.14	5.32	4.33	4.63	3.96	4.25	4.50	6.97	9.67	8.82	8.50
96 Albany Avenue, North Branch Chicago River	4.58	5.60	5.35	4.51	3.72	4.32	4.51	6.70	8.18	9.30	8.92
35 Central Street, North Shore Channel	3.00	3.24	3.65	2.71	1.67	1.78	1.92	2.49	4.22	4.89	5.33
112 Dempster Street, North Shore Channel	5.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	4.29	4.27	4.09	3.26	2.36	2.92	3.38	4.42	5.92	7.44	7.27
36 Touhy Avenue, North Shore Channel	4.63	5.18	4.95	4.16	3.39	4.03	4.12	6.41	8.08	8.92	8.83
101 Foster Avenue, North Shore Channel	4.57	5.21	6.04	3.98	3.37	4.07	4.26	6.48	8.25	8.42	8.67
37 Wilson Avenue, North Branch Chicago River	4.67	4.27	4.48	4.02	3.40	3.88	4.32	6.68	8.08	8.67	9.17
73 Diversey Parkway, North Branch Chicago River	4.92	4.57	4.68	3.89	3.32	4.10	4.08	6.26	7.83	8.92	9.25
46 Grand Avenue, North Branch Chicago River	4.86	4.95	4.53	4.13	3.43	4.01	4.25	6.49	7.92	8.92	8.50
74 Lake Shore Drive, Chicago River	2.67	2.78	2.55	2.23	1.77	1.87	1.75	2.54	4.22	4.30	4.42
100 Wells Street, Chicago River	3.55	4.01	2.93	2.53	2.39	2.25	2.27	3.55	5.17	6.25	5.33
39 Madison Street, South Branch Chicago River	4.17	4.97	4.04	3.60	3.09	3.03	3.29	5.03	7.00	7.91	7.75
108 Loomis Street, South Branch Chicago River	4.25	4.21	4.02	3.43	2.96	3.17	3.35	5.52	6.83	8.00	7.00
99 Archer Avenue, South Fork South Branch Chicago River	5.83	4.88	4.44	3.76	3.81	3.34	3.27	5.44	7.08	7.83	8.17
40 Damen Avenue, Chicago Sanitary & Ship Canal	4.57	4.08	3.84	3.68	2.93	3.15	3.37	5.52	6.67	7.67	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.58
75 Cicero Avenue, Chicago Sanitary & Ship Canal	4.00	4.28	3.93	3.51	3.13	3.24	3.75	5.08	7.00	7.33	7.50
41 Harlem Avenue, Chicago Sanitary & Ship Canal	4.58	5.09	4.63	4.32	3.56	3.80	4.16	5.92	7.50	8.25	7.92
42 Route 83, Chicago Sanitary & Ship Canal	5.01	5.22	4.91	4.27	3.56	4.19	4.39	6.05	8.17	8.00	8.83
48 Stephen Street, Chicago Sanitary & Ship Canal	4.83	5.06	4.93	4.37	3.68	4.20	4.54	6.32	7.75	7.92	8.67
92 Lockport Forebay, Chicago Sanitary & Ship Canal	4.88	5.17	4.83	4.44	3.60	4.34	4.40	6.01	8.00	8.29	8.26
Calumet River System											
49 Ewing Avenue, Calumet River	2.17	2.28	4.50	1.74	1.29	1.48	1.43	1.77	3.40	3.17	3.75
50 Burnham Avenue, Wolf Lake	6.14	5.31	6.28	4.35	3.83	4.00	3.81	5.37	6.42	6.17	5.50
55 130th Street, Calumet River	3.14	2.91	2.84	3.00	2.31	2.75	2.62	3.39	4.55	4.70	4.92
86 Burnham Avenue, Grand Calumet River	10.64	8.58	10.66	6.76	8.99	17.54	7.45	9.27	12.33	12.90	11.36
56 Indiana Avenue, Little Calumet River	3.50	3.84	3.64	3.70	3.08	3.47	3.39	3.77	5.11	5.64	6.42
76 Halsted Street, Little Calumet River	5.18	4.95	4.96	4.44	4.07	4.19	4.40	5.90	7.67	8.45	8.33
52 Wentworth Avenue, Little Calumet River	6.43	6.87	7.69	6.61	5.54	6.22	9.02	8.54	12.22	11.60	10.73
54 Joe Orr Road, Thorn Creek	5.43	6.24	5.96	6.41	5.09	5.04	5.33	8.00	10.43	9.67	10.43
97 170th Street, Thorn Creek	5.00	5.57	6.19	5.59	4.53	5.22	6.26	6.72	9.27	9.60	9.17
57 Ashland Avenue, Little Calumet River	5.18	5.98	5.60	5.99	4.89	6.68	5.67	7.46	9.60	9.60	9.00
58 Ashland Avenue, Calumet-Sag Channel	5.29	4.99	5.53	4.70	4.19	4.60	4.65	6.04	8.00	8.50	8.75
59 Cicero Avenue, Calumet-Sag Channel	5.20	5.06	5.55	4.71	4.21	4.55	4.77	6.41	8.17	8.64	8.67
43 Route 83, Calumet-Sag Channel	4.73	4.85	4.92	4.70	4.03	4.64	4.77	6.54	8.00	8.55	8.25
Des Plaines River System											
90 Route 19, Poplar Creek	5.36	5.82	5.67	5.14	4.43	5.13	5.75	7.28	8.64	9.90	9.22
110 Springinsguth Road, West Branch DuPage River	10.73	10.88	11.70	9.94	10.90	11.28	12.02	13.02	15.70	ND	ND
89 Walnut Lane, West Branch DuPage River	6.43	7.10	6.54	6.53	6.23	6.73	6.83	9.55	12.45	11.91	11.75
64 Lake Street, West Branch DuPage River	ND	ND	5.80	6.18	5.26	6.05	6.23	8.65	10.09	10.83	10.25
111 Arlington Drive, West Branch DuPage River	6.43	6.19	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	6.18	6.41	6.64	6.03	4.72	5.27	5.60	8.42	9.45	9.56	10.00
80 Arlington Heights Road, Salt Creek	5.09	5.80	5.58	5.47	3.74	4.45	5.00	7.13	9.42	9.92	10.50
18 Devon Avenue, Salt Creek	5.43	5.47	5.59	5.33	3.67	4.49	4.90	6.86	9.58	10.08	9.80
24 Wolf Road, Salt Creek	4.86	5.02	4.95	4.77	3.58	4.07	4.68	6.73	8.27	8.67	8.45
109 Brookfield Avenue, Salt Creek	4.92	5.07	4.87	4.83	3.72	4.29	4.65	7.30	10.82	8.70	8.83
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.67
77 Elmhurst Road, Higgins Creek	4.75	4.88	3.80	5.28	3.62	4.66	5.13	7.75	11.00	10.40	9.83
78 Wille Road, Higgins Creek	5.00	4.73	5.02	5.12	4.83	5.03	5.59	7.94	10.55	10.25	9.83
12 Lake-Cook Road, Buffalo Creek	5.33	6.21	5.97	6.41	5.79	6.10	5.94	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	5.57	6.13	5.98	6.04	4.81	7.90	7.21	7.48	9.27	9.67	9.25
17 Oakton Street, Des Plaines River	5.29	6.10	5.94	6.06	4.75	5.98	5.40	7.38	8.73	9.40	9.55
19 Belmont Avenue, Des Plaines River	5.17	5.80	5.48	5.77	4.57	5.75	5.56	7.53	9.27	9.50	9.67
20 Roosevelt Road, Des Plaines River	5.00	5.80	5.68	5.85	4.82	5.74	5.52	7.28	9.36	9.00	9.33
22 Ogden Avenue, Des Plaines River	5.33	5.63	5.28	5.58	4.41	5.36	5.14	7.00	9.27	9.20	9.25
23 Willow Springs Road, Des Plaines River	5.25	5.59	5.23	5.55	4.29	6.02	5.20	7.11	8.82	9.10	9.00
29 Stephen Street, Des Plaines River	5.71	5.40	5.45	5.51	3.98	5.20	5.12	7.08	8.45	9.36	9.00
91 Material Service Road, Des Plaines River	5.08	5.28	5.19	5.41	3.99	5.45	5.09	7.19	8.45	8.92	8.83

ND = No Data.

TABLE AII-73: FECAL COLIFORM MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (fcu/100mL)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	6260	4663	2364	1818	1453	2476	3196	1130	2494	3740	1344
103 Golf Road, West Fork North Branch Chicago River	546	797	466	1083	1133	660	893	727	622	839	704
31 Lake-Cook Road, Middle Fork North Branch	511	488	646	586	1836	633	943	536	760	773	1143
104 Glenview Road, North Branch Chicago River	301	723	188	372	563	827	855	649	1326	777	904
32 Lake-Cook Road, Skokie River	2400	2687	775	655	596	736	657	649	1042	546	718
105 Frontage Road, Skokie River	96	72	112	169	151	199	119	160	159	225	357
34 Dempster Street, North Branch Chicago River	441	987	1472	695	1069	600	1026	1121	996	1333	924
96 Albany Avenue, North Branch Chicago River	380	375	507	420	653	520	860	1119	1029	1498	1508
35 Central Street, North Shore Channel	35	124	54	80	168	66	90	144	330	291	483
112 Dempster Street, North Shore Channel	939	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	1663	915	615	343	1627	638	1181	866	963	1487	1954
36 Touhy Avenue, North Shore Channel	5642	7494	5393	8040	6892	8875	8550	11481	5518	7588	8349
101 Foster Avenue, North Shore Channel	6443	5857	5484	5021	7878	9612	7628	10290	6872	7917	10250
37 Wilson Avenue, North Branch Chicago River	5257	5823	4091	5461	5723	7479	6033	9748	5896	5940	7358
73 Diversey Parkway, North Branch Chicago River	3446	2991	3538	3818	4373	3608	4237	5799	3426	4228	5833
46 Grand Avenue, North Branch Chicago River	939	1618	971	1706	3414	1226	2054	1853	1583	2402	1919
74 Lake Shore Drive, Chicago River	81	44	28	241	90	86	31	81	46	53	36
100 Wells Street, Chicago River	320	792	182	189	947	183	190	150	65	301	288
39 Madison Street, South Branch Chicago River	1351	2467	415	904	2921	922	892	921	680	799	800
108 Loomis Street, South Branch Chicago River	369	589	257	334	1427	371	445	297	179	181	253
99 Archer Avenue, South Fork South Branch Chicago River	620	429	230	384	1625	294	493	156	202	294	548
40 Damen Avenue, Chicago Sanitary & Ship Canal	484	378	258	283	940	349	523	223	164	173	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	180
75 Cicero Avenue, Chicago Sanitary & Ship Canal	174	314	137	202	649	347	469	129	104	153	245
41 Harlem Avenue, Chicago Sanitary & Ship Canal	3721	3218	1391	3321	4642	4908	3906	2668	2637	4314	3609
42 Route 83, Chicago Sanitary & Ship Canal	1217	1163	537	573	1238	1289	1303	1011	935	866	460
48 Stephen Street, Chicago Sanitary & Ship Canal	668	977	199	448	992	645	894	469	386	345	419
92 Lockport Forebay, Chicago Sanitary & Ship Canal	112	239	101	216	255	227	308	205	186	179	159
Calumet River System											
49 Ewing Avenue, Calumet River	21	10	15	11	13	12	11	12	11	12	12
50 Burnham Avenue, Wolf Lake	16	43	21	26	36	70	21	77	53	37	13
55 130th Street, Calumet River	11	32	35	9	25	19	24	37	26	32	19
86 Burnham Avenue, Grand Calumet River	533	3416	4613	1158	642	2448	420	2377	1104	1695	488
56 Indiana Avenue, Little Calumet River	109	120	74	74	111	49	89	73	103	75	89
76 Halsted Street, Little Calumet River	985	1441	1926	2262	2891	3259	2159	2759	2775	2990	2024
52 Wentworth Avenue, Little Calumet River	811	5240	2585	2935	1811	1477	956	1934	1284	2247	976
54 Joe Orr Road, Thorn Creek	1587	3859	1131	2335	1407	2411	3309	14257	1588	2922	1083
97 170th Street, Thorn Creek	1250	2497	1086	756	780	698	642	2119	1292	1347	637
57 Ashland Avenue, Little Calumet River	511	1905	1346	563	783	816	431	3181	4103	2329	576
58 Ashland Avenue, Calumet-Sag Channel	752	1975	1280	1407	2174	2122	1580	2365	2616	2135	1157
59 Cicero Avenue, Calumet-Sag Channel	1978	1650	1060	377	945	1178	539	857	1041	1105	471
43 Route 83, Calumet-Sag Channel	269	272	127	106	108	188	97	57	147	103	93
Des Plaines River System											
90 Route 19, Poplar Creek	63	148	87	138	163	181	264	417	92	387	113
110 Springinguth Road, West Branch DuPage River	3581	1267	1500	2621	3454	6187	3225	3763	2603	ND	ND
89 Walnut Lane, West Branch DuPage River	1195	972	549	451	1103	2013	857	2026	1121	2181	1600
64 Lake Street, West Branch DuPage River	ND	ND	814	538	684	2406	949	2144	967	1731	1532
111 Arlington Drive, West Branch DuPage River	725	463	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	46	85	154	97	47	250	153	499	84	568	82
80 Arlington Heights Road, Salt Creek	466	222	273	184	377	312	417	389	529	678	303
18 Devon Avenue, Salt Creek	383	358	472	328	734	930	946	1014	1214	1668	939
24 Wolf Road, Salt Creek	338	229	358	398	298	688	1303	1034	337	2012	440
109 Brookfield Avenue, Salt Creek	567	499	560	615	663	1425	1618	1480	1499	3461	2056
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	782
77 Elmhurst Road, Higgins Creek	361	474	210	1296	857	2370	1915	1932	488	7317	2395
78 Wille Road, Higgins Creek	283	173	142	475	266	514	275	382	162	559	475
12 Lake-Cook Road, Buffalo Creek	86	77	140	99	248	823	236	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	229	212	245	193	247	310	362	650	240	566	284
17 Oakton Street, Des Plaines River	343	298	224	208	452	313	616	639	342	1128	345
19 Belmont Avenue, Des Plaines River	335	378	423	301	365	516	525	523	410	1021	709
20 Roosevelt Road, Des Plaines River	401	353	296	511	523	634	897	950	662	1309	913
22 Ogden Avenue, Des Plaines River	501	325	363	356	503	767	1509	1247	792	1023	900
23 Willow Springs Road, Des Plaines River	203	261	280	217	187	302	1092	480	303	1664	351
29 Stephen Street, Des Plaines River	226	157	162	129	129	184	617	248	202	568	276
91 Material Service Road, Des Plaines River	66	112	63	83	78	192	327	260	135	564	122

ND = No Data.

TABLE AII-74: ESCHERICHIA COLI MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (fcu/100mL)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	ND	1133	1195	2068	1008	1800	2068	ND	2140	5099	ND
103 Golf Road, West Fork North Branch Chicago River	ND	665	411	968	507	347	374	943	451	380	506
31 Lake-Cook Road, Middle Fork North Branch	ND	348	348	466	1005	921	799	243	956	319	429
104 Glenview Road, North Branch Chicago River	ND	6813	174	240	353	266	291	443	432	180	254
32 Lake-Cook Road, Skokie River	ND	4555	697	344	312	527	147	515	579	418	581
105 Frontage Road, Skokie River	ND	126	129	247	121	118	71	276	142	134	387
34 Dempster Street, North Branch Chicago River	ND	2970	2277	343	446	386	840	734	604	1110	534
96 Albany Avenue, North Branch Chicago River	ND	549	1244	148	559	400	470	791	337	934	1553
35 Central Street, North Shore Channel	ND	47	81	53	231	44	222	78	267	271	4382
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	ND	1595	3345	362	2052	562	782	974	835	4035	1409
36 Touhy Avenue, North Shore Channel	ND	8437	5491	6119	6748	8540	5772	10341	3302	7271	9539
101 Foster Avenue, North Shore Channel	ND	8728	4095	4701	7533	12046	6040	10236	5652	8204	14164
37 Wilson Avenue, North Branch Chicago River	ND	9398	3511	5609	5922	9093	5411	9844	6376	7083	9158
73 Diversey Parkway, North Branch Chicago River	ND	6808	2336	4607	3816	3900	3231	7280	2569	4688	6747
46 Grand Avenue, North Branch Chicago River	ND	2378	573	1599	3263	1197	1245	2667	1272	2882	2128
74 Lake Shore Drive, Chicago River	ND	25	17	38	55	81	16	24	49	44	20
100 Wells Street, Chicago River	ND	573	33	93	411	169	184	119	49	231	307
39 Madison Street, South Branch Chicago River	ND	1124	180	973	1683	584	1253	461	463	427	565
108 Loomis Street, South Branch Chicago River	ND	199	68	201	621	336	599	61	72	70	176
99 Archer Avenue, South Fork South Branch Chicago River	ND	108	201	164	907	115	448	102	78	251	173
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	1113	230	260	632	ND	ND	156	ND	ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	342
75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND	617	58	161	488	932	403	78	177	94	224
41 Harlem Avenue, Chicago Sanitary & Ship Canal	ND	5172	1106	1669	2877	5416	3330	2267	2567	2488	2925
42 Route 83, Chicago Sanitary & Ship Canal	ND	3446	667	399	1007	867	1365	1340	553	787	715
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	4432	202	379	724	645	1049	796	407	322	530
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	357	81	175	457	251	316	148	128	81	177
Calumet River System											
49 Ewing Avenue, Calumet River	ND	10	23	10	10	10	10	12	10	14	10
50 Burnham Avenue, Wolf Lake	ND	98	26	23	29	89	19	183	37	58	12
55 130th Street, Calumet River	ND	20	43	14	23	12	16	57	15	90	14
86 Burnham Avenue, Grand Calumet River	ND	10775204450	1302	2342	682	262	11506	6199	6709	449	
56 Indiana Avenue, Little Calumet River	ND	1549	126	257	77	29	181	63	48	142	101
76 Halsted Street, Little Calumet River	ND	785	3724	2486	2012	1929	2372	2838	2420	2787	1815
52 Wentworth Avenue, Little Calumet River	ND	2504	2785	1724	1090	2677	829	2278	3794	1169	846
54 Joe Orr Road, Thorn Creek	ND	1650	1368	1428	699	2611	2124	16399	1508	22000	721
97 170th Street, Thorn Creek	ND	1754	435	815	697	1138	364	2442	1631	2984	529
57 Ashland Avenue, Little Calumet River	ND	1322	552	285	1027	1530	288	5565	5967	2705	615
58 Ashland Avenue, Calumet-Sag Channel	ND	512	436	943	1738	3512	1259	2253	2454	1264	690
59 Cicero Avenue, Calumet-Sag Channel	ND	1065	360	193	471	1793	396	797	1139	418	500
43 Route 83, Calumet-Sag Channel	ND	150	26	46	86	822	24	60	218	39	75
Des Plaines River System											
90 Route 19, Poplar Creek	ND	195	144	118	149	148	514	775	42	103	82
110 Springinguth Road, West Branch DuPage River	ND	1460	1606	1719	1739	6129	2664	2794	2596	ND	ND
89 Walnut Lane, West Branch DuPage River	ND	1793	588	399	1836	720	675	2202	727	2139	1366
64 Lake Street, West Branch DuPage River	ND	ND	1509	399	1472	1714	1451	2216	908	1357	1150
111 Arlington Drive, West Branch DuPage River	ND	1270	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	ND	14	209	63	109	114	22	158	89	423	61
80 Arlington Heights Road, Salt Creek	ND	19	280	76	443	221	427	487	370	552	209
18 Devon Avenue, Salt Creek	ND	9	552	134	1239	483	530	1202	1164	2722	1146
24 Wolf Road, Salt Creek	ND	85	218	232	278	286	711	1077	165	7589	336
109 Brookfield Avenue, Salt Creek	ND	420	442	367	450	492	723	1289	2994	ND	ND
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	330
77 Elmhurst Road, Higgins Creek	ND	550	200	660	220	1897	1217	890	268	5717	2097
78 Wille Road, Higgins Creek	ND	295	179	315	186	221	207	1077	127	539	425
12 Lake-Cook Road, Buffalo Creek	ND	147	280	117	109	287	216	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	ND	136	333	320	218	274	398	684	77	223	569
17 Oakton Street, Des Plaines River	ND	243	185	352	503	232	555	295	161	147	553
19 Belmont Avenue, Des Plaines River	ND	264	477	399	323	271	839	439	458	277	1018
20 Roosevelt Road, Des Plaines River	ND	285	335	953	391	457	1165	480	524	773	903
22 Ogden Avenue, Des Plaines River	ND	370	364	579	681	667	1618	606	724	88	837
23 Willow Springs Road, Des Plaines River	ND	319	154	295	110	268	855	169	202	1220	506
29 Stephen Street, Des Plaines River	ND	206	179	197	118	165	431	186	122	117	641
91 Material Service Road, Des Plaines River	ND	62	59	103	69	263	381	114	248	363	90

ND = No Data.

TABLE AII-75: TOTAL CALCIUM MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	81.4	79.4	72.1	68.2	71.1	73.6	62.0	70.3	85.3	54.9	79.0
103 Golf Road, West Fork North Branch Chicago River	84.9	79.1	75.7	66.4	68.2	75.5	73.9	80.8	71.5	70.9	72.8
31 Lake-Cook Road, Middle Fork North Branch	72.0	62.3	61.3	57.6	62.1	64.2	62.9	65.6	64.3	64.1	71.9
104 Glenview Road, North Branch Chicago River	71.6	62.1	64.3	61.5	65.1	62.8	62.3	61.5	64.4	65.5	69.0
32 Lake-Cook Road, Skokie River	77.7	69.4	67.5	62.7	66.3	75.8	68.5	70.5	74.2	69.8	75.4
105 Frontage Road, Skokie River	72.4	62.5	63.5	62.2	64.3	62.8	62.1	62.0	63.2	59.9	67.7
34 Dempster Street, North Branch Chicago River	80.3	66.2	69.8	61.2	63.0	64.2	65.9	70.6	68.7	65.7	70.0
96 Albany Avenue, North Branch Chicago River	64.8	69.2	65.4	65.4	67.6	65.5	67.9	69.4	65.1	64.6	69.2
35 Central Street, North Shore Channel	51.6	41.0	38.2	37.1	39.6	39.4	37.5	39.1	38.8	41.0	43.6
112 Dempster Street, North Shore Channel	48.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	55.4	50.9	48.9	47.2	47.6	49.3	47.7	47.8	45.8	50.4	51.9
36 Touhy Avenue, North Shore Channel	52.5	57.9	52.3	60.2	60.0	56.0	53.3	51.9	57.1	53.4	58.5
101 Foster Avenue, North Shore Channel	57.9	57.2	55.0	58.0	60.3	58.0	54.2	52.9	57.7	54.3	58.8
37 Wilson Avenue, North Branch Chicago River	59.2	58.9	59.9	57.9	61.0	59.1	56.4	55.7	59.8	56.4	60.9
73 Diversey Parkway, North Branch Chicago River	53.7	60.2	58.5	58.4	61.7	57.3	56.2	54.7	60.8	55.4	61.7
46 Grand Avenue, North Branch Chicago River	62.3	60.1	57.0	56.4	60.8	57.9	56.9	57.3	62.1	56.6	60.2
74 Lake Shore Drive, Chicago River	48.3	46.0	38.2	36.8	37.3	42.0	38.4	40.6	44.2	40.9	43.1
100 Wells Street, Chicago River	50.1	52.2	43.5	43.8	47.4	44.8	44.1	44.1	46.0	48.0	49.3
39 Madison Street, South Branch Chicago River	58.8	61.1	51.3	53.5	53.6	51.8	51.3	52.0	52.8	55.2	57.3
108 Loomis Street, South Branch Chicago River	53.1	56.2	52.7	55.1	53.9	52.7	53.6	54.3	52.0	52.8	56.8
99 Archer Avenue, South Fork South Branch Chicago River	49.3	56.6	54.9	52.1	56.8	50.3	51.2	51.9	53.3	52.5	56.7
40 Damen Avenue, Chicago Sanitary & Ship Canal	58.4	56.6	53.4	53.5	53.9	52.3	53.8	52.9	53.1	53.4	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	57.8
75 Cicero Avenue, Chicago Sanitary & Ship Canal	52.1	57.4	53.8	52.9	56.8	53.3	51.2	54.5	55.1	52.1	59.9
41 Harlem Avenue, Chicago Sanitary & Ship Canal	54.0	59.1	59.2	56.9	58.5	56.2	54.8	54.2	54.6	53.8	57.3
42 Route 83, Chicago Sanitary & Ship Canal	61.1	61.4	58.5	57.0	57.5	56.0	56.3	56.4	56.5	56.6	58.7
48 Stephen Street, Chicago Sanitary & Ship Canal	59.7	62.8	60.5	56.4	60.1	58.3	59.0	60.1	59.8	58.7	61.6
92 Lockport Forebay, Chicago Sanitary & Ship Canal	58.6	61.2	60.7	57.8	60.8	59.1	58.4	59.5	59.9	59.0	62.6
Calumet River System											
49 Ewing Avenue, Calumet River	36.5	37.9	35.2	35.9	34.9	37.3	35.9	36.5	37.1	38.6	41.1
50 Burnham Avenue, Wolf Lake	38.6	36.7	35.5	36.1	35.8	36.2	30.9	37.3	36.6	35.3	35.9
55 130th Street, Calumet River	46.4	43.9	41.8	43.3	42.6	46.3	42.6	43.4	43.2	43.4	47.2
86 Burnham Avenue, Grand Calumet River	81.4	81.2	85.3	82.4	96.3	92.0	98.0	68.3	82.5	86.9	79.6
56 Indiana Avenue, Little Calumet River	48.2	51.9	47.6	50.2	50.8	55.0	49.6	47.8	49.2	52.0	58.6
76 Halsted Street, Little Calumet River	61.9	66.5	60.8	62.5	68.1	66.3	65.8	63.1	62.1	62.2	64.8
52 Wentworth Avenue, Little Calumet River	88.4	68.0	72.2	75.1	89.9	79.9	88.1	74.4	86.4	96.3	94.5
54 Joe Orr Road, Thorn Creek	87.9	70.7	79.2	75.7	83.8	78.7	85.4	76.0	80.8	64.1	85.5
97 170th Street, Thorn Creek	95.3	74.0	73.9	75.8	87.0	71.6	87.7	83.0	84.0	80.6	100.8
57 Ashland Avenue, Little Calumet River	73.5	69.7	69.4	70.9	82.3	69.8	86.4	75.4	78.9	84.3	86.5
58 Ashland Avenue, Calumet-Sag Channel	69.6	66.7	65.3	61.8	68.4	61.8	68.3	65.3	65.4	66.2	73.7
59 Cicero Avenue, Calumet-Sag Channel	63.1	67.7	63.9	61.8	67.9	61.8	71.3	65.4	66.4	64.8	68.2
43 Route 83, Calumet-Sag Channel	60.5	63.3	66.9	61.0	66.5	61.8	69.4	64.7	63.1	65.3	69.8
Des Plaines River System											
90 Route 19, Poplar Creek	77.3	70.3	75.9	67.3	73.1	68.5	70.9	65.6	76.3	61.3	77.0
110 Springinsguth Road, West Branch DuPage River	77.3	88.7	72.1	74.8	82.5	77.8	85.6	77.1	86.8	ND	ND
89 Walnut Lane, West Branch DuPage River	69.0	71.0	65.3	66.1	63.6	61.6	65.8	58.5	64.5	55.8	63.1
64 Lake Street, West Branch DuPage River	ND	ND	79.2	65.0	67.3	58.8	63.7	59.7	70.4	55.6	65.0
111 Arlington Drive, West Branch DuPage River	62.4	68.7	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	61.1	70.0	50.6	62.2	70.2	63.5	63.3	65.9	75.8	58.1	67.5
80 Arlington Heights Road, Salt Creek	75.0	61.9	65.8	61.5	69.9	62.7	64.5	66.4	64.1	60.9	68.7
18 Devon Avenue, Salt Creek	64.2	64.2	68.3	60.7	69.4	63.0	65.4	66.4	64.4	58.9	68.2
24 Wolf Road, Salt Creek	75.0	68.4	70.8	68.5	70.9	65.1	64.0	66.1	69.7	59.2	73.7
109 Brookfield Avenue, Salt Creek	65.2	68.9	67.8	66.0	68.2	62.6	63.1	64.2	69.9	58.5	58.5
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	92.5
77 Elmhurst Road, Higgins Creek	64.4	53.4	63.6	51.0	62.4	44.5	54.3	60.1	73.7	48.3	63.2
78 Wille Road, Higgins Creek	69.0	83.8	75.2	79.1	76.6	71.0	69.4	69.2	70.9	63.4	74.4
12 Lake-Cook Road, Buffalo Creek	83.0	71.5	76.8	69.5	78.3	69.2	75.3	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	72.9	65.5	67.8	62.1	72.5	67.9	73.3	66.8	71.1	65.2	76.8
17 Oakton Street, Des Plaines River	73.0	66.4	66.3	61.2	70.7	64.2	69.1	66.6	72.2	64.1	75.6
19 Belmont Avenue, Des Plaines River	64.5	67.6	65.1	63.3	72.5	64.2	69.2	67.1	72.7	62.4	74.7
20 Roosevelt Road, Des Plaines River	71.0	67.4	65.1	61.6	72.4	63.9	68.6	65.8	71.0	60.9	74.7
22 Ogden Avenue, Des Plaines River	66.2	66.4	65.3	61.5	68.4	62.6	65.2	63.7	69.9	68.7	73.8
23 Willow Springs Road, Des Plaines River	66.7	67.3	63.3	61.8	69.7	62.7	64.5	66.1	69.7	61.7	70.8
29 Stephen Street, Des Plaines River	72.6	65.9	67.1	61.8	71.1	65.1	69.8	67.4	70.0	65.9	76.6
91 Material Service Road, Des Plaines River	67.3	66.2	67.8	63.6	69.8	66.3	71.0	68.3	71.1	65.6	74.9

ND = No Data.

TABLE AII-76: TOTAL MAGNESIUM MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	33.8	32.6	28.5	28.2	29.7	28.1	25.7	29.0	35.4	23.6	34.0
103 Golf Road, West Fork North Branch Chicago River	35.0	31.0	29.1	26.4	26.3	29.7	29.7	32.2	27.6	28.3	30.5
31 Lake-Cook Road, Middle Fork North Branch	33.8	26.3	26.4	24.6	25.7	28.7	28.9	33.1	29.2	29.2	33.0
104 Glenview Road, North Branch Chicago River	32.6	25.7	27.0	25.8	27.0	26.9	27.1	27.7	27.3	28.3	29.6
32 Lake-Cook Road, Skokie River	33.8	28.6	28.1	25.4	26.9	31.3	30.3	32.4	31.6	29.8	33.5
105 Frontage Road, Skokie River	33.3	26.2	27.0	26.1	26.5	26.3	26.5	27.2	26.9	25.3	29.2
34 Dempster Street, North Branch Chicago River	35.0	27.6	28.3	25.1	25.9	27.2	27.9	30.7	28.4	27.0	29.8
96 Albany Avenue, North Branch Chicago River	27.9	28.6	26.3	26.3	27.0	27.6	28.3	29.7	26.8	26.6	29.3
35 Central Street, North Shore Channel	19.2	14.1	12.8	12.5	13.3	13.3	12.5	13.3	13.1	14.1	15.2
112 Dempster Street, North Shore Channel	18.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	20.1	17.7	16.9	16.4	16.2	16.9	16.7	16.9	15.8	17.5	17.9
36 Touhy Avenue, North Shore Channel	18.8	20.2	18.0	21.0	21.2	19.5	19.0	18.2	20.3	19.1	21.2
101 Foster Avenue, North Shore Channel	20.9	20.1	19.1	20.1	21.4	20.2	19.4	18.6	20.8	19.4	21.3
37 Wilson Avenue, North Branch Chicago River	21.8	21.4	22.0	20.8	22.4	21.3	20.9	20.1	22.2	20.5	22.8
73 Diversey Parkway, North Branch Chicago River	19.9	22.0	21.1	20.8	22.5	20.7	20.7	19.5	22.4	20.0	23.1
46 Grand Avenue, North Branch Chicago River	23.4	22.0	20.3	20.0	21.8	20.9	21.0	20.8	22.3	20.4	22.5
74 Lake Shore Drive, Chicago River	17.5	15.7	12.7	12.4	12.6	14.5	12.9	14.2	15.5	13.7	14.7
100 Wells Street, Chicago River	18.2	18.6	15.0	15.1	16.5	15.9	15.3	15.3	16.3	16.7	17.4
39 Madison Street, South Branch Chicago River	22.2	22.1	18.2	19.1	19.1	18.4	18.6	18.6	19.0	19.9	21.1
108 Loomis Street, South Branch Chicago River	19.3	20.3	18.7	19.8	19.4	18.7	19.6	19.8	19.0	18.8	21.0
99 Archer Avenue, South Fork South Branch Chicago River	17.1	20.2	19.4	18.1	20.1	17.7	18.4	18.5	19.2	18.7	20.6
40 Damen Avenue, Chicago Sanitary & Ship Canal	21.7	20.4	19.0	19.5	19.4	18.6	19.6	19.2	19.3	19.1	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21.4
75 Cicero Avenue, Chicago Sanitary & Ship Canal	18.9	20.9	19.4	18.7	20.7	18.9	18.3	19.7	19.9	18.5	21.9
41 Harlem Avenue, Chicago Sanitary & Ship Canal	19.1	20.8	20.9	20.0	21.0	19.8	19.9	19.6	19.9	19.2	21.1
42 Route 83, Chicago Sanitary & Ship Canal	21.4	21.3	20.1	20.1	20.5	20.2	20.4	20.5	20.6	20.2	21.8
48 Stephen Street, Chicago Sanitary & Ship Canal	21.6	22.3	21.1	19.9	21.4	21.2	21.5	22.2	21.9	21.3	22.9
92 Lockport Forebay, Chicago Sanitary & Ship Canal	21.2	21.6	21.2	20.6	21.6	21.3	21.3	21.8	22.0	21.4	23.0
Calumet River System											
49 Ewing Avenue, Calumet River	12.3	12.5	11.8	11.7	11.2	12.1	11.5	12.1	12.3	12.8	13.2
50 Burnham Avenue, Wolf Lake	11.1	12.6	12.4	11.8	11.9	12.1	11.9	13.7	13.4	13.2	14.4
55 130th Street, Calumet River	15.9	14.8	14.2	14.4	14.0	15.8	14.2	15.0	14.8	14.8	15.9
86 Burnham Avenue, Grand Calumet River	26.4	28.5	28.2	36.9	39.0	39.3	48.7	44.4	53.9	65.6	67.1
56 Indiana Avenue, Little Calumet River	17.3	18.0	16.2	17.2	17.3	19.8	17.6	17.8	18.5	19.2	23.8
76 Halsted Street, Little Calumet River	21.5	22.7	20.6	21.5	23.2	22.8	22.6	22.3	22.0	21.5	23.0
52 Wentworth Avenue, Little Calumet River	36.1	26.5	28.6	28.4	34.3	31.4	33.9	29.7	34.3	37.2	38.4
54 Joe Orr Road, Thorn Creek	32.9	26.5	28.3	28.2	30.4	30.1	36.3	33.8	33.9	26.5	38.4
97 170th Street, Thorn Creek	40.8	31.2	29.7	29.9	33.9	28.4	37.7	36.6	36.7	34.6	49.1
57 Ashland Avenue, Little Calumet River	29.0	27.5	26.5	27.0	31.2	27.0	35.3	31.6	32.5	35.0	37.3
58 Ashland Avenue, Calumet-Sag Channel	25.0	23.9	23.4	21.6	23.6	21.8	24.2	23.8	23.8	24.2	27.9
59 Cicero Avenue, Calumet-Sag Channel	22.9	24.0	22.4	22.1	23.8	21.8	25.8	23.8	24.7	23.7	25.4
43 Route 83, Calumet-Sag Channel	22.2	22.8	23.7	21.9	23.6	22.4	25.4	23.7	23.6	24.1	26.0
Des Plaines River System											
90 Route 19, Poplar Creek	36.9	30.6	32.3	28.7	31.8	30.3	30.6	29.8	34.4	27.5	34.6
110 Springinsguth Road, West Branch DuPage River	27.6	32.6	25.5	27.1	29.8	28.3	30.4	28.0	31.9	ND	ND
89 Walnut Lane, West Branch DuPage River	27.0	27.1	24.2	25.1	24.0	23.0	24.3	22.0	23.9	20.2	23.9
64 Lake Street, West Branch DuPage River	ND	ND	28.3	24.4	25.1	22.3	23.6	22.3	26.2	20.3	24.8
111 Arlington Drive, West Branch DuPage River	23.8	25.8	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	27.2	28.3	20.7	26.3	28.5	26.2	26.4	29.5	31.4	23.2	31.2
80 Arlington Heights Road, Salt Creek	29.3	23.3	24.5	23.3	26.2	24.3	24.9	25.9	24.4	23.4	27.0
18 Devon Avenue, Salt Creek	25.1	23.9	25.6	23.0	26.0	24.5	25.2	25.7	24.5	22.7	26.6
24 Wolf Road, Salt Creek	31.0	26.9	27.1	26.6	27.6	26.0	25.6	27.3	28.2	23.3	30.1
109 Brookfield Avenue, Salt Creek	26.9	26.9	26.2	25.8	26.7	25.1	25.3	26.7	28.3	23.2	24.0
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	37.4
77 Elmhurst Road, Higgins Creek	23.1	18.9	20.6	18.2	20.3	14.5	18.5	20.1	26.3	15.6	22.5
78 Wille Road, Higgins Creek	25.9	30.9	27.2	28.9	27.9	25.6	25.1	25.6	26.2	22.8	27.9
12 Lake-Cook Road, Buffalo Creek	37.5	30.4	32.6	29.5	33.4	30.4	33.1	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	33.6	29.2	29.5	27.3	31.3	30.0	32.7	29.6	31.8	28.7	35.1
17 Oakton Street, Des Plaines River	33.1	29.1	28.2	26.4	30.0	28.5	30.7	29.9	32.5	27.9	33.9
19 Belmont Avenue, Des Plaines River	27.6	28.8	26.8	26.8	30.1	27.7	29.7	29.1	31.1	25.9	33.0
20 Roosevelt Road, Des Plaines River	31.4	28.7	26.7	26.2	30.1	27.7	29.3	28.7	31.4	25.5	33.0
22 Ogden Avenue, Des Plaines River	28.3	27.7	26.5	25.7	28.1	26.6	27.3	27.5	30.1	27.8	31.6
23 Willow Springs Road, Des Plaines River	28.8	28.2	25.7	26.0	29.0	26.9	27.4	28.8	30.3	25.9	31.0
29 Stephen Street, Des Plaines River	31.7	27.3	27.3	25.8	29.1	28.2	29.5	29.2	30.2	27.4	32.7
91 Material Service Road, Des Plaines River	29.2	27.5	27.8	26.3	28.9	28.2	30.3	29.9	30.9	27.5	32.5

ND = No Data.

TABLE AII-77: HARDNESS MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	342	332	297	286	300	300	261	295	359	234	337
103 Golf Road, West Fork North Branch Chicago River	356	325	309	274	278	311	307	335	292	294	307
31 Lake-Cook Road, Middle Fork North Branch	319	264	262	245	261	278	276	300	281	280	316
104 Glenview Road, North Branch Chicago River	313	261	272	260	274	268	267	268	273	280	294
32 Lake-Cook Road, Skokie River	333	291	284	261	276	318	296	310	316	297	326
105 Frontage Road, Skokie River	318	264	270	263	270	265	264	267	269	254	289
34 Dempster Street, North Branch Chicago River	345	279	291	256	264	272	279	303	289	275	297
96 Albany Avenue, North Branch Chicago River	277	291	272	272	280	277	286	296	273	271	293
35 Central Street, North Shore Channel	208	161	148	144	154	153	145	153	151	160	171
112 Dempster Street, North Shore Channel	196	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	221	200	192	185	186	193	188	189	179	198	203
36 Touhy Avenue, North Shore Channel	208	228	205	237	237	220	211	205	226	212	233
101 Foster Avenue, North Shore Channel	230	226	216	228	239	228	215	209	229	215	235
37 Wilson Avenue, North Branch Chicago River	238	235	240	230	244	235	227	222	241	225	246
73 Diversey Parkway, North Branch Chicago River	216	241	233	231	247	228	226	217	244	221	249
46 Grand Avenue, North Branch Chicago River	252	241	226	223	242	231	229	229	247	226	243
74 Lake Shore Drive, Chicago River	193	179	148	143	145	165	149	160	174	159	168
100 Wells Street, Chicago River	200	207	171	172	187	177	173	173	182	189	195
39 Madison Street, South Branch Chicago River	238	243	203	212	212	205	205	207	210	219	230
108 Loomis Street, South Branch Chicago River	212	224	209	219	214	209	214	217	208	209	228
99 Archer Avenue, South Fork South Branch Chicago River	193	224	217	205	225	198	204	206	212	208	226
40 Damen Avenue, Chicago Sanitary & Ship Canal	235	225	211	214	214	207	215	211	212	212	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	233
75 Cicero Avenue, Chicago Sanitary & Ship Canal	208	229	214	209	227	211	203	217	219	206	240
41 Harlem Avenue, Chicago Sanitary & Ship Canal	213	233	234	224	233	222	219	216	218	213	230
42 Route 83, Chicago Sanitary & Ship Canal	241	241	229	225	228	223	225	225	226	225	236
48 Stephen Street, Chicago Sanitary & Ship Canal	238	249	238	223	238	233	236	241	240	234	248
92 Lockport Forebay, Chicago Sanitary & Ship Canal	233	242	239	229	241	236	234	238	240	235	251
Calumet River System											
49 Ewing Avenue, Calumet River	142	146	136	138	133	143	137	141	143	149	157
50 Burnham Avenue, Wolf Lake	142	143	140	139	138	140	126	149	146	143	149
55 130th Street, Calumet River	181	171	163	167	164	181	165	170	169	169	183
86 Burnham Avenue, Grand Calumet River	312	320	329	358	401	391	445	354	428	487	475
56 Indiana Avenue, Little Calumet River	192	204	185	196	198	219	196	193	199	209	244
76 Halsted Street, Little Calumet River	243	260	237	245	266	259	258	249	246	244	256
52 Wentworth Avenue, Little Calumet River	370	279	298	304	366	329	360	308	357	393	394
54 Joe Orr Road, Thorn Creek	355	285	314	305	335	321	363	329	341	269	371
97 170th Street, Thorn Creek	406	314	307	312	357	296	374	358	361	344	454
57 Ashland Avenue, Little Calumet River	303	287	283	288	334	285	361	318	331	355	370
58 Ashland Avenue, Calumet-Sag Channel	277	265	259	243	268	244	270	261	261	265	299
59 Cicero Avenue, Calumet-Sag Channel	252	268	252	245	268	244	284	261	268	260	275
43 Route 83, Calumet-Sag Channel	243	252	265	243	263	247	278	259	255	262	282
Des Plaines River System											
90 Route 19, Poplar Creek	345	302	323	286	314	296	303	287	332	266	335
110 Springinsguth Road, West Branch DuPage River	307	356	285	298	329	311	339	308	348	ND	ND
89 Walnut Lane, West Branch DuPage River	283	289	263	268	258	249	265	237	260	222	256
64 Lake Street, West Branch DuPage River	ND	ND	314	263	271	239	256	241	283	222	264
111 Arlington Drive, West Branch DuPage River	254	278	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	264	291	212	264	292	266	267	286	319	241	297
80 Arlington Heights Road, Salt Creek	308	251	265	249	282	257	263	273	261	248	283
18 Devon Avenue, Salt Creek	264	259	276	246	280	258	267	272	262	241	280
24 Wolf Road, Salt Creek	315	282	289	280	291	269	265	277	290	244	308
109 Brookfield Avenue, Salt Creek	274	283	277	271	280	260	262	270	291	242	245
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	385
77 Elmhurst Road, Higgins Creek	256	211	244	203	239	171	212	233	292	185	250
78 Wille Road, Higgins Creek	279	336	300	317	306	283	277	278	285	252	301
12 Lake-Cook Road, Buffalo Creek	362	304	326	295	333	298	324	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	320	284	291	267	310	293	318	289	308	281	336
17 Oakton Street, Des Plaines River	319	286	282	261	300	278	299	289	314	275	328
19 Belmont Avenue, Des Plaines River	275	288	273	268	305	274	295	287	310	263	322
20 Roosevelt Road, Des Plaines River	307	287	272	262	305	273	292	283	307	257	323
22 Ogden Avenue, Des Plaines River	282	280	272	259	287	266	275	272	298	286	314
23 Willow Springs Road, Des Plaines River	285	284	264	261	293	268	274	284	299	260	305
29 Stephen Street, Des Plaines River	312	277	280	261	297	279	295	288	299	278	326
91 Material Service Road, Des Plaines River	288	278	284	267	293	282	302	293	305	277	321

ND = No Data.

TABLE AII-78: GROSS ALPHA RADIOACTIVITY MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (pCi/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	3.48	2.91	2.75	4.53	2.95	11.71	6.01	6.20	6.38	3.79	4.49
103 Golf Road, West Fork North Branch Chicago River	2.87	2.63	3.38	4.20	2.59	7.08	5.73	7.14	4.36	4.80	4.41
31 Lake-Cook Road, Middle Fork North Branch	2.48	2.24	3.42	2.76	2.78	5.25	4.94	5.34	4.74	4.53	3.82
104 Glenview Road, North Branch Chicago River	2.37	2.11	3.56	3.62	2.35	5.37	5.40	5.50	4.19	4.47	3.72
32 Lake-Cook Road, Skokie River	2.55	2.20	3.10	2.71	2.65	5.29	5.04	5.50	4.51	4.34	3.78
105 Frontage Road, Skokie River	2.23	2.30	3.48	3.32	2.28	5.13	4.82	5.03	4.26	3.87	3.79
34 Dempster Street, North Branch Chicago River	2.53	2.08	3.68	3.61	2.38	6.56	5.01	5.91	4.84	4.92	4.15
96 Albany Avenue, North Branch Chicago River	2.32	2.23	3.67	3.93	2.71	6.03	5.04	5.43	4.01	4.25	4.39
35 Central Street, North Shore Channel	1.94	1.36	2.05	1.62	1.36	3.85	3.07	3.30	3.00	3.43	3.40
112 Dempster Street, North Shore Channel	1.64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	1.69	1.72	2.67	2.57	1.60	4.29	3.56	4.07	3.23	3.67	3.64
36 Touhy Avenue, North Shore Channel	1.75	2.13	2.85	3.25	2.03	5.27	3.73	4.27	3.62	3.54	3.72
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
73 Diversey Parkway, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
46 Grand Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
74 Lake Shore Drive, Chicago River	1.72	1.79	2.37	1.64	1.27	4.29	3.09	3.23	3.43	3.14	3.27
100 Wells Street, Chicago River	1.64	1.95	2.23	2.57	1.73	4.27	3.41	3.61	3.44	3.41	3.45
39 Madison Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
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	1.74	2.33	3.08	4.73	2.08	5.40	3.84	4.17	3.87	3.67	3.70
41 Harlem Avenue, Chicago Sanitary & Ship Canal	1.89	2.17	3.41	2.96	2.26	6.13	3.88	4.27	3.93	3.49	3.66
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	1.86	1.95	3.43	3.79	2.44	4.89	4.08	4.53	4.00	3.62	3.83
Calumet River System											
49 Ewing Avenue, Calumet River	1.35	1.35	1.84	1.94	1.37	4.14	3.66	3.03	2.90	3.22	3.00
50 Burnham Avenue, Wolf Lake	1.46	1.55	1.95	1.81	1.41	4.16	3.44	3.33	2.94	3.12	2.95
55 130th Street, Calumet River	1.66	1.57	2.15	2.58	1.72	4.70	3.49	3.50	3.17	3.50	3.30
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
56 Indiana Avenue, Little Calumet River	1.63	1.52	2.28	2.82	1.93	5.08	3.65	3.56	3.43	3.76	3.57
76 Halsted Street, Little Calumet River	1.79	1.88	3.07	2.77	2.35	5.28	4.08	4.66	3.68	3.99	3.72
52 Wentworth Avenue, Little Calumet River	2.13	1.99	2.91	2.84	2.62	5.63	4.24	4.88	3.80	4.59	4.46
54 Joe Orr Road, Thorn Creek	3.13	2.49	3.91	4.56	3.98	7.27	6.25	8.99	6.72	4.00	8.21
97 170th Street, Thorn Creek	2.95	2.35	3.98	4.30	3.13	6.27	5.38	7.46	6.43	6.15	5.67
57 Ashland Avenue, Little Calumet River	2.48	2.50	3.64	3.88	2.69	5.46	5.09	6.19	4.35	4.73	4.68
58 Ashland Avenue, Calumet-Sag Channel	ND	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
43 Route 83, Calumet-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Des Plaines River System											
90 Route 19, Poplar Creek	2.40	2.04	3.01	3.04	2.49	5.25	5.66	5.19	4.76	3.92	4.37
110 Springinguth Road, West Branch DuPage River	2.39	2.54	2.55	3.90	3.26	6.14	7.04	6.48	5.09	ND	ND
89 Walnut Lane, West Branch DuPage River	1.94	2.18	2.97	3.29	2.38	4.82	4.98	4.77	4.32	3.78	4.07
64 Lake Street, West Branch DuPage River	ND	ND	4.93	3.05	2.44	4.85	5.10	5.06	4.51	3.69	4.18
111 Arlington Drive, West Branch DuPage River	2.01	2.35	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	2.35	2.77	3.23	3.34	2.90	5.39	5.27	6.27	5.20	4.65	4.23
80 Arlington Heights Road, Salt Creek	2.27	2.08	3.16	2.84	2.46	5.18	5.59	5.71	4.59	4.28	4.00
18 Devon Avenue, Salt Creek	2.06	2.10	3.37	2.75	2.44	5.17	5.51	5.85	4.59	4.28	3.97
24 Wolf Road, Salt Creek	2.39	2.30	3.50	3.41	2.66	5.45	5.00	4.81	4.52	4.32	4.79
109 Brookfield Avenue, Salt Creek	2.08	2.48	3.30	4.66	2.77	5.46	5.20	4.76	4.55	4.26	3.38
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.16
77 Elmhurst Road, Higgins Creek	2.44	2.54	2.64	2.37	2.76	5.20	6.74	7.77	5.90	4.54	6.04
78 Wille Road, Higgins Creek	2.26	2.18	2.59	3.50	2.38	5.28	4.78	4.79	4.19	3.98	4.43
12 Lake-Cook Road, Buffalo Creek	2.45	2.58	3.27	3.11	2.75	5.67	5.13	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	2.03	1.96	3.24	2.88	2.41	5.22	4.86	5.27	4.08	4.04	4.10
17 Oakton Street, Des Plaines River	2.14	2.17	2.71	2.50	2.49	5.35	4.97	5.30	4.27	4.08	4.50
19 Belmont Avenue, Des Plaines River	2.00	1.95	2.84	3.08	2.64	5.33	5.06	5.46	4.09	4.15	4.56
20 Roosevelt Road, Des Plaines River	2.11	2.10	4.18	2.30	2.43	5.36	5.29	5.02	4.43	4.15	4.92
22 Ogden Avenue, Des Plaines River	2.08	2.15	3.46	3.23	2.91	5.54	4.95	5.07	4.10	4.25	4.62
23 Willow Springs Road, Des Plaines River	2.11	2.44	3.65	3.10	2.47	5.25	5.06	4.93	4.21	4.19	4.17
29 Stephen Street, Des Plaines River	2.29	2.49	3.27	3.22	2.85	5.24	5.40	4.93	4.19	4.29	4.74
91 Material Service Road, Des Plaines River	1.98	2.42	3.48	3.43	3.50	5.11	4.84	5.70	4.72	4.19	4.13

ND = No Data.

**TABLE AII-79: GROSS BETA RADIOACTIVITY MEAN HISTORY
2002 THROUGH 2012**

Sampling Station (No. Name)	Annual Means (pCi/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	5.08	5.64	8.10	7.18	7.85	11.96	11.59	11.58	16.75	8.90	8.00
103 Golf Road, West Fork North Branch Chicago River	3.73	3.69	7.99	6.97	4.53	9.70	9.95	11.05	11.05	10.27	9.99
31 Lake-Cook Road, Middle Fork North Branch	2.30	2.62	5.51	5.56	6.34	6.66	7.40	7.15	7.41	7.37	6.64
104 Glenview Road, North Branch Chicago River	3.26	3.56	6.34	6.32	4.70	7.18	9.08	11.27	9.48	8.90	12.84
32 Lake-Cook Road, Skokie River	2.65	2.62	6.18	5.40	4.65	5.94	8.19	8.83	7.13	7.35	6.70
105 Frontage Road, Skokie River	3.66	4.24	7.12	6.50	4.67	8.18	9.65	10.79	9.60	9.93	8.46
34 Dempster Street, North Branch Chicago River	3.14	3.52	5.94	5.74	4.61	9.02	9.39	11.51	8.93	10.17	9.49
96 Albany Avenue, North Branch Chicago River	3.12	3.66	7.06	6.02	4.47	8.16	7.91	10.61	9.09	9.53	8.47
35 Central Street, North Shore Channel	1.74	1.71	4.87	5.08	1.92	4.89	4.50	4.28	4.48	4.82	6.79
112 Dempster Street, North Shore Channel	3.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	3.36	3.33	5.19	5.40	3.79	5.91	6.97	6.88	5.78	6.45	6.70
36 Touhy Avenue, North Shore Channel	3.25	4.39	6.36	6.29	4.64	7.70	7.91	7.88	8.29	7.70	7.94
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
73 Diversey Parkway, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
46 Grand Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
74 Lake Shore Drive, Chicago River	2.18	3.31	4.55	4.94	2.06	4.73	4.54	4.29	5.52	4.80	4.87
100 Wells Street, Chicago River	2.29	3.75	5.25	5.04	3.51	5.22	5.22	5.60	6.57	6.36	5.36
39 Madison Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
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	3.21	4.53	5.97	5.64	5.86	7.36	6.87	7.38	8.91	8.13	6.80
41 Harlem Avenue, Chicago Sanitary & Ship Canal	4.26	4.74	7.47	6.32	6.55	9.43	8.29	7.98	8.92	8.38	6.66
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	3.86	4.23	6.85	6.81	6.23	8.06	8.21	8.70	9.03	9.22	8.31
Calumet River System											
49 Ewing Avenue, Calumet River	1.57	1.62	4.38	4.72	2.69	5.42	5.39	4.99	4.77	3.99	4.31
50 Burnham Avenue, Wolf Lake	4.19	3.64	6.05	5.49	4.30	7.02	6.10	4.94	7.01	4.81	4.77
55 130th Street, Calumet River	2.69	2.97	4.79	5.66	4.14	7.24	6.50	6.14	6.79	6.10	5.72
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
56 Indiana Avenue, Little Calumet River	2.49	2.71	5.82	5.59	5.31	7.77	7.82	6.63	6.99	7.48	6.80
76 Halsted Street, Little Calumet River	3.15	3.66	6.34	6.66	6.83	8.74	8.96	9.11	8.41	9.54	9.00
52 Wentworth Avenue, Little Calumet River	4.11	3.55	7.19	5.99	6.96	10.56	10.37	10.90	12.00	12.91	12.46
54 Joe Orr Road, Thorn Creek	4.49	4.05	6.83	8.36	7.63	8.90	10.91	14.81	12.20	10.77	12.05
97 170th Street, Thorn Creek	4.68	4.71	7.91	8.02	7.64	10.69	10.72	13.04	11.68	12.14	12.41
57 Ashland Avenue, Little Calumet River	3.85	4.04	6.80	6.86	7.82	9.52	10.20	11.25	10.88	10.93	10.76
58 Ashland Avenue, Calumet-Sag Channel	ND	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
43 Route 83, Calumet-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Des Plaines River System											
90 Route 19, Poplar Creek	2.23	2.26	5.93	5.83	3.48	6.26	7.25	6.75	5.59	6.76	5.70
110 Springinsguth Road, West Branch DuPage River	2.88	2.81	4.53	5.60	4.87	7.41	8.04	8.52	8.22	ND	ND
89 Walnut Lane, West Branch DuPage River	4.77	5.46	9.15	9.31	7.04	9.37	9.90	10.62	9.17	10.50	10.82
64 Lake Street, West Branch DuPage River	ND	ND	9.39	8.23	7.51	9.31	10.36	10.94	10.71	10.56	10.72
111 Arlington Drive, West Branch DuPage River	5.88	5.16	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	1.94	3.06	4.79	5.91	4.27	7.55	7.71	8.35	8.15	8.41	8.09
80 Arlington Heights Road, Salt Creek	3.81	3.02	6.94	6.24	5.33	9.10	10.09	10.26	9.43	9.54	9.12
18 Devon Avenue, Salt Creek	4.21	3.54	6.89	6.61	5.24	9.40	9.35	11.03	9.86	10.54	9.77
24 Wolf Road, Salt Creek	3.99	4.30	6.63	7.12	6.85	9.29	11.12	11.39	9.45	10.43	10.71
109 Brookfield Avenue, Salt Creek	3.97	3.76	8.37	7.30	7.67	8.92	10.50	10.71	8.96	9.41	10.31
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.68
77 Elmhurst Road, Higgins Creek	2.58	3.00	4.78	4.99	3.74	6.99	8.79	11.23	8.33	9.76	8.82
78 Wille Road, Higgins Creek	5.42	4.44	6.42	7.56	7.43	11.79	12.65	15.45	13.34	13.15	15.24
12 Lake-Cook Road, Buffalo Creek	2.23	3.40	5.54	5.44	3.78	8.20	7.37	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	3.29	3.50	7.23	7.12	6.05	8.94	10.05	11.41	9.53	10.71	9.94
17 Oakton Street, Des Plaines River	2.97	3.41	5.94	6.18	5.05	8.40	9.12	10.16	9.23	10.61	9.39
19 Belmont Avenue, Des Plaines River	4.16	3.35	6.60	5.57	5.54	9.81	10.24	11.57	9.77	10.62	10.73
20 Roosevelt Road, Des Plaines River	3.41	3.55	6.24	6.23	6.16	9.70	9.69	10.91	8.99	10.23	10.38
22 Ogden Avenue, Des Plaines River	4.13	4.23	7.06	7.07	8.05	9.27	9.32	11.04	9.51	9.44	10.33
23 Willow Springs Road, Des Plaines River	4.13	3.97	6.11	6.19	7.96	8.01	9.51	10.68	9.37	9.32	10.28
29 Stephen Street, Des Plaines River	3.21	4.50	7.00	6.25	7.55	9.48	10.39	10.87	9.16	10.23	10.53
91 Material Service Road, Des Plaines River	4.15	3.65	8.06	7.02	6.48	9.94	9.65	12.34	9.48	10.75	9.88

ND = No Data.

TABLE AII-80: CHLOROPHYLL *a* MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means ($\mu\text{g/L}$)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	19.5	14.7	8.1	7.2	14.4	6.3	10.6	14.6	29.1	47.9	9.6
103 Golf Road, West Fork North Branch Chicago River	12.4	14.5	14.0	7.5	9.1	12.4	13.4	29.3	21.1	19.0	14.4
31 Lake-Cook Road, Middle Fork North Branch	3.0	8.2	5.0	5.1	10.6	7.7	12.0	8.0	6.7	11.1	11.6
104 Glenview Road, North Branch Chicago River	11.2	8.0	7.0	5.9	10.6	12.2	19.7	10.1	12.1	32.9	18.1
32 Lake-Cook Road, Skokie River	8.2	7.9	7.0	6.2	8.3	8.9	7.6	12.0	22.5	10.3	11.5
105 Frontage Road, Skokie River	16.5	10.5	10.1	9.7	18.4	18.1	32.9	15.6	20.4	21.5	21.5
34 Dempster Street, North Branch Chicago River	16.3	12.2	7.7	5.6	8.7	9.7	16.7	24.2	15.8	16.7	16.2
96 Albany Avenue, North Branch Chicago River	9.1	9.5	8.8	7.1	7.8	9.0	14.0	35.6	21.5	18.1	11.7
35 Central Street, North Shore Channel	29.6	15.3	17.7	9.9	6.3	6.2	4.5	3.6	2.9	8.1	12.5
112 Dempster Street, North Shore Channel	12.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	18.7	4.6	16.8	11.3	12.6	16.2	22.6	8.1	12.5	4.8	17.0
36 Touhy Avenue, North Shore Channel	3.0	1.5	2.1	2.0	2.1	1.3	2.0	1.6	1.4	1.2	1.5
101 Foster Avenue, North Shore Channel	1.8	5.1	1.5	1.9	1.4	1.1	1.6	2.2	1.9	4.3	1.9
37 Wilson Avenue, North Branch Chicago River	2.9	2.8	2.5	2.8	3.2	2.9	4.7	2.8	4.0	4.9	4.9
73 Diversey Parkway, North Branch Chicago River	4.0	3.5	2.8	2.2	3.6	2.4	4.3	2.6	3.8	4.7	3.9
46 Grand Avenue, North Branch Chicago River	7.7	4.3	2.6	2.7	3.5	4.9	6.1	4.3	5.8	5.7	3.6
74 Lake Shore Drive, Chicago River	1.5	1.5	1.3	1.3	1.6	2.2	1.4	3.3	4.7	3.2	2.7
100 Wells Street, Chicago River	4.2	2.2	1.9	1.6	2.5	2.2	2.5	2.8	3.0	3.7	3.0
39 Madison Street, South Branch Chicago River	4.9	3.4	3.8	1.9	3.5	4.0	4.4	4.2	4.1	5.2	4.6
108 Loomis Street, South Branch Chicago River	4.5	3.7	2.3	2.0	3.0	3.7	6.0	5.4	7.2	6.1	3.4
99 Archer Avenue, South Fork South Branch Chicago River	13.8	28.6	13.3	8.9	10.5	7.4	5.7	21.5	27.4	9.5	9.2
40 Damen Avenue, Chicago Sanitary & Ship Canal	6.6	3.8	5.8	7.7	3.4	4.5	5.4	14.1	7.9	ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2
75 Cicero Avenue, Chicago Sanitary & Ship Canal	6.9	4.4	4.7	3.0	4.1	5.4	4.7	6.5	6.0	6.3	5.0
41 Harlem Avenue, Chicago Sanitary & Ship Canal	5.7	2.7	4.0	1.9	2.3	2.6	2.8	3.6	3.4	2.7	2.4
42 Route 83, Chicago Sanitary & Ship Canal	9.8	3.4	5.5	2.9	4.1	5.2	4.1	6.4	4.2	4.4	4.2
48 Stephen Street, Chicago Sanitary & Ship Canal	6.4	3.9	4.7	5.2	5.6	6.1	3.7	5.3	3.5	7.2	3.9
92 Lockport Forebay, Chicago Sanitary & Ship Canal	4.4	4.3	4.7	5.6	5.4	5.5	4.0	5.2	3.9	7.2	5.3
Calumet River System											
49 Ewing Avenue, Calumet River	4.9	1.1	0.9	2.1	1.7	1.1	1.4	0.9	1.4	1.6	1.7
50 Burnham Avenue, Wolf Lake	6.9	6.4	4.5	5.4	6.7	6.2	4.7	6.8	4.8	8.7	3.8
55 130th Street, Calumet River	2.6	3.0	3.7	6.3	4.6	4.0	3.3	2.9	4.0	7.1	9.9
86 Burnham Avenue, Grand Calumet River	33.3	17.4	75.6	30.8	142.5	101.0	27.4	57.7	61.9	38.1	31.1
56 Indiana Avenue, Little Calumet River	10.9	4.0	14.1	27.0	20.6	14.0	25.8	16.4	7.2	24.4	26.4
76 Halsted Street, Little Calumet River	9.0	3.1	4.1	12.6	7.8	6.6	8.1	7.1	3.8	10.3	9.1
52 Wentworth Avenue, Little Calumet River	4.4	8.3	8.2	7.7	5.5	13.0	4.3	6.0	5.5	9.0	5.7
54 Joe Orr Road, Thorn Creek	3.4	3.7	4.7	4.8	4.1	3.0	3.7	12.4	6.7	8.5	9.2
97 170th Street, Thorn Creek	6.7	8.3	11.2	9.4	8.5	9.2	5.3	8.2	8.8	11.5	10.4
57 Ashland Avenue, Little Calumet River	10.8	7.9	8.0	10.5	8.2	7.1	4.7	9.2	7.5	10.0	11.2
58 Ashland Avenue, Calumet-Sag Channel	9.4	5.4	7.0	11.3	8.0	7.2	9.5	10.4	4.8	15.3	11.5
59 Cicero Avenue, Calumet-Sag Channel	4.6	3.5	4.0	12.4	7.9	7.8	9.0	7.5	5.2	20.3	11.8
43 Route 83, Calumet-Sag Channel	6.9	4.5	5.2	9.0	10.0	6.5	6.3	8.8	4.4	24.5	15.8
Des Plaines River System											
90 Route 19, Poplar Creek	8.8	7.8	10.0	9.0	8.9	10.9	13.9	12.5	8.1	14.6	15.9
110 Springinsguth Road, West Branch DuPage River	27.4	13.7	17.2	14.0	14.3	21.4	14.5	59.8	10.6	ND	ND
89 Walnut Lane, West Branch DuPage River	6.4	7.0	4.8	5.9	6.6	7.3	5.4	9.1	3.7	9.0	5.9
64 Lake Street, West Branch DuPage River	ND	ND	15.9	18.8	19.4	23.2	20.2	24.6	15.4	29.5	24.9
111 Arlington Drive, West Branch DuPage River	15.5	13.7	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	20.2	22.5	26.3	21.3	33.9	39.0	33.9	31.0	36.4	37.4	30.6
80 Arlington Heights Road, Salt Creek	9.2	15.2	15.6	13.6	11.7	13.8	16.5	12.4	11.2	18.6	12.9
18 Devon Avenue, Salt Creek	8.3	11.7	13.6	15.0	13.6	14.3	17.6	14.8	15.7	19.5	16.2
24 Wolf Road, Salt Creek	6.9	5.5	8.6	8.0	8.9	7.4	12.0	11.0	6.4	12.9	13.7
109 Brookfield Avenue, Salt Creek	4.5	6.9	8.2	9.5	6.1	7.3	16.1	11.3	9.9	17.9	12.8
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22.8
77 Elmhurst Road, Higgins Creek	12.5	8.8	28.3	8.4	25.7	14.7	11.9	14.1	8.5	11.4	14.3
78 Wille Road, Higgins Creek	2.2	2.3	2.6	2.2	2.4	3.8	3.0	2.5	2.6	4.3	2.8
12 Lake-Cook Road, Buffalo Creek	11.1	16.8	14.1	18.6	19.7	23.2	20.2	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	7.6	14.4	12.3	10.7	18.8	13.7	16.9	27.5	21.0	34.1	27.3
17 Oakton Street, Des Plaines River	6.7	26.9	14.2	19.2	35.1	12.3	13.0	34.3	18.3	42.2	20.5
19 Belmont Avenue, Des Plaines River	4.4	20.1	13.7	13.7	22.0	6.1	12.3	23.2	13.0	35.3	11.2
20 Roosevelt Road, Des Plaines River	6.3	23.8	12.6	20.1	23.3	6.7	11.4	23.4	14.2	28.7	10.0
22 Ogden Avenue, Des Plaines River	19.1	20.0	11.5	19.7	20.7	6.1	15.8	19.1	14.1	45.5	12.9
23 Willow Springs Road, Des Plaines River	6.0	15.8	12.6	27.5	22.5	5.1	13.5	29.0	15.9	33.0	20.6
29 Stephen Street, Des Plaines River	26.0	14.7	16.9	29.9	22.4	9.5	17.5	49.0	25.5	49.1	34.5
91 Material Service Road, Des Plaines River	10.6	16.3	26.3	24.1	26.3	11.9	23.8	34.6	40.4	56.2	35.3

ND = No Data.

TABLE AII-81: BENZENE MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means ($\mu\text{g/L}$)											
	12	11	10	09	08	07	06	05	04	03	02	
Chicago River System												
106 Dundee Road, West Fork North Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
103 Golf Road, West Fork North Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
31 Lake-Cook Road, Middle Fork North Branch	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
104 Glenview Road, North Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
32 Lake-Cook Road, Skokie River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
105 Frontage Road, Skokie River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
34 Dempster Street, North Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
96 Albany Avenue, North Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
35 Central Street, North Shore Channel	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
36 Touhy Avenue, North Shore Channel	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
101 Foster Avenue, North Shore Channel	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
37 Wilson Avenue, North Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
73 Diversey Parkway, North Branch Chicago River	2.000	2.000	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	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
74 Lake Shore Drive, Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
100 Wells Street, Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
39 Madison Street, South Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
108 Loomis Street, South Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
99 Archer Avenue, South Fork South Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	2.000	2.000	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	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
Calumet River System												
49 Ewing Avenue, Calumet River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
50 Burnham Avenue, Wolf Lake	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
55 130th Street, Calumet River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
86 Burnham Avenue, Grand Calumet River	2.500	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
56 Indiana Avenue, Little Calumet River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
76 Halsted Street, Little Calumet River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
52 Wentworth Avenue, Little Calumet River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
54 Joe Orr Road, Thorn Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND
97 170th Street, Thorn Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
57 Ashland Avenue, Little Calumet River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
58 Ashland Avenue, Calumet-Sag Channel	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
59 Cicero Avenue, Calumet-Sag Channel	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
43 Route 83, Calumet-Sag Channel	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
Des Plaines River System												
90 Route 19, Poplar Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
110 Springinsguth Road, West Branch DuPage River	ND	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND
89 Walnut Lane, West Branch DuPage River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
111 Arlington Drive, West Branch DuPage River	ND	2.000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	2.000	2.000	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	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
18 Devon Avenue, Salt Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
24 Wolf Road, Salt Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
109 Brookfield Avenue, Salt Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND	ND
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
78 Wille Road, Higgins Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
12 Lake-Cook Road, Buffalo Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
17 Oakton Street, Des Plaines River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
19 Belmont Avenue, Des Plaines River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
20 Roosevelt Road, Des Plaines River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
22 Ogden Avenue, Des Plaines River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
23 Willow Springs Road, Des Plaines River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
29 Stephen Street, Des Plaines River	2.000	2.000	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	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND

ND = No Data.

TABLE AII-82: ETHYLBENZENE MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means ($\mu\text{g/L}$)											
	12	11	10	09	08	07	06	05	04	03	02	
Chicago River System												
106 Dundee Road, West Fork North Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
103 Golf Road, West Fork North Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
31 Lake-Cook Road, Middle Fork North Branch	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
104 Glenview Road, North Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
32 Lake-Cook Road, Skokie River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
105 Frontage Road, Skokie River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
34 Dempster Street, North Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
96 Albany Avenue, North Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
35 Central Street, North Shore Channel	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
36 Touhy Avenue, North Shore Channel	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
101 Foster Avenue, North Shore Channel	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
37 Wilson Avenue, North Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
73 Diversey Parkway, North Branch Chicago River	2.000	2.000	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	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
74 Lake Shore Drive, Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
100 Wells Street, Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
39 Madison Street, South Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
108 Loomis Street, South Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
99 Archer Avenue, South Fork South Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	2.000	2.000	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	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
Calumet River System												
49 Ewing Avenue, Calumet River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
50 Burnham Avenue, Wolf Lake	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
55 130th Street, Calumet River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
86 Burnham Avenue, Grand Calumet River	2.667	2.120	0.000	0.000	0.400	0.000	0.000	0.000	0.000	0.000	0.000	ND
56 Indiana Avenue, Little Calumet River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
76 Halsted Street, Little Calumet River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
52 Wentworth Avenue, Little Calumet River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
54 Joe Orr Road, Thorn Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND
97 170th Street, Thorn Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
57 Ashland Avenue, Little Calumet River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
58 Ashland Avenue, Calumet-Sag Channel	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
59 Cicero Avenue, Calumet-Sag Channel	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
43 Route 83, Calumet-Sag Channel	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
Des Plaines River System												
90 Route 19, Poplar Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
110 Springinsguth Road, West Branch DuPage River	ND	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND
89 Walnut Lane, West Branch DuPage River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
111 Arlington Drive, West Branch DuPage River	ND	2.000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	2.000	2.000	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	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
18 Devon Avenue, Salt Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
24 Wolf Road, Salt Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
109 Brookfield Avenue, Salt Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND	ND	ND
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
78 Wille Road, Higgins Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
12 Lake-Cook Road, Buffalo Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
17 Oakton Street, Des Plaines River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
19 Belmont Avenue, Des Plaines River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
20 Roosevelt Road, Des Plaines River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
22 Ogden Avenue, Des Plaines River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
23 Willow Springs Road, Des Plaines River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
29 Stephen Street, Des Plaines River	2.000	2.000	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	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND

ND = No Data.

TABLE AII-83: TOLUENE MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means ($\mu\text{g/L}$)											
	12	11	10	09	08	07	06	05	04	03	02	
Chicago River System												
106 Dundee Road, West Fork North Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
103 Golf Road, West Fork North Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
31 Lake-Cook Road, Middle Fork North Branch	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
104 Glenview Road, North Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
32 Lake-Cook Road, Skokie River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
105 Frontage Road, Skokie River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
34 Dempster Street, North Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
96 Albany Avenue, North Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
35 Central Street, North Shore Channel	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	2.000	2.000	0.000	0.000	0.000	1.267	0.000	0.000	0.500	0.000	0.000	ND
36 Touhy Avenue, North Shore Channel	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
101 Foster Avenue, North Shore Channel	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.333	0.667	0.000	0.000	ND
37 Wilson Avenue, North Branch Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.400	0.000	0.000	0.000	ND
73 Diversey Parkway, North Branch Chicago River	2.000	2.183	0.000	0.333	0.000	1.067	0.000	2.200	1.000	ND	ND	ND
46 Grand Avenue, North Branch Chicago River	2.000	2.000	0.000	0.000	0.967	0.640	0.000	0.400	0.000	0.000	0.000	ND
74 Lake Shore Drive, Chicago River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
100 Wells Street, Chicago River	2.000	2.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
39 Madison Street, South Branch Chicago River	2.000	3.033	0.000	0.000	0.383	0.625	0.000	0.333	0.000	0.000	0.000	ND
108 Loomis Street, South Branch Chicago River	2.000	2.000	0.000	0.000	0.383	0.000	0.000	0.000	0.000	0.000	0.000	ND
99 Archer Avenue, South Fork South Branch Chicago River	5.500	2.000	1.200	0.000	0.000	0.000	0.000	0.800	0.000	0.000	0.000	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	7.250	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	2.000	2.000	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	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
Calumet River System												
49 Ewing Avenue, Calumet River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
50 Burnham Avenue, Wolf Lake	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
55 130th Street, Calumet River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
86 Burnham Avenue, Grand Calumet River	2.333	2.460	0.000	1.033	0.000	0.000	0.000	0.400	0.000	0.000	0.000	ND
56 Indiana Avenue, Little Calumet River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
76 Halsted Street, Little Calumet River	2.000	2.000	0.000	0.483	0.433	0.000	0.000	0.667	0.000	0.000	0.000	ND
52 Wentworth Avenue, Little Calumet River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
54 Joe Orr Road, Thorn Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND
97 170th Street, Thorn Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
57 Ashland Avenue, Little Calumet River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.400	0.000	0.000	0.000	ND
58 Ashland Avenue, Calumet-Sag Channel	2.000	2.000	0.000	0.467	0.000	0.000	0.000	0.857	0.000	0.000	0.000	ND
59 Cicero Avenue, Calumet-Sag Channel	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
43 Route 83, Calumet-Sag Channel	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
Des Plaines River System												
90 Route 19, Poplar Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
110 Springinsguth Road, West Branch DuPage River	ND	2.000	0.000	0.000	0.000	0.625	0.000	2.200	0.000	ND	ND	ND
89 Walnut Lane, West Branch DuPage River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
111 Arlington Drive, West Branch DuPage River	ND	2.000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	2.000	2.000	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	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
18 Devon Avenue, Salt Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
24 Wolf Road, Salt Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
109 Brookfield Avenue, Salt Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND	ND	ND
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
78 Wille Road, Higgins Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
12 Lake-Cook Road, Buffalo Creek	2.000	2.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
17 Oakton Street, Des Plaines River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
19 Belmont Avenue, Des Plaines River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
20 Roosevelt Road, Des Plaines River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
22 Ogden Avenue, Des Plaines River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
23 Willow Springs Road, Des Plaines River	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
29 Stephen Street, Des Plaines River	2.000	2.000	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	2.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND

ND = No Data.

TABLE AII-84: XYLENE MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means ($\mu\text{g/L}$)											
	12	11	10	09	08	07	06	05	04	03	02	
Chicago River System												
106 Dundee Road, West Fork North Branch Chicago River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
103 Golf Road, West Fork North Branch Chicago River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
31 Lake-Cook Road, Middle Fork North Branch	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
104 Glenview Road, North Branch Chicago River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
32 Lake-Cook Road, Skokie River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
105 Frontage Road, Skokie River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
34 Dempster Street, North Branch Chicago River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
96 Albany Avenue, North Branch Chicago River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
35 Central Street, North Shore Channel	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
36 Touhy Avenue, North Shore Channel	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
101 Foster Avenue, North Shore Channel	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
37 Wilson Avenue, North Branch Chicago River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
73 Diversey Parkway, North Branch Chicago River	3.000	3.000	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	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
74 Lake Shore Drive, Chicago River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
100 Wells Street, Chicago River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
39 Madison Street, South Branch Chicago River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
108 Loomis Street, South Branch Chicago River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
99 Archer Avenue, South Fork South Branch Chicago River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	3.000	3.000	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	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
Calumet River System												
49 Ewing Avenue, Calumet River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
50 Burnham Avenue, Wolf Lake	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
55 130th Street, Calumet River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
86 Burnham Avenue, Grand Calumet River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
56 Indiana Avenue, Little Calumet River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
76 Halsted Street, Little Calumet River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
52 Wentworth Avenue, Little Calumet River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
54 Joe Orr Road, Thorn Creek	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND
97 170th Street, Thorn Creek	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
57 Ashland Avenue, Little Calumet River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
58 Ashland Avenue, Calumet-Sag Channel	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
59 Cicero Avenue, Calumet-Sag Channel	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
43 Route 83, Calumet-Sag Channel	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
Des Plaines River System												
90 Route 19, Poplar Creek	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
110 Springinsguth Road, West Branch DuPage River	ND	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND
89 Walnut Lane, West Branch DuPage River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
111 Arlington Drive, West Branch DuPage River	ND	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	3.000	3.000	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	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
18 Devon Avenue, Salt Creek	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
24 Wolf Road, Salt Creek	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
109 Brookfield Avenue, Salt Creek	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND	ND
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
78 Wille Road, Higgins Creek	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
12 Lake-Cook Road, Buffalo Creek	3.000	3.000	0.000	0.000	0.000	0.000	0.000	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
17 Oakton Street, Des Plaines River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
19 Belmont Avenue, Des Plaines River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
20 Roosevelt Road, Des Plaines River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
22 Ogden Avenue, Des Plaines River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
23 Willow Springs Road, Des Plaines River	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
29 Stephen Street, Des Plaines River	3.000	3.000	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	3.000	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND

ND = No Data.

TABLE AII-85: META AND/OR PARA XYLENES MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means ($\mu\text{g/L}$)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
103 Golf Road, West Fork North Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
31 Lake-Cook Road, Middle Fork North Branch	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
104 Glenview Road, North Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
32 Lake-Cook Road, Skokie River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
105 Frontage Road, Skokie River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
34 Dempster Street, North Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
96 Albany Avenue, North Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
36 Touhy Avenue, North Shore Channel	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
101 Foster Avenue, North Shore Channel	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
37 Wilson Avenue, North Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
73 Diversey Parkway, North Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
46 Grand Avenue, North Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
74 Lake Shore Drive, Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
100 Wells Street, Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
39 Madison Street, South Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
108 Loomis Street, South Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
99 Archer Avenue, South Fork South Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	3.000	3.000	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	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
42 Route 83, Chicago Sanitary & Ship Canal	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calumet River System											
49 Ewing Avenue, Calumet River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
50 Burnham Avenue, Wolf Lake	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
55 130th Street, Calumet River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
56 Indiana Avenue, Little Calumet River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Calumet River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
52 Wentworth Avenue, Little Calumet River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
97 170th Street, Thorn Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
57 Ashland Avenue, Little Calumet River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
58 Ashland Avenue, Calumet-Sag Channel	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
59 Cicero Avenue, Calumet-Sag Channel	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
43 Route 83, Calumet-Sag Channel	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
Des Plaines River System											
90 Route 19, Poplar Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
110 Springinsguth Road, West Branch DuPage River	ND	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
89 Walnut Lane, West Branch DuPage River	3.000	3.000	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
111 Arlington Drive, West Branch DuPage River	ND	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
80 Arlington Heights Road, Salt Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
18 Devon Avenue, Salt Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
24 Wolf Road, Salt Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
109 Brookfield Avenue, Salt Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
78 Wille Road, Higgins Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
12 Lake-Cook Road, Buffalo Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
17 Oakton Street, Des Plaines River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
19 Belmont Avenue, Des Plaines River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
20 Roosevelt Road, Des Plaines River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
22 Ogden Avenue, Des Plaines River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
23 Willow Springs Road, Des Plaines River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
29 Stephen Street, Des Plaines River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
91 Material Service Road, Des Plaines River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No Data.

TABLE AII-86: ORTHO XYLENE MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means ($\mu\text{g/L}$)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
103 Golf Road, West Fork North Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
31 Lake-Cook Road, Middle Fork North Branch	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
104 Glenview Road, North Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
32 Lake-Cook Road, Skokie River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
105 Frontage Road, Skokie River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
34 Dempster Street, North Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
96 Albany Avenue, North Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
36 Touhy Avenue, North Shore Channel	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
101 Foster Avenue, North Shore Channel	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
37 Wilson Avenue, North Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
73 Diversey Parkway, North Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
46 Grand Avenue, North Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
74 Lake Shore Drive, Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
100 Wells Street, Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
39 Madison Street, South Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
108 Loomis Street, South Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
99 Archer Avenue, South Fork South Branch Chicago River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	3.000	3.000	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	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
42 Route 83, Chicago Sanitary & Ship Canal	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calumet River System											
49 Ewing Avenue, Calumet River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
50 Burnham Avenue, Wolf Lake	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
55 130th Street, Calumet River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
56 Indiana Avenue, Little Calumet River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Calumet River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
52 Wentworth Avenue, Little Calumet River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
97 170th Street, Thorn Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
57 Ashland Avenue, Little Calumet River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
58 Ashland Avenue, Calumet-Sag Channel	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
59 Cicero Avenue, Calumet-Sag Channel	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
43 Route 83, Calumet-Sag Channel	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
Des Plaines River System											
90 Route 19, Poplar Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
110 Springinguth Road, West Branch DuPage River	ND	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
89 Walnut Lane, West Branch DuPage River	3.000	3.000	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
111 Arlington Drive, West Branch DuPage River	ND	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
80 Arlington Heights Road, Salt Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
18 Devon Avenue, Salt Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
24 Wolf Road, Salt Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
109 Brookfield Avenue, Salt Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
78 Wille Road, Higgins Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
12 Lake-Cook Road, Buffalo Creek	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
17 Oakton Street, Des Plaines River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
19 Belmont Avenue, Des Plaines River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
20 Roosevelt Road, Des Plaines River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
22 Ogden Avenue, Des Plaines River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
23 Willow Springs Road, Des Plaines River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
29 Stephen Street, Des Plaines River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
91 Material Service Road, Des Plaines River	3.000	3.000	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No Data.

TABLE AII-87: TOTAL SILVER MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001
103 Golf Road, West Fork North Branch Chicago River	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.003
31 Lake-Cook Road, Middle Fork North Branch	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
104 Glenview Road, North Branch Chicago River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.002
32 Lake-Cook Road, Skokie River	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002
105 Frontage Road, Skokie River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
34 Dempster Street, North Branch Chicago River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
96 Albany Avenue, North Branch Chicago River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
35 Central Street, North Shore Channel	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
112 Dempster Street, North Shore Channel	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000
36 Touhy Avenue, North Shore Channel	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002
101 Foster Avenue, North Shore Channel	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001
37 Wilson Avenue, North Branch Chicago River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
73 Diversey Parkway, North Branch Chicago River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
46 Grand Avenue, North Branch Chicago River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.001
74 Lake Shore Drive, Chicago River	0.001	0.004	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
100 Wells Street, Chicago River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.003
39 Madison Street, South Branch Chicago River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
108 Loomis Street, South Branch Chicago River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.003
99 Archer Avenue, South Fork South Branch Chicago River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.003
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002
42 Route 83, Chicago Sanitary & Ship Canal	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
48 Stephen Street, Chicago Sanitary & Ship Canal	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
Calumet River System											
49 Ewing Avenue, Calumet River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002
50 Burnham Avenue, Wolf Lake	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
55 130th Street, Calumet River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
86 Burnham Avenue, Grand Calumet River	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
56 Indiana Avenue, Little Calumet River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
76 Halsted Street, Little Calumet River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.003
52 Wentworth Avenue, Little Calumet River	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
54 Joe Orr Road, Thorn Creek	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.003
97 170th Street, Thorn Creek	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.003
57 Ashland Avenue, Little Calumet River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
58 Ashland Avenue, Calumet-Sag Channel	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
59 Cicero Avenue, Calumet-Sag Channel	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001
43 Route 83, Calumet-Sag Channel	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
Des Plaines River System											
90 Route 19, Poplar Creek	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
110 Springinguth Road, West Branch DuPage River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND
89 Walnut Lane, West Branch DuPage River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
111 Arlington Drive, West Branch DuPage River	0.001	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
80 Arlington Heights Road, Salt Creek	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
18 Devon Avenue, Salt Creek	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
24 Wolf Road, Salt Creek	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
109 Brookfield Avenue, Salt Creek	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000
77 Elmhurst Road, Higgins Creek	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
78 Wille Road, Higgins Creek	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.002
12 Lake-Cook Road, Buffalo Creek	0.002	0.004	0.000	0.000	0.000	0.000	0.000	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
17 Oakton Street, Des Plaines River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19 Belmont Avenue, Des Plaines River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
20 Roosevelt Road, Des Plaines River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22 Ogden Avenue, Des Plaines River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
23 Willow Springs Road, Des Plaines River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
29 Stephen Street, Des Plaines River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
91 Material Service Road, Des Plaines River	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000

ND = No Data.

TABLE AII-88: TOTAL ARSENIC MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.003
103 Golf Road, West Fork North Branch Chicago River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000
31 Lake-Cook Road, Middle Fork North Branch	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000
104 Glenview Road, North Branch Chicago River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.003
32 Lake-Cook Road, Skokie River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.004
105 Frontage Road, Skokie River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.002
34 Dempster Street, North Branch Chicago River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96 Albany Avenue, North Branch Chicago River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000
35 Central Street, North Shore Channel	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.002
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
36 Touhy Avenue, North Shore Channel	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
101 Foster Avenue, North Shore Channel	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37 Wilson Avenue, North Branch Chicago River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
73 Diversey Parkway, North Branch Chicago River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
46 Grand Avenue, North Branch Chicago River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.000
74 Lake Shore Drive, Chicago River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
100 Wells Street, Chicago River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39 Madison Street, South Branch Chicago River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
108 Loomis Street, South Branch Chicago River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
99 Archer Avenue, South Fork South Branch Chicago River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005
42 Route 83, Chicago Sanitary & Ship Canal	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48 Stephen Street, Chicago Sanitary & Ship Canal	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005
Calumet River System											
49 Ewing Avenue, Calumet River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
50 Burnham Avenue, Wolf Lake	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.006
55 130th Street, Calumet River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008
86 Burnham Avenue, Grand Calumet River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
56 Indiana Avenue, Little Calumet River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006
76 Halsted Street, Little Calumet River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.010
52 Wentworth Avenue, Little Calumet River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54 Joe Orr Road, Thorn Creek	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.017
97 170th Street, Thorn Creek	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.010
57 Ashland Avenue, Little Calumet River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
58 Ashland Avenue, Calumet-Sag Channel	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.004
59 Cicero Avenue, Calumet-Sag Channel	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009
43 Route 83, Calumet-Sag Channel	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005
Des Plaines River System											
90 Route 19, Poplar Creek	0.050	0.050	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.003
110 Springinsguth Road, West Branch DuPage River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.001	0.000	ND	ND
89 Walnut Lane, West Branch DuPage River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.002
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.004
111 Arlington Drive, West Branch DuPage River	0.050	0.050	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000
80 Arlington Heights Road, Salt Creek	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
18 Devon Avenue, Salt Creek	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
24 Wolf Road, Salt Creek	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.007
109 Brookfield Avenue, Salt Creek	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000
77 Elmhurst Road, Higgins Creek	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000
78 Wille Road, Higgins Creek	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.002
12 Lake-Cook Road, Buffalo Creek	0.050	0.050	0.000	0.000	0.545	0.000	0.001	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.008
17 Oakton Street, Des Plaines River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.005
19 Belmont Avenue, Des Plaines River	0.050	0.050	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.004
20 Roosevelt Road, Des Plaines River	0.050	0.050	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000
22 Ogden Avenue, Des Plaines River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.002
23 Willow Springs Road, Des Plaines River	0.050	0.050	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.003
29 Stephen Street, Des Plaines River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.004
91 Material Service Road, Des Plaines River	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.002	0.001	0.000	0.003

ND = No Data.

TABLE AII-89: TOTAL BARIUM MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.072	0.079	0.064	0.060	0.063	0.062	0.056	0.051	0.069	0.048	0.054
103 Golf Road, West Fork North Branch Chicago River	0.056	0.055	0.054	0.048	0.048	0.052	0.052	0.055	0.048	0.051	0.051
31 Lake-Cook Road, Middle Fork North Branch	0.039	0.037	0.039	0.036	0.042	0.041	0.045	0.042	0.040	0.045	0.045
104 Glenview Road, North Branch Chicago River	0.034	0.036	0.033	0.032	0.037	0.034	0.037	0.032	0.034	0.038	0.035
32 Lake-Cook Road, Skokie River	0.046	0.043	0.042	0.038	0.042	0.048	0.043	0.041	0.046	0.045	0.047
105 Frontage Road, Skokie River	0.032	0.031	0.030	0.030	0.035	0.032	0.030	0.030	0.033	0.029	0.032
34 Dempster Street, North Branch Chicago River	0.046	0.039	0.040	0.035	0.039	0.038	0.040	0.041	0.040	0.039	0.040
96 Albany Avenue, North Branch Chicago River	0.036	0.041	0.038	0.037	0.042	0.039	0.041	0.040	0.037	0.039	0.043
35 Central Street, North Shore Channel	0.029	0.024	0.023	0.021	0.024	0.023	0.022	0.025	0.023	0.024	0.030
112 Dempster Street, North Shore Channel	0.030	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.027	0.026	0.026	0.023	0.025	0.025	0.023	0.025	0.023	0.026	0.025
36 Touhy Avenue, North Shore Channel	0.023	0.026	0.022	0.026	0.026	0.024	0.021	0.022	0.023	0.020	0.024
101 Foster Avenue, North Shore Channel	0.025	0.025	0.023	0.025	0.027	0.024	0.021	0.022	0.023	0.021	0.024
37 Wilson Avenue, North Branch Chicago River	0.027	0.029	0.028	0.027	0.030	0.027	0.025	0.024	0.026	0.024	0.028
73 Diversey Parkway, North Branch Chicago River	0.024	0.028	0.026	0.027	0.030	0.026	0.025	0.024	0.026	0.027	0.029
46 Grand Avenue, North Branch Chicago River	0.028	0.028	0.026	0.027	0.030	0.028	0.026	0.025	0.028	0.024	0.028
74 Lake Shore Drive, Chicago River	0.026	0.026	0.023	0.022	0.023	0.024	0.022	0.023	0.025	0.023	0.025
100 Wells Street, Chicago River	0.025	0.026	0.023	0.024	0.026	0.024	0.023	0.023	0.024	0.023	0.027
39 Madison Street, South Branch Chicago River	0.029	0.030	0.026	0.027	0.028	0.027	0.025	0.024	0.024	0.023	0.027
108 Loomis Street, South Branch Chicago River	0.025	0.028	0.026	0.027	0.030	0.028	0.026	0.025	0.025	0.024	0.027
99 Archer Avenue, South Fork South Branch Chicago River	0.026	0.029	0.026	0.026	0.030	0.025	0.025	0.025	0.025	0.023	0.029
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.029	0.028	0.027	0.027	0.029	0.028	0.027	0.025	0.025	0.025	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.029
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.024	0.030	0.026	0.027	0.030	0.027	0.026	0.025	0.026	0.024	0.029
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.020	0.025	0.022	0.023	0.024	0.024	0.021	0.020	0.020	0.019	0.023
42 Route 83, Chicago Sanitary & Ship Canal	0.020	0.022	0.021	0.022	0.024	0.022	0.020	0.020	0.020	0.021	0.023
48 Stephen Street, Chicago Sanitary & Ship Canal	0.022	0.025	0.023	0.023	0.026	0.025	0.023	0.023	0.023	0.023	0.024
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.020	0.024	0.023	0.024	0.026	0.023	0.023	0.023	0.024	0.022	0.026
Calumet River System											
49 Ewing Avenue, Calumet River	0.023	0.024	0.022	0.022	0.022	0.023	0.022	0.022	0.023	0.024	0.026
50 Burnham Avenue, Wolf Lake	0.045	0.036	0.035	0.034	0.034	0.036	0.028	0.033	0.032	0.028	0.029
55 130th Street, Calumet River	0.032	0.030	0.028	0.029	0.030	0.032	0.031	0.030	0.030	0.031	0.035
86 Burnham Avenue, Grand Calumet River	0.034	0.033	0.037	0.028	0.031	0.034	0.029	0.043	0.027	0.031	0.029
56 Indiana Avenue, Little Calumet River	0.028	0.031	0.029	0.033	0.034	0.033	0.031	0.030	0.030	0.030	0.037
76 Halsted Street, Little Calumet River	0.021	0.025	0.021	0.025	0.027	0.024	0.022	0.022	0.022	0.020	0.024
52 Wentworth Avenue, Little Calumet River	0.039	0.043	0.044	0.039	0.040	0.039	0.043	0.037	0.042	0.043	0.045
54 Joe Orr Road, Thorn Creek	0.025	0.032	0.035	0.029	0.031	0.028	0.031	0.042	0.034	0.030	0.030
97 170th Street, Thorn Creek	0.046	0.043	0.041	0.037	0.038	0.035	0.041	0.042	0.042	0.038	0.041
57 Ashland Avenue, Little Calumet River	0.034	0.042	0.039	0.037	0.038	0.036	0.042	0.040	0.043	0.039	0.040
58 Ashland Avenue, Calumet-Sag Channel	0.025	0.030	0.029	0.027	0.026	0.026	0.024	0.026	0.025	0.029	0.029
59 Cicero Avenue, Calumet-Sag Channel	0.023	0.029	0.026	0.027	0.027	0.027	0.028	0.024	0.027	0.026	0.028
43 Route 83, Calumet-Sag Channel	0.023	0.028	0.026	0.027	0.027	0.027	0.028	0.025	0.026	0.028	0.030
Des Plaines River System											
90 Route 19, Poplar Creek	0.071	0.064	0.069	0.062	0.071	0.078	0.095	0.112	0.102	0.079	0.071
110 Springinguth Road, West Branch DuPage River	0.050	0.050	0.047	0.045	0.053	0.048	0.054	0.053	0.056	ND	ND
89 Walnut Lane, West Branch DuPage River	0.035	0.035	0.031	0.029	0.032	0.029	0.030	0.026	0.028	0.028	0.031
64 Lake Street, West Branch DuPage River	ND	ND	0.046	0.034	0.039	0.031	0.035	0.033	0.035	0.033	0.037
111 Arlington Drive, West Branch DuPage River	0.037	0.037	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.041	0.043	0.038	0.041	0.051	0.045	0.044	0.053	0.052	0.045	0.048
80 Arlington Heights Road, Salt Creek	0.035	0.032	0.031	0.027	0.031	0.027	0.033	0.033	0.030	0.031	0.030
18 Devon Avenue, Salt Creek	0.026	0.030	0.034	0.028	0.031	0.028	0.033	0.031	0.029	0.030	0.031
24 Wolf Road, Salt Creek	0.036	0.035	0.037	0.034	0.037	0.034	0.035	0.033	0.034	0.031	0.036
109 Brookfield Avenue, Salt Creek	0.031	0.036	0.036	0.034	0.038	0.034	0.036	0.033	0.036	0.034	0.028
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.046
77 Elmhurst Road, Higgins Creek	0.057	0.047	0.061	0.043	0.064	0.043	0.056	0.056	0.067	0.050	0.060
78 Wille Road, Higgins Creek	0.025	0.029	0.026	0.029	0.026	0.024	0.024	0.020	0.024	0.022	0.030
12 Lake-Cook Road, Buffalo Creek	0.043	0.043	0.050	0.042	0.049	0.044	0.047	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.046	0.038	0.042	0.033	0.040	0.040	0.045	0.038	0.038	0.038	0.044
17 Oakton Street, Des Plaines River	0.043	0.041	0.044	0.035	0.041	0.040	0.046	0.040	0.040	0.041	0.044
19 Belmont Avenue, Des Plaines River	0.038	0.039	0.040	0.034	0.040	0.038	0.043	0.037	0.038	0.037	0.040
20 Roosevelt Road, Des Plaines River	0.039	0.039	0.040	0.034	0.042	0.038	0.044	0.037	0.038	0.035	0.042
22 Ogden Avenue, Des Plaines River	0.038	0.038	0.038	0.034	0.039	0.037	0.042	0.036	0.038	0.036	0.040
23 Willow Springs Road, Des Plaines River	0.036	0.038	0.037	0.033	0.039	0.036	0.039	0.036	0.037	0.034	0.038
29 Stephen Street, Des Plaines River	0.039	0.037	0.038	0.033	0.039	0.037	0.041	0.035	0.037	0.036	0.040
91 Material Service Road, Des Plaines River	0.034	0.038	0.037	0.033	0.039	0.037	0.041	0.035	0.038	0.036	0.039

ND = No Data.

TABLE AII-90: TOTAL BORON MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.138	0.145	0.138	0.160	0.150	0.135	0.129	0.178	0.203	0.147	0.139
103 Golf Road, West Fork North Branch Chicago River	0.121	0.125	0.124	0.113	0.104	0.149	0.145	0.191	0.139	0.137	0.159
31 Lake-Cook Road, Middle Fork North Branch	0.090	0.073	0.067	0.074	0.085	0.121	0.118	0.176	0.170	0.113	0.122
104 Glenview Road, North Branch Chicago River	0.113	0.103	0.126	0.107	0.115	0.142	0.142	0.182	0.155	0.138	0.167
32 Lake-Cook Road, Skokie River	0.095	0.093	0.092	0.093	0.097	0.120	0.135	0.161	0.129	0.137	0.120
105 Frontage Road, Skokie River	0.126	0.121	0.137	0.124	0.121	0.149	0.161	0.188	0.172	0.193	0.186
34 Dempster Street, North Branch Chicago River	0.116	0.114	0.107	0.103	0.113	0.139	0.143	0.192	0.153	0.176	0.172
96 Albany Avenue, North Branch Chicago River	0.117	0.114	0.118	0.112	0.109	0.138	0.151	0.185	0.150	0.164	0.169
35 Central Street, North Shore Channel	0.052	0.060	0.000	0.011	0.012	0.036	0.037	0.039	0.037	0.050	0.052
112 Dempster Street, North Shore Channel	0.115	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.129	0.100	0.060	0.070	0.060	0.087	0.117	0.093	0.076	0.091	0.118
36 Touhy Avenue, North Shore Channel	0.158	0.150	0.160	0.151	0.173	0.185	0.193	0.180	0.172	0.190	0.185
101 Foster Avenue, North Shore Channel	0.150	0.132	0.151	0.147	0.167	0.182	0.192	0.177	0.174	0.176	0.176
37 Wilson Avenue, North Branch Chicago River	0.138	0.125	0.138	0.128	0.146	0.160	0.173	0.168	0.161	0.166	0.160
73 Diversey Parkway, North Branch Chicago River	0.148	0.128	0.143	0.123	0.142	0.166	0.166	0.160	0.162	0.175	0.161
46 Grand Avenue, North Branch Chicago River	0.141	0.121	0.132	0.116	0.132	0.154	0.163	0.172	0.160	0.162	0.161
74 Lake Shore Drive, Chicago River	0.077	0.077	0.024	0.023	0.040	0.092	0.067	0.061	0.073	0.057	0.055
100 Wells Street, Chicago River	0.104	0.093	0.044	0.045	0.069	0.079	0.081	0.082	0.092	0.103	0.080
39 Madison Street, South Branch Chicago River	0.117	0.117	0.103	0.102	0.109	0.107	0.128	0.132	0.144	0.149	0.140
108 Loomis Street, South Branch Chicago River	0.125	0.108	0.107	0.103	0.109	0.109	0.131	0.135	0.143	0.144	0.136
99 Archer Avenue, South Fork South Branch Chicago River	0.111	0.110	0.118	0.099	0.125	0.111	0.117	0.134	0.139	0.143	0.135
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.120	0.108	0.108	0.101	0.111	0.106	0.130	0.133	0.141	0.145	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.136
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.124	0.109	0.114	0.095	0.125	0.117	0.124	0.133	0.144	0.145	0.145
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.163	0.154	0.152	0.145	0.166	0.168	0.183	0.176	0.207	0.192	0.184
42 Route 83, Chicago Sanitary & Ship Canal	0.256	0.213	0.221	0.164	0.168	0.208	0.223	0.219	0.261	0.226	0.232
48 Stephen Street, Chicago Sanitary & Ship Canal	0.235	0.195	0.204	0.153	0.175	0.192	0.208	0.216	0.221	0.217	0.227
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.215	0.191	0.203	0.162	0.185	0.196	0.218	0.223	0.206	0.203	0.206
Calumet River System											
49 Ewing Avenue, Calumet River	0.050	0.060	0.000	0.017	0.017	0.046	0.049	0.042	0.046	0.035	0.039
50 Burnham Avenue, Wolf Lake	0.217	0.244	0.242	0.238	0.181	0.171	0.115	0.147	0.144	0.105	0.104
55 130th Street, Calumet River	0.151	0.114	0.089	0.111	0.119	0.146	0.107	0.113	0.111	0.084	0.120
86 Burnham Avenue, Grand Calumet River	0.615	0.805	0.774	0.345	0.682	0.583	0.601	0.287	0.429	0.430	0.383
56 Indiana Avenue, Little Calumet River	0.133	0.132	0.111	0.122	0.145	0.165	0.137	0.116	0.127	0.128	0.161
76 Halsted Street, Little Calumet River	0.189	0.187	0.173	0.171	0.205	0.194	0.224	0.205	0.189	0.187	0.201
52 Wentworth Avenue, Little Calumet River	0.254	0.140	0.179	0.169	0.262	0.231	0.240	0.224	0.242	0.267	0.321
54 Joe Orr Road, Thorn Creek	0.293	0.203	0.221	0.256	0.324	0.313	0.404	0.269	0.320	0.252	0.353
97 170th Street, Thorn Creek	0.238	0.182	0.194	0.207	0.246	0.222	0.297	0.251	0.269	0.279	0.332
57 Ashland Avenue, Little Calumet River	0.223	0.171	0.180	0.191	0.241	0.202	0.258	0.232	0.223	0.265	0.270
58 Ashland Avenue, Calumet-Sag Channel	0.193	0.171	0.176	0.163	0.202	0.173	0.230	0.206	0.194	0.210	0.226
59 Cicero Avenue, Calumet-Sag Channel	0.189	0.174	0.172	0.154	0.201	0.165	0.224	0.199	0.193	0.192	0.207
43 Route 83, Calumet-Sag Channel	0.190	0.157	0.181	0.148	0.187	0.168	0.204	0.207	0.187	0.182	0.194
Des Plaines River System											
90 Route 19, Poplar Creek	0.054	0.060	0.025	0.024	0.047	0.058	0.061	0.071	0.056	0.056	0.056
110 Springinguth Road, West Branch DuPage River	0.065	0.093	0.051	0.075	0.088	0.075	0.079	0.078	0.125	ND	ND
89 Walnut Lane, West Branch DuPage River	0.181	0.169	0.216	0.203	0.218	0.248	0.247	0.278	0.274	0.264	0.285
64 Lake Street, West Branch DuPage River	ND	ND	0.102	0.149	0.183	0.187	0.190	0.238	0.225	0.228	0.224
111 Arlington Drive, West Branch DuPage River	0.169	0.146	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.081	0.099	0.051	0.079	0.082	0.085	0.091	0.098	0.089	0.073	0.100
80 Arlington Heights Road, Salt Creek	0.170	0.134	0.190	0.145	0.176	0.198	0.191	0.205	0.197	0.191	0.207
18 Devon Avenue, Salt Creek	0.218	0.150	0.189	0.135	0.172	0.196	0.196	0.207	0.189	0.187	0.192
24 Wolf Road, Salt Creek	0.166	0.163	0.162	0.145	0.178	0.182	0.188	0.233	0.193	0.177	0.227
109 Brookfield Avenue, Salt Creek	0.196	0.155	0.181	0.150	0.188	0.183	0.210	0.262	0.195	0.198	0.247
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.179
77 Elmhurst Road, Higgins Creek	0.106	0.080	0.000	0.055	0.110	0.089	0.083	0.081	0.084	0.063	0.074
78 Wille Road, Higgins Creek	0.245	0.224	0.202	0.193	0.245	0.260	0.289	0.366	0.303	0.282	0.335
12 Lake-Cook Road, Buffalo Creek	0.073	0.081	0.073	0.091	0.100	0.088	0.107	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.121	0.114	0.141	0.117	0.157	0.155	0.181	0.221	0.191	0.192	0.189
17 Oakton Street, Des Plaines River	0.124	0.113	0.141	0.101	0.144	0.137	0.155	0.215	0.167	0.186	0.191
19 Belmont Avenue, Des Plaines River	0.177	0.125	0.149	0.112	0.154	0.154	0.170	0.236	0.181	0.209	0.207
20 Roosevelt Road, Des Plaines River	0.133	0.126	0.155	0.107	0.168	0.151	0.172	0.237	0.182	0.207	0.218
22 Ogden Avenue, Des Plaines River	0.188	0.130	0.151	0.121	0.169	0.155	0.183	0.236	0.194	0.211	0.214
23 Willow Springs Road, Des Plaines River	0.183	0.129	0.155	0.116	0.170	0.161	0.185	0.243	0.182	0.176	0.219
29 Stephen Street, Des Plaines River	0.134	0.120	0.145	0.110	0.160	0.167	0.192	0.243	0.177	0.195	0.204
91 Material Service Road, Des Plaines River	0.173	0.124	0.148	0.116	0.162	0.173	0.198	0.249	0.179	0.217	0.213

ND = No Data.

TABLE AII-91: TOTAL CADMIUM MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.001	0.001
103 Golf Road, West Fork North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.001
31 Lake-Cook Road, Middle Fork North Branch	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.001
104 Glenview Road, North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
32 Lake-Cook Road, Skokie River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001
105 Frontage Road, Skokie River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
34 Dempster Street, North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001
96 Albany Avenue, North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
35 Central Street, North Shore Channel	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
36 Touhy Avenue, North Shore Channel	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
101 Foster Avenue, North Shore Channel	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
37 Wilson Avenue, North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
73 Diversey Parkway, North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
46 Grand Avenue, North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
74 Lake Shore Drive, Chicago River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.001
100 Wells Street, Chicago River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000
39 Madison Street, South Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.001
108 Loomis Street, South Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000
99 Archer Avenue, South Fork South Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.001
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001
42 Route 83, Chicago Sanitary & Ship Canal	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
48 Stephen Street, Chicago Sanitary & Ship Canal	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
Calumet River System											
49 Ewing Avenue, Calumet River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000
50 Burnham Avenue, Wolf Lake	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.001
55 130th Street, Calumet River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000
86 Burnham Avenue, Grand Calumet River	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.000	0.001
56 Indiana Avenue, Little Calumet River	0.001	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.001
76 Halsted Street, Little Calumet River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.001
52 Wentworth Avenue, Little Calumet River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
54 Joe Orr Road, Thorn Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.000	0.002
97 170th Street, Thorn Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.001
57 Ashland Avenue, Little Calumet River	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.000	0.001	0.000	0.000
58 Ashland Avenue, Calumet-Sag Channel	0.001	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.000	0.000
59 Cicero Avenue, Calumet-Sag Channel	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
43 Route 83, Calumet-Sag Channel	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001
Des Plaines River System											
90 Route 19, Poplar Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.001
110 Springinguth Road, West Branch DuPage River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	ND	ND
89 Walnut Lane, West Branch DuPage River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001
111 Arlington Drive, West Branch DuPage River	0.001	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.001
80 Arlington Heights Road, Salt Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001
18 Devon Avenue, Salt Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
24 Wolf Road, Salt Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
109 Brookfield Avenue, Salt Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.004
77 Elmhurst Road, Higgins Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.002
78 Wille Road, Higgins Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
12 Lake-Cook Road, Buffalo Creek	0.001	0.001	0.002	0.000	0.000	0.000	0.000	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.002
17 Oakton Street, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
19 Belmont Avenue, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
20 Roosevelt Road, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001
22 Ogden Avenue, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001
23 Willow Springs Road, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001
29 Stephen Street, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001
91 Material Service Road, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.001

ND = No Data.

TABLE AII-92: TOTAL COPPER MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.014	0.020	0.004	0.003	0.005	0.006	0.012	0.028	0.025	0.020	0.023
103 Golf Road, West Fork North Branch Chicago River	0.007	0.020	0.000	0.001	0.000	0.002	0.004	0.017	0.013	0.015	0.024
31 Lake-Cook Road, Middle Fork North Branch	0.007	0.020	0.000	0.000	0.000	0.001	0.005	0.021	0.012	0.013	0.022
104 Glenview Road, North Branch Chicago River	0.007	0.021	0.000	0.001	0.000	0.002	0.005	0.016	0.013	0.013	0.020
32 Lake-Cook Road, Skokie River	0.006	0.021	0.000	0.001	0.000	0.001	0.006	0.017	0.012	0.011	0.019
105 Frontage Road, Skokie River	0.005	0.020	0.000	0.000	0.000	0.002	0.003	0.018	0.014	0.018	0.020
34 Dempster Street, North Branch Chicago River	0.006	0.020	0.000	0.000	0.000	0.002	0.004	0.018	0.013	0.015	0.021
96 Albany Avenue, North Branch Chicago River	0.006	0.020	0.001	0.000	0.000	0.002	0.004	0.017	0.016	0.016	0.022
35 Central Street, North Shore Channel	0.005	0.020	0.000	0.000	0.000	0.000	0.001	0.014	0.011	0.012	0.023
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.006	0.020	0.001	0.000	0.000	0.001	0.003	0.013	0.012	0.014	0.021
36 Touhy Avenue, North Shore Channel	0.006	0.020	0.000	0.000	0.000	0.002	0.004	0.017	0.012	0.015	0.024
101 Foster Avenue, North Shore Channel	0.006	0.020	0.000	0.000	0.000	0.003	0.003	0.016	0.014	0.013	0.023
37 Wilson Avenue, North Branch Chicago River	0.006	0.020	0.000	0.000	0.000	0.002	0.003	0.016	0.013	0.015	0.023
73 Diversey Parkway, North Branch Chicago River	0.006	0.020	0.000	0.001	0.000	0.002	0.003	0.017	0.011	0.015	0.022
46 Grand Avenue, North Branch Chicago River	0.007	0.020	0.003	0.000	0.000	0.003	0.004	0.017	0.015	0.017	0.022
74 Lake Shore Drive, Chicago River	0.006	0.020	0.000	0.000	0.000	0.003	0.002	0.015	0.013	0.014	0.013
100 Wells Street, Chicago River	0.009	0.020	0.001	0.000	0.000	0.004	0.004	0.016	0.015	0.015	0.019
39 Madison Street, South Branch Chicago River	0.007	0.020	0.000	0.000	0.000	0.005	0.004	0.017	0.015	0.015	0.020
108 Loomis Street, South Branch Chicago River	0.007	0.020	0.000	0.000	0.001	0.007	0.005	0.018	0.018	0.016	0.020
99 Archer Avenue, South Fork South Branch Chicago River	0.008	0.020	0.000	0.000	0.000	0.003	0.004	0.015	0.014	0.016	0.017
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.008	0.020	0.000	0.000	0.001	0.005	0.006	0.018	0.015	0.017	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.021
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.009	0.020	0.000	0.000	0.000	0.005	0.005	0.019	0.015	0.015	0.020
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.007	0.020	0.000	0.000	0.000	0.003	0.003	0.013	0.012	0.013	0.016
42 Route 83, Chicago Sanitary & Ship Canal	0.005	0.020	0.000	0.000	0.001	0.005	0.002	0.015	0.016	0.014	0.017
48 Stephen Street, Chicago Sanitary & Ship Canal	0.008	0.020	0.000	0.000	0.001	0.004	0.002	0.015	0.020	0.015	0.017
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.005	0.020	0.000	0.000	0.001	0.002	0.003	0.016	0.013	0.014	0.020
Calumet River System											
49 Ewing Avenue, Calumet River	0.005	0.020	0.000	0.000	0.000	0.001	0.004	0.013	0.010	0.011	0.015
50 Burnham Avenue, Wolf Lake	0.005	0.020	0.000	0.000	0.000	0.000	0.002	0.014	0.011	0.013	0.013
55 130th Street, Calumet River	0.005	0.020	0.000	0.000	0.000	0.001	0.006	0.013	0.013	0.012	0.015
86 Burnham Avenue, Grand Calumet River	0.005	0.020	0.001	0.000	0.000	0.004	0.006	0.038	0.016	0.017	0.020
56 Indiana Avenue, Little Calumet River	0.006	0.020	0.000	0.002	0.000	0.005	0.004	0.015	0.013	0.013	0.020
76 Halsted Street, Little Calumet River	0.005	0.020	0.000	0.028	0.001	0.001	0.002	0.015	0.010	0.010	0.016
52 Wentworth Avenue, Little Calumet River	0.005	0.020	0.001	0.000	0.000	0.002	0.003	0.015	0.015	0.012	0.019
54 Joe Orr Road, Thorn Creek	0.005	0.020	0.000	0.000	0.000	0.000	0.001	0.020	0.014	0.008	0.013
97 170th Street, Thorn Creek	0.005	0.020	0.001	0.000	0.000	0.003	0.002	0.017	0.016	0.014	0.016
57 Ashland Avenue, Little Calumet River	0.017	0.020	0.001	0.007	0.000	0.004	0.002	0.019	0.014	0.010	0.017
58 Ashland Avenue, Calumet-Sag Channel	0.029	0.020	0.000	0.013	0.000	0.001	0.002	0.020	0.011	0.011	0.017
59 Cicero Avenue, Calumet-Sag Channel	0.005	0.020	0.000	0.000	0.000	0.001	0.002	0.014	0.011	0.011	0.016
43 Route 83, Calumet-Sag Channel	0.005	0.020	0.000	0.000	0.000	0.001	0.002	0.014	0.012	0.013	0.018
Des Plaines River System											
90 Route 19, Poplar Creek	0.005	0.020	0.000	0.000	0.000	0.001	0.001	0.015	0.009	0.012	0.016
110 Springinguth Road, West Branch DuPage River	0.005	0.020	0.000	0.000	0.000	0.002	0.001	0.017	0.012	ND	ND
89 Walnut Lane, West Branch DuPage River	0.008	0.020	0.002	0.003	0.003	0.006	0.007	0.021	0.018	0.018	0.023
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.000	0.000	0.005	0.006	0.022	0.016	0.019	0.021
111 Arlington Drive, West Branch DuPage River	0.006	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.005	0.020	0.000	0.000	0.000	0.002	0.001	0.017	0.011	0.014	0.021
80 Arlington Heights Road, Salt Creek	0.005	0.020	0.000	0.000	0.000	0.002	0.003	0.018	0.013	0.017	0.018
18 Devon Avenue, Salt Creek	0.005	0.020	0.000	0.001	0.000	0.002	0.003	0.021	0.012	0.016	0.019
24 Wolf Road, Salt Creek	0.005	0.020	0.001	0.000	0.001	0.005	0.006	0.020	0.013	0.017	0.020
109 Brookfield Avenue, Salt Creek	0.005	0.020	0.003	0.001	0.001	0.005	0.007	0.020	0.014	0.022	0.024
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.016
77 Elmhurst Road, Higgins Creek	0.005	0.020	0.000	0.000	0.003	0.005	0.006	0.016	0.017	0.018	0.019
78 Wille Road, Higgins Creek	0.008	0.020	0.000	0.000	0.001	0.001	0.001	0.017	0.012	0.014	0.018
12 Lake-Cook Road, Buffalo Creek	0.005	0.020	0.000	0.000	0.000	0.002	0.001	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.005	0.020	0.000	0.000	0.000	0.001	0.002	0.017	0.013	0.016	0.019
17 Oakton Street, Des Plaines River	0.005	0.020	0.000	0.000	0.000	0.002	0.002	0.016	0.012	0.015	0.018
19 Belmont Avenue, Des Plaines River	0.006	0.020	0.000	0.000	0.001	0.002	0.003	0.019	0.014	0.016	0.021
20 Roosevelt Road, Des Plaines River	0.006	0.020	0.001	0.000	0.001	0.003	0.003	0.017	0.011	0.017	0.022
22 Ogden Avenue, Des Plaines River	0.005	0.020	0.000	0.000	0.000	0.004	0.004	0.020	0.012	0.017	0.020
23 Willow Springs Road, Des Plaines River	0.005	0.020	0.000	0.000	0.000	0.003	0.004	0.021	0.012	0.015	0.023
29 Stephen Street, Des Plaines River	0.005	0.026	0.001	0.000	0.000	0.003	0.004	0.019	0.011	0.016	0.022
91 Material Service Road, Des Plaines River	0.005	0.021	0.000	0.000	0.000	0.003	0.003	0.017	0.014	0.015	0.019

ND = No Data.

TABLE AII-93: TOTAL CHROMIUM MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.005	0.010	0.001	0.002	0.002	0.003	0.004	0.000	0.001	0.003	0.006
103 Golf Road, West Fork North Branch Chicago River	0.005	0.010	0.001	0.002	0.001	0.002	0.002	0.000	0.000	0.001	0.007
31 Lake-Cook Road, Middle Fork North Branch	0.005	0.010	0.000	0.001	0.001	0.002	0.003	0.000	0.000	0.001	0.006
104 Glenview Road, North Branch Chicago River	0.005	0.010	0.000	0.002	0.001	0.001	0.003	0.000	0.001	0.000	0.005
32 Lake-Cook Road, Skokie River	0.005	0.010	0.001	0.001	0.001	0.001	0.003	0.000	0.000	0.000	0.001
105 Frontage Road, Skokie River	0.005	0.010	0.001	0.000	0.000	0.001	0.001	0.000	0.001	0.002	0.003
34 Dempster Street, North Branch Chicago River	0.005	0.010	0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.001	0.007
96 Albany Avenue, North Branch Chicago River	0.005	0.010	0.001	0.001	0.002	0.002	0.002	0.001	0.001	0.001	0.001
35 Central Street, North Shore Channel	0.005	0.010	0.000	0.000	0.000	0.001	0.001	0.002	0.000	0.000	0.008
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.005	0.010	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.002	0.003
36 Touhy Avenue, North Shore Channel	0.006	0.010	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.005
101 Foster Avenue, North Shore Channel	0.005	0.010	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.001	0.003
37 Wilson Avenue, North Branch Chicago River	0.005	0.010	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.001	0.006
73 Diversey Parkway, North Branch Chicago River	0.005	0.020	0.000	0.001	0.000	0.001	0.001	0.000	0.000	0.002	0.004
46 Grand Avenue, North Branch Chicago River	0.005	0.010	0.000	0.002	0.003	0.003	0.002	0.000	0.001	0.003	0.005
74 Lake Shore Drive, Chicago River	0.005	0.010	0.000	0.000	0.001	0.002	0.001	0.000	0.000	0.001	0.003
100 Wells Street, Chicago River	0.005	0.010	0.000	0.000	0.001	0.003	0.001	0.000	0.000	0.001	0.004
39 Madison Street, South Branch Chicago River	0.007	0.010	0.001	0.001	0.002	0.004	0.001	0.000	0.001	0.002	0.005
108 Loomis Street, South Branch Chicago River	0.008	0.010	0.001	0.001	0.004	0.004	0.002	0.000	0.001	0.002	0.005
99 Archer Avenue, South Fork South Branch Chicago River	0.005	0.010	0.000	0.001	0.002	0.002	0.001	0.000	0.000	0.002	0.008
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.005	0.010	0.001	0.002	0.004	0.003	0.002	0.000	0.001	0.003	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.013	0.010	0.001	0.003	0.005	0.003	0.002	0.001	0.001	0.003	0.006
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.005	0.010	0.000	0.002	0.008	0.003	0.002	0.000	0.001	0.003	0.004
42 Route 83, Chicago Sanitary & Ship Canal	0.005	0.045	0.001	0.002	0.002	0.004	0.002	0.000	0.003	0.004	0.005
48 Stephen Street, Chicago Sanitary & Ship Canal	0.006	0.022	0.001	0.003	0.002	0.004	0.002	0.002	0.002	0.004	0.004
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.005	0.010	0.001	0.003	0.003	0.002	0.002	0.001	0.002	0.003	0.007
Calumet River System											
49 Ewing Avenue, Calumet River	0.005	0.010	0.001	0.000	0.001	0.002	0.001	0.000	0.000	0.000	0.002
50 Burnham Avenue, Wolf Lake	0.005	0.010	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.004
55 130th Street, Calumet River	0.005	0.010	0.000	0.001	0.000	0.001	0.002	0.000	0.000	0.000	0.003
86 Burnham Avenue, Grand Calumet River	0.005	0.010	0.000	0.002	0.001	0.003	0.003	0.009	0.002	0.004	0.003
56 Indiana Avenue, Little Calumet River	0.005	0.010	0.000	0.004	0.002	0.003	0.002	0.000	0.000	0.001	0.006
76 Halsted Street, Little Calumet River	0.005	0.010	0.000	0.001	0.002	0.002	0.002	0.000	0.001	0.001	0.001
52 Wentworth Avenue, Little Calumet River	0.005	0.010	0.003	0.003	0.001	0.002	0.002	0.001	0.001	0.001	0.007
54 Joe Orr Road, Thorn Creek	0.005	0.010	0.001	0.001	0.000	0.001	0.001	0.004	0.000	0.003	0.005
97 170th Street, Thorn Creek	0.005	0.010	0.002	0.001	0.001	0.002	0.002	0.001	0.002	0.003	0.005
57 Ashland Avenue, Little Calumet River	0.005	0.010	0.002	0.003	0.001	0.004	0.002	0.002	0.002	0.002	0.007
58 Ashland Avenue, Calumet-Sag Channel	0.005	0.010	0.001	0.001	0.002	0.003	0.001	0.000	0.001	0.002	0.006
59 Cicero Avenue, Calumet-Sag Channel	0.005	0.010	0.001	0.001	0.003	0.002	0.002	0.000	0.002	0.003	0.005
43 Route 83, Calumet-Sag Channel	0.005	0.010	0.000	0.001	0.001	0.002	0.002	0.000	0.000	0.004	0.005
Des Plaines River System											
90 Route 19, Poplar Creek	0.005	0.010	0.002	0.001	0.003	0.001	0.001	0.000	0.000	0.001	0.003
110 Springinsguth Road, West Branch DuPage River	0.007	0.010	0.000	0.001	0.002	0.001	0.001	0.000	0.001	ND	ND
89 Walnut Lane, West Branch DuPage River	0.006	0.012	0.002	0.002	0.003	0.001	0.001	0.000	0.000	0.001	0.002
64 Lake Street, West Branch DuPage River	ND	ND	0.001	0.001	0.002	0.002	0.002	0.000	0.000	0.001	0.003
111 Arlington Drive, West Branch DuPage River	0.005	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.005	0.010	0.001	0.001	0.001	0.002	0.002	0.001	0.000	0.003	0.009
80 Arlington Heights Road, Salt Creek	0.005	0.010	0.000	0.002	0.000	0.001	0.001	0.000	0.000	0.000	0.003
18 Devon Avenue, Salt Creek	0.005	0.010	0.000	0.002	0.000	0.001	0.001	0.001	0.000	0.001	0.001
24 Wolf Road, Salt Creek	0.005	0.010	0.001	0.002	0.001	0.002	0.003	0.001	0.000	0.004	0.007
109 Brookfield Avenue, Salt Creek	0.005	0.010	0.001	0.001	0.002	0.002	0.007	0.003	0.003	0.003	0.007
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000
77 Elmhurst Road, Higgins Creek	0.005	0.010	0.000	0.002	0.004	0.003	0.003	0.000	0.000	0.003	0.004
78 Wille Road, Higgins Creek	0.005	0.010	0.000	0.001	0.001	0.001	0.001	0.000	0.001	0.002	0.004
12 Lake-Cook Road, Buffalo Creek	0.005	0.010	0.002	0.004	0.001	0.002	0.001	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.005	0.010	0.000	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.001
17 Oakton Street, Des Plaines River	0.005	0.010	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.003	0.004
19 Belmont Avenue, Des Plaines River	0.005	0.013	0.001	0.006	0.002	0.002	0.002	0.013	0.000	0.031	0.002
20 Roosevelt Road, Des Plaines River	0.005	0.010	0.002	0.002	0.002	0.002	0.002	0.004	0.000	0.018	0.004
22 Ogden Avenue, Des Plaines River	0.005	0.010	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.003	0.004
23 Willow Springs Road, Des Plaines River	0.005	0.010	0.013	0.002	0.002	0.002	0.003	0.005	0.001	0.004	0.002
29 Stephen Street, Des Plaines River	0.005	0.010	0.001	0.002	0.001	0.002	0.004	0.003	0.001	0.003	0.001
91 Material Service Road, Des Plaines River	0.005	0.010	0.001	0.001	0.003	0.002	0.002	0.002	0.001	0.003	0.004

ND = No Data.

**TABLE AII-94: TOTAL HEXAVALENT CHROMIUM MEAN HISTORY
2002 THROUGH 2012**

Sampling Station (No. Name)	Annual Means ($\mu\text{g/L}$)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	6.000	10.000	0.000	0.000	0.000	0.500	1.800	3.500	0.000	2.000	0.000
103 Golf Road, West Fork North Branch Chicago River	6.000	10.000	0.000	0.000	0.000	0.727	0.500	1.400	0.500	0.375	0.000
31 Lake-Cook Road, Middle Fork North Branch	6.000	10.000	0.000	0.000	0.000	0.000	0.182	1.300	0.000	0.000	0.000
104 Glenview Road, North Branch Chicago River	6.000	10.000	0.000	0.000	0.000	0.364	0.667	1.500	0.167	0.000	0.000
32 Lake-Cook Road, Skokie River	6.000	10.000	0.000	0.000	0.000	0.600	0.333	0.909	0.000	0.556	0.000
105 Frontage Road, Skokie River	6.000	10.000	0.000	0.000	0.000	0.364	0.750	1.250	0.000	0.500	0.000
34 Dempster Street, North Branch Chicago River	6.000	10.000	0.000	0.000	0.000	0.545	1.000	1.909	0.167	0.455	0.000
96 Albany Avenue, North Branch Chicago River	6.000	10.000	0.000	0.000	0.000	0.636	0.333	1.273	0.364	0.400	0.000
35 Central Street, North Shore Channel	6.000	10.000	0.000	0.000	0.000	0.333	0.889	1.750	0.000	0.444	0.000
112 Dempster Street, North Shore Channel	6.000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	6.000	10.000	0.000	0.000	0.000	0.583	0.333	1.750	0.167	0.300	0.000
36 Touhy Avenue, North Shore Channel	6.000	10.000	0.000	0.000	0.000	1.083	0.500	1.333	0.583	0.000	0.000
101 Foster Avenue, North Shore Channel	6.000	10.000	0.000	0.000	0.000	0.583	0.667	1.846	0.417	0.500	0.000
37 Wilson Avenue, North Branch Chicago River	6.000	10.000	0.000	0.000	0.000	0.167	0.667	1.833	0.333	0.500	0.000
73 Diversey Parkway, North Branch Chicago River	6.000	10.000	0.000	0.000	0.000	0.333	0.750	1.583	0.750	0.667	0.000
46 Grand Avenue, North Branch Chicago River	6.000	10.000	0.000	0.000	0.000	0.545	0.333	1.667	0.667	0.667	0.000
74 Lake Shore Drive, Chicago River	6.000	10.000	0.000	0.000	0.000	0.909	0.364	0.400	0.222	0.400	0.000
100 Wells Street, Chicago River	6.000	10.000	0.000	0.000	0.000	1.000	0.417	0.417	0.333	0.500	0.167
39 Madison Street, South Branch Chicago River	6.000	10.000	0.000	0.000	0.000	0.545	0.750	0.667	0.417	0.364	0.000
108 Loomis Street, South Branch Chicago River	6.000	10.000	0.000	0.000	0.000	0.167	0.667	0.500	0.333	0.500	0.167
99 Archer Avenue, South Fork South Branch Chicago River	6.000	10.000	0.000	0.000	0.000	0.364	0.286	0.909	0.417	0.500	0.000
40 Damen Avenue, Chicago Sanitary & Ship Canal	6.000	10.000	0.000	0.000	0.000	0.583	0.500	0.833	0.333	ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000
75 Cicero Avenue, Chicago Sanitary & Ship Canal	6.000	10.000	0.000	0.000	1.417	1.083	0.583	0.750	0.333	0.250	0.000
41 Harlem Avenue, Chicago Sanitary & Ship Canal	6.000	10.000	0.000	0.000	2.909	0.333	0.500	0.667	0.333	0.667	0.000
42 Route 83, Chicago Sanitary & Ship Canal	6.000	10.000	0.000	0.000	0.000	0.182	0.667	0.818	0.333	0.167	0.000
48 Stephen Street, Chicago Sanitary & Ship Canal	6.000	10.000	0.000	0.000	0.000	0.636	0.667	0.909	0.333	0.167	0.000
92 Lockport Forebay, Chicago Sanitary & Ship Canal	6.078	10.000	0.000	0.000	0.000	0.540	0.627	1.442	0.404	0.442	0.000
Calumet River System											
49 Ewing Avenue, Calumet River	6.000	10.000	0.000	0.000	0.000	0.400	0.364	0.818	0.400	0.583	0.000
50 Burnham Avenue, Wolf Lake	6.000	10.000	0.000	0.000	0.000	0.545	0.636	1.167	0.167	0.833	0.000
55 130th Street, Calumet River	6.000	10.000	0.000	0.000	0.000	0.400	0.818	1.091	0.182	1.000	0.000
86 Burnham Avenue, Grand Calumet River	6.000	10.000	0.000	0.000	0.000	0.200	0.818	1.700	0.444	0.700	0.000
56 Indiana Avenue, Little Calumet River	6.000	10.000	0.000	0.000	0.000	0.500	0.818	1.000	0.444	0.000	0.000
76 Halsted Street, Little Calumet River	6.000	10.000	0.000	0.000	0.000	0.909	0.818	1.583	0.000	0.545	0.000
52 Wentworth Avenue, Little Calumet River	6.000	10.000	0.000	0.000	0.000	0.727	0.727	1.364	0.000	1.200	0.000
54 Joe Orr Road, Thorn Creek	6.000	10.000	0.000	0.000	0.000	0.200	0.667	2.500	0.000	0.667	0.000
97 170th Street, Thorn Creek	6.000	10.000	0.000	0.000	0.000	1.000	0.818	1.636	0.000	1.200	0.000
57 Ashland Avenue, Little Calumet River	6.000	10.000	0.000	0.000	0.000	0.364	1.091	1.545	0.200	0.300	0.000
58 Ashland Avenue, Calumet-Sag Channel	6.000	10.000	0.000	0.000	0.000	0.727	0.909	1.500	0.167	0.583	0.000
59 Cicero Avenue, Calumet-Sag Channel	6.000	10.000	0.000	0.000	0.000	0.273	0.727	1.583	0.167	1.273	0.000
43 Route 83, Calumet-Sag Channel	6.000	10.000	0.000	0.000	0.000	0.273	1.000	1.273	0.000	1.273	0.000
Des Plaines River System											
90 Route 19, Poplar Creek	6.000	10.000	0.000	0.000	0.000	0.000	0.417	1.455	1.091	0.700	0.000
110 Springinsguth Road, West Branch DuPage River	6.182	10.000	0.000	0.000	0.000	0.600	0.545	1.727	1.300	ND	ND
89 Walnut Lane, West Branch DuPage River	6.000	10.000	0.000	0.000	0.000	0.417	0.417	1.250	1.091	0.364	0.000
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.000	0.000	0.750	0.833	1.583	1.167	0.750	0.000
111 Arlington Drive, West Branch DuPage River	6.000	10.000	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	6.000	10.000	0.000	0.000	0.000	0.200	0.778	1.778	1.091	0.667	0.000
80 Arlington Heights Road, Salt Creek	6.000	10.000	0.000	0.000	0.000	0.167	0.167	2.250	1.000	0.500	0.000
18 Devon Avenue, Salt Creek	6.000	10.000	0.000	0.000	0.000	0.417	0.333	1.667	1.167	0.333	0.000
24 Wolf Road, Salt Creek	6.000	10.000	0.000	0.000	0.000	0.182	0.417	2.333	0.636	0.583	0.000
109 Brookfield Avenue, Salt Creek	6.250	10.000	0.000	0.000	0.000	0.182	3.500	1.917	2.364	0.900	0.000
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000
77 Elmhurst Road, Higgins Creek	6.000	10.000	0.000	0.000	0.000	0.400	0.714	1.000	0.667	0.200	0.000
78 Wille Road, Higgins Creek	6.000	10.000	0.000	0.000	0.000	0.167	0.500	1.333	0.364	0.750	0.000
12 Lake-Cook Road, Buffalo Creek	6.000	10.000	0.000	0.000	0.000	0.333	0.778	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	6.000	10.000	0.000	0.000	0.000	0.833	0.000	1.583	0.909	0.667	0.000
17 Oakton Street, Des Plaines River	6.000	10.000	0.000	0.000	0.000	0.182	0.167	1.417	1.000	0.500	0.000
19 Belmont Avenue, Des Plaines River	38.417	10.000	0.000	0.000	0.000	0.000	0.583	10.333	1.000	0.750	0.000
20 Roosevelt Road, Des Plaines River	6.000	10.000	0.000	0.000	0.000	0.364	0.417	3.833	0.636	1.143	0.000
22 Ogden Avenue, Des Plaines River	12.583	10.000	0.000	0.000	0.000	0.364	0.667	1.500	0.727	0.000	0.000
23 Willow Springs Road, Des Plaines River	6.000	10.000	11.583	0.000	0.000	0.182	0.833	3.083	1.273	0.700	0.000
29 Stephen Street, Des Plaines River	6.000	10.000	0.000	0.000	0.000	0.000	0.750	1.500	0.727	0.909	0.000
91 Material Service Road, Des Plaines River	6.333	10.000	0.000	0.000	0.000	0.273	0.750	1.417	0.545	0.667	0.000

ND = No Data.

TABLE AII-95: TOTAL IRON MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	2.150	1.310	0.991	1.346	1.915	1.138	2.559	1.173	1.846	1.601	0.913
103 Golf Road, West Fork North Branch Chicago River	0.850	0.664	0.571	1.029	0.838	0.573	1.142	0.864	0.698	0.823	1.037
31 Lake-Cook Road, Middle Fork North Branch	0.350	0.589	0.698	0.894	1.080	0.853	1.924	0.817	0.917	0.922	0.934
104 Glenview Road, North Branch Chicago River	0.525	0.967	0.614	0.885	0.909	0.617	1.421	0.598	0.705	0.847	0.705
32 Lake-Cook Road, Skokie River	0.700	0.830	0.602	0.976	1.095	0.846	1.756	0.867	0.922	0.683	0.831
105 Frontage Road, Skokie River	0.300	0.575	0.459	0.631	0.711	0.584	0.591	0.476	0.856	0.534	0.580
34 Dempster Street, North Branch Chicago River	0.725	0.618	0.469	0.828	0.921	0.693	1.091	0.697	0.703	0.744	0.889
96 Albany Avenue, North Branch Chicago River	0.375	0.636	0.605	0.797	1.098	0.595	0.917	0.646	0.722	0.701	0.889
35 Central Street, North Shore Channel	0.250	0.225	0.174	0.278	0.300	0.209	0.322	0.329	0.297	0.256	0.355
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.225	0.433	0.553	0.340	0.490	0.388	0.394	0.358	0.393	0.522	0.466
36 Touhy Avenue, North Shore Channel	0.150	0.200	0.134	0.173	0.198	0.158	0.180	0.209	0.241	0.171	0.310
101 Foster Avenue, North Shore Channel	0.175	0.250	0.171	0.182	0.259	0.185	0.214	0.306	0.320	0.236	0.347
37 Wilson Avenue, North Branch Chicago River	0.200	0.333	0.309	0.458	0.484	0.322	0.361	0.306	0.385	0.355	0.490
73 Diversey Parkway, North Branch Chicago River	0.250	0.500	0.274	0.478	0.459	0.373	0.401	0.319	0.384	0.509	0.560
46 Grand Avenue, North Branch Chicago River	0.325	0.375	0.320	0.546	0.479	0.552	0.506	0.386	0.637	0.466	0.594
74 Lake Shore Drive, Chicago River	0.125	0.200	0.090	0.103	0.148	0.161	0.099	0.127	0.136	0.158	0.199
100 Wells Street, Chicago River	0.400	0.275	0.126	0.182	0.292	0.172	0.178	0.171	0.180	0.222	0.248
39 Madison Street, South Branch Chicago River	0.450	0.417	0.336	0.410	0.477	0.527	0.294	0.326	0.394	0.389	0.439
108 Loomis Street, South Branch Chicago River	0.425	0.433	0.360	0.437	0.566	0.543	0.397	0.327	0.382	0.392	0.417
99 Archer Avenue, South Fork South Branch Chicago River	0.725	0.467	0.394	0.460	0.483	0.379	0.384	0.393	0.462	0.455	0.599
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.450	0.408	0.393	0.460	0.513	0.495	0.465	0.360	0.488	0.446	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.507
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.625	0.692	0.389	0.523	0.473	0.509	0.494	0.401	0.484	0.493	0.545
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.275	0.375	0.207	0.340	0.286	0.418	0.295	0.256	0.270	0.261	0.330
42 Route 83, Chicago Sanitary & Ship Canal	0.225	0.475	0.209	0.307	0.364	0.425	0.247	0.247	0.293	0.318	0.336
48 Stephen Street, Chicago Sanitary & Ship Canal	0.575	0.625	0.345	0.506	0.630	0.641	0.511	0.473	0.509	0.516	0.429
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.288	0.404	0.338	0.561	0.593	0.454	0.477	0.443	0.445	0.434	0.505
Calumet River System											
49 Ewing Avenue, Calumet River	0.400	0.383	0.067	0.173	0.210	0.355	0.308	0.202	0.293	0.249	0.268
50 Burnham Avenue, Wolf Lake	0.150	0.200	0.082	0.117	0.065	0.165	0.065	0.148	0.100	0.110	0.134
55 130th Street, Calumet River	0.150	0.270	0.103	0.183	0.234	0.339	0.479	0.257	0.244	0.330	0.345
86 Burnham Avenue, Grand Calumet River	1.275	1.210	1.404	1.010	1.108	1.567	1.217	2.100	1.194	1.315	1.335
56 Indiana Avenue, Little Calumet River	0.233	0.380	0.288	0.650	0.861	0.701	0.587	0.684	0.576	0.791	1.014
76 Halsted Street, Little Calumet River	0.200	0.282	0.222	0.381	0.698	0.390	0.380	0.321	0.382	0.330	0.449
52 Wentworth Avenue, Little Calumet River	1.525	3.360	3.213	1.980	1.189	1.842	1.676	1.388	1.469	1.350	1.973
54 Joe Orr Road, Thorn Creek	0.625	1.760	1.170	0.739	0.332	0.489	0.317	2.309	0.681	1.481	0.445
97 170th Street, Thorn Creek	1.050	3.330	2.409	1.223	0.825	1.459	1.217	1.516	1.468	1.088	0.867
57 Ashland Avenue, Little Calumet River	1.150	2.440	2.236	1.307	0.785	1.423	1.126	1.514	1.678	1.084	0.980
58 Ashland Avenue, Calumet-Sag Channel	0.375	1.282	0.906	0.606	0.549	0.757	0.461	0.548	0.543	0.787	0.616
59 Cicero Avenue, Calumet-Sag Channel	0.500	0.909	0.665	0.643	0.782	0.830	0.780	0.524	0.664	0.745	0.637
43 Route 83, Calumet-Sag Channel	0.450	0.855	0.430	0.784	0.578	0.706	0.722	0.514	0.505	0.973	0.751
Des Plaines River System											
90 Route 19, Poplar Creek	0.525	0.800	0.796	0.750	0.959	0.672	1.105	1.031	0.619	0.982	0.846
110 Springinguth Road, West Branch DuPage River	1.167	0.800	1.005	1.387	1.469	1.348	1.222	1.425	1.342	ND	ND
89 Walnut Lane, West Branch DuPage River	0.275	0.358	0.446	0.334	0.607	0.363	0.333	0.383	0.423	0.608	0.432
64 Lake Street, West Branch DuPage River	ND	ND	0.913	0.807	1.035	0.879	1.017	1.009	0.863	1.154	0.894
111 Arlington Drive, West Branch DuPage River	1.000	0.717	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.933	1.100	1.280	1.223	1.264	1.286	1.306	1.534	0.869	1.666	1.448
80 Arlington Heights Road, Salt Creek	0.275	0.391	0.298	0.538	0.333	0.447	0.397	0.344	0.420	0.345	0.343
18 Devon Avenue, Salt Creek	0.350	0.391	0.374	0.619	0.427	0.533	0.488	0.421	0.539	0.590	0.434
24 Wolf Road, Salt Creek	0.400	0.655	0.785	0.909	0.929	1.071	1.287	0.875	0.732	1.312	0.662
109 Brookfield Avenue, Salt Creek	0.325	0.645	0.716	0.934	0.908	0.941	1.371	0.903	0.701	1.580	0.605
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.583
77 Elmhurst Road, Higgins Creek	0.500	1.100	0.780	0.770	1.844	0.960	1.375	0.866	1.061	1.454	1.179
78 Wille Road, Higgins Creek	0.175	0.200	0.078	0.137	0.236	0.177	0.153	0.160	0.184	0.227	0.417
12 Lake-Cook Road, Buffalo Creek	0.600	0.800	1.391	1.227	1.054	1.261	1.086	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.600	0.582	0.682	0.976	0.788	0.863	0.920	0.892	0.757	0.964	0.829
17 Oakton Street, Des Plaines River	0.525	0.618	0.525	1.019	0.902	0.812	0.875	0.722	0.726	1.499	0.632
19 Belmont Avenue, Des Plaines River	0.450	0.609	0.681	0.971	0.975	0.883	0.892	0.682	0.673	1.145	0.680
20 Roosevelt Road, Des Plaines River	0.500	0.582	0.698	1.030	0.979	0.865	0.871	0.766	0.688	1.292	0.749
22 Ogden Avenue, Des Plaines River	0.425	0.591	0.773	1.055	0.916	1.081	1.161	0.850	0.710	1.300	0.679
23 Willow Springs Road, Des Plaines River	0.400	0.636	0.634	0.992	0.872	0.880	0.932	0.727	0.702	1.068	0.611
29 Stephen Street, Des Plaines River	0.400	0.609	0.715	1.074	0.796	0.849	0.907	0.756	0.805	1.176	0.679
91 Material Service Road, Des Plaines River	0.450	0.700	0.713	0.862	0.762	0.765	0.966	0.790	0.810	1.213	0.754

ND = No Data.

TABLE AII-96: TOTAL LEAD MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.020	0.030	0.000	0.022	0.010	0.005	0.007	0.006	0.006	0.006	0.000
103 Golf Road, West Fork North Branch Chicago River	0.020	0.030	0.000	0.012	0.004	0.005	0.006	0.005	0.007	0.004	0.002
31 Lake-Cook Road, Middle Fork North Branch	0.020	0.030	0.000	0.009	0.004	0.006	0.007	0.004	0.006	0.004	0.002
104 Glenview Road, North Branch Chicago River	0.020	0.030	0.000	0.019	0.007	0.005	0.008	0.003	0.006	0.007	0.002
32 Lake-Cook Road, Skokie River	0.020	0.030	0.000	0.011	0.006	0.007	0.007	0.003	0.008	0.004	0.002
105 Frontage Road, Skokie River	0.020	0.030	0.000	0.018	0.005	0.006	0.006	0.003	0.007	0.006	0.002
34 Dempster Street, North Branch Chicago River	0.020	0.030	0.000	0.016	0.007	0.005	0.007	0.005	0.006	0.076	0.002
96 Albany Avenue, North Branch Chicago River	0.020	0.030	0.000	0.018	0.009	0.006	0.007	0.005	0.008	0.006	0.002
35 Central Street, North Shore Channel	0.020	0.030	0.000	0.009	0.004	0.002	0.003	0.002	0.005	0.003	0.002
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.020	0.030	0.000	0.010	0.007	0.005	0.004	0.004	0.004	0.006	0.002
36 Touhy Avenue, North Shore Channel	0.020	0.030	0.000	0.020	0.005	0.004	0.004	0.003	0.005	0.004	0.001
101 Foster Avenue, North Shore Channel	0.020	0.030	0.000	0.017	0.006	0.004	0.004	0.003	0.005	0.005	0.001
37 Wilson Avenue, North Branch Chicago River	0.020	0.030	0.000	0.016	0.007	0.005	0.005	0.003	0.006	0.031	0.001
73 Diversey Parkway, North Branch Chicago River	0.020	0.030	0.000	0.016	0.006	0.005	0.005	0.004	0.006	0.125	0.001
46 Grand Avenue, North Branch Chicago River	0.020	0.030	0.000	0.016	0.007	0.008	0.007	0.005	0.008	0.105	0.002
74 Lake Shore Drive, Chicago River	0.020	0.030	0.000	0.003	0.006	0.008	0.004	0.004	0.006	0.003	0.001
100 Wells Street, Chicago River	0.020	0.030	0.000	0.004	0.006	0.006	0.010	0.004	0.005	0.004	0.001
39 Madison Street, South Branch Chicago River	0.020	0.030	0.000	0.004	0.007	0.010	0.010	0.006	0.007	0.006	0.002
108 Loomis Street, South Branch Chicago River	0.020	0.030	0.001	0.013	0.009	0.010	0.011	0.006	0.007	0.007	0.002
99 Archer Avenue, South Fork South Branch Chicago River	0.020	0.030	0.002	0.006	0.006	0.008	0.007	0.007	0.008	0.008	0.003
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.020	0.030	0.001	0.007	0.008	0.009	0.011	0.007	0.009	0.008	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.020	0.030	0.001	0.011	0.008	0.010	0.011	0.007	0.009	0.009	0.003
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.020	0.030	0.000	0.010	0.007	0.008	0.008	0.004	0.006	0.006	0.002
42 Route 83, Chicago Sanitary & Ship Canal	0.020	0.030	0.001	0.013	0.009	0.008	0.007	0.005	0.007	0.007	0.002
48 Stephen Street, Chicago Sanitary & Ship Canal	0.020	0.030	0.000	0.013	0.007	0.009	0.008	0.007	0.009	0.008	0.002
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.020	0.030	0.000	0.013	0.008	0.006	0.007	0.006	0.007	0.007	0.003
Calumet River System											
49 Ewing Avenue, Calumet River	0.020	0.030	0.000	0.000	0.004	0.010	0.004	0.003	0.005	0.004	0.002
50 Burnham Avenue, Wolf Lake	0.020	0.030	0.000	0.002	0.004	0.007	0.003	0.004	0.003	0.004	0.002
55 130th Street, Calumet River	0.020	0.030	0.000	0.000	0.002	0.006	0.008	0.004	0.005	0.004	0.002
86 Burnham Avenue, Grand Calumet River	0.020	0.030	0.000	0.004	0.007	0.012	0.013	0.034	0.015	0.014	0.002
56 Indiana Avenue, Little Calumet River	0.020	0.030	0.002	0.000	0.005	0.027	0.006	0.006	0.006	0.007	0.003
76 Halsted Street, Little Calumet River	0.020	0.030	0.000	0.009	0.010	0.042	0.006	0.005	0.007	0.006	0.003
52 Wentworth Avenue, Little Calumet River	0.020	0.030	0.000	0.006	0.005	0.005	0.006	0.005	0.007	0.005	0.003
54 Joe Orr Road, Thorn Creek	0.020	0.031	0.000	0.004	0.002	0.004	0.004	0.016	0.005	0.005	0.000
97 170th Street, Thorn Creek	0.020	0.030	0.000	0.004	0.004	0.007	0.006	0.007	0.010	0.006	0.003
57 Ashland Avenue, Little Calumet River	0.020	0.030	0.002	0.002	0.005	0.007	0.006	0.008	0.011	0.007	0.002
58 Ashland Avenue, Calumet-Sag Channel	0.020	0.030	0.002	0.008	0.006	0.007	0.006	0.010	0.007	0.006	0.004
59 Cicero Avenue, Calumet-Sag Channel	0.020	0.030	0.000	0.002	0.005	0.006	0.007	0.005	0.009	0.007	0.003
43 Route 83, Calumet-Sag Channel	0.020	0.030	0.001	0.003	0.004	0.006	0.008	0.008	0.007	0.009	0.004
Des Plaines River System											
90 Route 19, Poplar Creek	0.020	0.030	0.000	0.013	0.007	0.003	0.004	0.003	0.008	0.004	0.002
110 Springinsguth Road, West Branch DuPage River	0.020	0.030	0.000	0.002	0.008	0.005	0.005	0.004	0.010	ND	ND
89 Walnut Lane, West Branch DuPage River	0.020	0.030	0.000	0.015	0.006	0.004	0.005	0.003	0.010	0.006	0.009
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.014	0.007	0.004	0.005	0.012	0.008	0.005	0.002
111 Arlington Drive, West Branch DuPage River	0.020	0.030	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.020	0.030	0.000	0.002	0.005	0.005	0.006	0.005	0.009	0.006	0.003
80 Arlington Heights Road, Salt Creek	0.020	0.030	0.000	0.015	0.007	0.003	0.005	0.003	0.007	0.004	0.001
18 Devon Avenue, Salt Creek	0.020	0.030	0.000	0.011	0.013	0.003	0.004	0.004	0.006	0.004	0.002
24 Wolf Road, Salt Creek	0.020	0.030	0.000	0.014	0.006	0.006	0.007	0.004	0.008	0.007	0.003
109 Brookfield Avenue, Salt Creek	0.020	0.030	0.000	0.015	0.007	0.006	0.007	0.005	0.009	0.008	0.005
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000
77 Elmhurst Road, Higgins Creek	0.020	0.030	0.000	0.000	0.006	0.009	0.008	0.004	0.011	0.008	0.002
78 Wille Road, Higgins Creek	0.020	0.030	0.000	0.016	0.007	0.004	0.004	0.004	0.007	0.004	0.003
12 Lake-Cook Road, Buffalo Creek	0.020	0.030	0.002	0.019	0.008	0.006	0.005	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.020	0.030	0.000	0.014	0.007	0.005	0.004	0.003	0.022	0.005	0.003
17 Oakton Street, Des Plaines River	0.020	0.030	0.000	0.012	0.007	0.005	0.005	0.004	0.007	0.006	0.003
19 Belmont Avenue, Des Plaines River	0.020	0.030	0.000	0.015	0.007	0.005	0.006	0.005	0.008	0.006	0.003
20 Roosevelt Road, Des Plaines River	0.020	0.030	0.000	0.014	0.007	0.005	0.007	0.005	0.008	0.005	0.002
22 Ogden Avenue, Des Plaines River	0.020	0.030	0.000	0.012	0.008	0.006	0.008	0.005	0.008	0.008	0.002
23 Willow Springs Road, Des Plaines River	0.020	0.030	0.000	0.012	0.008	0.006	0.007	0.005	0.012	0.007	0.003
29 Stephen Street, Des Plaines River	0.020	0.030	0.000	0.012	0.008	0.005	0.006	0.005	0.009	0.008	0.002
91 Material Service Road, Des Plaines River	0.020	0.030	0.000	0.014	0.007	0.007	0.007	0.005	0.009	0.008	0.002

ND = No Data.

TABLE AII-97: TOTAL NICKEL MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.005	0.008	0.002	0.000	0.000	0.003	0.003	0.003	0.003	0.004	0.005
103 Golf Road, West Fork North Branch Chicago River	0.005	0.008	0.001	0.001	0.000	0.001	0.002	0.003	0.001	0.003	0.006
31 Lake-Cook Road, Middle Fork North Branch	0.005	0.008	0.000	0.000	0.000	0.001	0.002	0.002	0.002	0.002	0.005
104 Glenview Road, North Branch Chicago River	0.005	0.008	0.000	0.000	0.000	0.001	0.002	0.002	0.003	0.001	0.004
32 Lake-Cook Road, Skokie River	0.005	0.008	0.002	0.000	0.000	0.001	0.002	0.001	0.001	0.002	0.005
105 Frontage Road, Skokie River	0.005	0.011	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.002	0.005
34 Dempster Street, North Branch Chicago River	0.005	0.008	0.000	0.000	0.000	0.002	0.002	0.002	0.001	0.003	0.004
96 Albany Avenue, North Branch Chicago River	0.005	0.008	0.000	0.000	0.000	0.001	0.002	0.002	0.004	0.003	0.005
35 Central Street, North Shore Channel	0.005	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.002
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.010	0.008	0.000	0.000	0.000	0.001	0.002	0.002	0.001	0.003	0.005
36 Touhy Avenue, North Shore Channel	0.011	0.008	0.000	0.000	0.000	0.001	0.002	0.002	0.002	0.005	0.004
101 Foster Avenue, North Shore Channel	0.010	0.008	0.000	0.001	0.000	0.002	0.002	0.003	0.002	0.005	0.006
37 Wilson Avenue, North Branch Chicago River	0.005	0.008	0.000	0.000	0.000	0.000	0.002	0.003	0.003	0.005	0.005
73 Diversey Parkway, North Branch Chicago River	0.011	0.013	0.000	0.001	0.000	0.002	0.002	0.003	0.002	0.006	0.009
46 Grand Avenue, North Branch Chicago River	0.012	0.008	0.000	0.002	0.000	0.004	0.004	0.004	0.004	0.008	0.008
74 Lake Shore Drive, Chicago River	0.006	0.008	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.001	0.003
100 Wells Street, Chicago River	0.007	0.008	0.001	0.000	0.000	0.002	0.001	0.002	0.002	0.004	0.004
39 Madison Street, South Branch Chicago River	0.008	0.008	0.000	0.000	0.000	0.012	0.003	0.004	0.003	0.006	0.007
108 Loomis Street, South Branch Chicago River	0.010	0.008	0.000	0.000	0.000	0.004	0.003	0.004	0.003	0.006	0.007
99 Archer Avenue, South Fork South Branch Chicago River	0.008	0.008	0.000	0.000	0.000	0.003	0.003	0.004	0.003	0.005	0.006
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.008	0.008	0.000	0.000	0.000	0.003	0.003	0.004	0.003	0.007	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.006
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.016	0.008	0.000	0.000	0.000	0.003	0.003	0.004	0.003	0.007	0.006
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.009	0.008	0.001	0.000	0.000	0.004	0.005	0.006	0.005	0.005	0.008
42 Route 83, Chicago Sanitary & Ship Canal	0.010	0.027	0.001	0.000	0.000	0.006	0.005	0.006	0.007	0.008	0.009
48 Stephen Street, Chicago Sanitary & Ship Canal	0.008	0.016	0.000	0.000	0.000	0.005	0.004	0.006	0.006	0.007	0.009
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.007	0.009	0.000	0.000	0.000	0.004	0.005	0.006	0.005	0.006	0.008
Calumet River System											
49 Ewing Avenue, Calumet River	0.005	0.009	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.002
50 Burnham Avenue, Wolf Lake	0.005	0.008	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
55 130th Street, Calumet River	0.005	0.008	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.002	0.002
86 Burnham Avenue, Grand Calumet River	0.005	0.008	0.000	0.000	0.000	0.003	0.003	0.005	0.004	0.005	0.009
56 Indiana Avenue, Little Calumet River	0.005	0.008	0.000	0.000	0.000	0.004	0.002	0.002	0.002	0.003	0.006
76 Halsted Street, Little Calumet River	0.006	0.008	0.000	0.000	0.000	0.003	0.002	0.004	0.002	0.004	0.004
52 Wentworth Avenue, Little Calumet River	0.005	0.008	0.002	0.000	0.000	0.002	0.002	0.003	0.003	0.002	0.005
54 Joe Orr Road, Thorn Creek	0.005	0.008	0.000	0.000	0.000	0.001	0.001	0.004	0.001	0.003	0.005
97 170th Street, Thorn Creek	0.006	0.010	0.004	0.000	0.000	0.003	0.004	0.007	0.005	0.003	0.007
57 Ashland Avenue, Little Calumet River	0.005	0.008	0.000	0.000	0.000	0.004	0.003	0.005	0.004	0.004	0.010
58 Ashland Avenue, Calumet-Sag Channel	0.005	0.008	0.000	0.000	0.000	0.003	0.002	0.003	0.003	0.004	0.004
59 Cicero Avenue, Calumet-Sag Channel	0.005	0.008	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.005	0.005
43 Route 83, Calumet-Sag Channel	0.005	0.008	0.001	0.000	0.000	0.003	0.003	0.004	0.002	0.005	0.006
Des Plaines River System											
90 Route 19, Poplar Creek	0.005	0.008	0.000	0.000	0.002	0.000	0.001	0.002	0.000	0.001	0.003
110 Springinguth Road, West Branch DuPage River	0.005	0.008	0.000	0.000	0.000	0.002	0.002	0.003	0.003	ND	ND
89 Walnut Lane, West Branch DuPage River	0.006	0.009	0.001	0.003	0.001	0.002	0.003	0.003	0.001	0.001	0.005
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.004	0.000	0.003	0.004	0.004	0.002	0.002	0.004
111 Arlington Drive, West Branch DuPage River	0.005	0.008	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.005	0.008	0.000	0.000	0.000	0.002	0.002	0.004	0.002	0.002	0.006
80 Arlington Heights Road, Salt Creek	0.005	0.008	0.003	0.000	0.000	0.003	0.002	0.003	0.002	0.002	0.005
18 Devon Avenue, Salt Creek	0.005	0.008	0.004	0.000	0.000	0.003	0.002	0.003	0.002	0.003	0.004
24 Wolf Road, Salt Creek	0.006	0.008	0.003	0.000	0.000	0.004	0.004	0.005	0.005	0.004	0.009
109 Brookfield Avenue, Salt Creek	0.006	0.012	0.002	0.000	0.000	0.004	0.004	0.006	0.005	0.004	0.011
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
77 Elmhurst Road, Higgins Creek	0.005	0.008	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002	0.005
78 Wille Road, Higgins Creek	0.007	0.008	0.004	0.000	0.002	0.007	0.007	0.014	0.006	0.005	0.009
12 Lake-Cook Road, Buffalo Creek	0.006	0.008	0.000	0.001	0.000	0.002	0.002	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.005	0.008	0.000	0.000	0.006	0.002	0.002	0.005	0.003	0.005	0.005
17 Oakton Street, Des Plaines River	0.005	0.008	0.000	0.002	0.000	0.001	0.002	0.004	0.002	0.004	0.005
19 Belmont Avenue, Des Plaines River	0.005	0.010	0.000	0.002	0.000	0.003	0.003	0.006	0.003	0.005	0.006
20 Roosevelt Road, Des Plaines River	0.005	0.008	0.000	0.000	0.000	0.002	0.003	0.006	0.003	0.004	0.007
22 Ogden Avenue, Des Plaines River	0.005	0.008	0.000	0.000	0.000	0.003	0.004	0.006	0.003	0.005	0.008
23 Willow Springs Road, Des Plaines River	0.005	0.008	0.000	0.000	0.000	0.003	0.003	0.006	0.003	0.004	0.007
29 Stephen Street, Des Plaines River	0.005	0.008	0.000	0.000	0.000	0.003	0.003	0.005	0.003	0.005	0.007
91 Material Service Road, Des Plaines River	0.006	0.008	0.000	0.500	0.000	0.003	0.003	0.005	0.004	0.005	0.007

ND = No Data.

**TABLE AII-98: TOTAL MANGANESE MEAN HISTORY
2002 THROUGH 2012**

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.069	0.082	0.094	0.080	0.089	0.075	0.087	0.083	0.097	0.097	0.067
103 Golf Road, West Fork North Branch Chicago River	0.096	0.069	0.066	0.076	0.069	0.074	0.068	0.087	0.067	0.070	0.091
31 Lake-Cook Road, Middle Fork North Branch	0.076	0.081	0.171	0.078	0.084	0.148	0.084	0.128	0.092	0.077	0.148
104 Glenview Road, North Branch Chicago River	0.059	0.081	0.072	0.087	0.073	0.062	0.072	0.080	0.060	0.062	0.060
32 Lake-Cook Road, Skokie River	0.103	0.096	0.120	0.085	0.095	0.120	0.086	0.124	0.137	0.081	0.096
105 Frontage Road, Skokie River	0.039	0.054	0.069	0.056	0.059	0.055	0.038	0.045	0.086	0.108	0.046
34 Dempster Street, North Branch Chicago River	0.076	0.081	0.069	0.067	0.072	0.068	0.064	0.072	0.065	0.112	0.083
96 Albany Avenue, North Branch Chicago River	0.052	0.069	0.058	0.060	0.085	0.068	0.060	0.059	0.062	0.072	0.057
35 Central Street, North Shore Channel	0.022	0.022	0.020	0.019	0.037	0.015	0.019	0.045	0.017	0.020	0.028
112 Dempster Street, North Shore Channel	0.041	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.039	0.035	0.041	0.024	0.032	0.021	0.024	0.021	0.025	0.031	0.026
36 Touhy Avenue, North Shore Channel	0.032	0.030	0.027	0.016	0.023	0.019	0.014	0.021	0.019	0.016	0.034
101 Foster Avenue, North Shore Channel	0.027	0.030	0.023	0.024	0.024	0.020	0.015	0.021	0.023	0.019	0.027
37 Wilson Avenue, North Branch Chicago River	0.035	0.030	0.033	0.028	0.033	0.026	0.022	0.026	0.027	0.030	0.035
73 Diversey Parkway, North Branch Chicago River	0.037	0.092	0.034	0.034	0.043	0.029	0.026	0.026	0.027	0.046	0.036
46 Grand Avenue, North Branch Chicago River	0.046	0.041	0.032	0.036	0.045	0.054	0.031	0.033	0.037	0.038	0.042
74 Lake Shore Drive, Chicago River	0.021	0.025	0.017	0.013	0.017	0.018	0.008	0.012	0.018	0.013	0.017
100 Wells Street, Chicago River	0.039	0.058	0.019	0.018	0.037	0.024	0.013	0.020	0.022	0.020	0.021
39 Madison Street, South Branch Chicago River	0.054	0.049	0.036	0.026	0.038	0.030	0.022	0.069	0.028	0.028	0.036
108 Loomis Street, South Branch Chicago River	0.040	0.118	0.036	0.032	0.048	0.042	0.027	0.036	0.028	0.027	0.035
99 Archer Avenue, South Fork South Branch Chicago River	0.049	0.044	0.034	0.046	0.049	0.033	0.026	0.038	0.034	0.032	0.048
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.042	0.039	0.034	0.030	0.045	0.032	0.029	0.031	0.029	0.035	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.041
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.051	0.040	0.033	0.029	0.037	0.034	0.029	0.029	0.029	0.032	0.040
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.026	0.037	0.039	0.034	0.029	0.031	0.031	0.019	0.019	0.017	0.036
42 Route 83, Chicago Sanitary & Ship Canal	0.032	0.038	0.024	0.022	0.027	0.023	0.020	0.021	0.022	0.029	0.039
48 Stephen Street, Chicago Sanitary & Ship Canal	0.047	0.045	0.065	0.041	0.036	0.032	0.039	0.039	0.042	0.039	0.043
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.041	0.090	0.042	0.041	0.066	0.039	0.036	0.037	0.047	0.037	0.053
Calumet River System											
49 Ewing Avenue, Calumet River	0.022	0.033	0.023	0.030	0.018	0.023	0.017	0.016	0.053	0.020	0.022
50 Burnham Avenue, Wolf Lake	0.058	0.045	0.058	0.047	0.052	0.081	0.029	0.054	0.040	0.035	0.028
55 130th Street, Calumet River	0.021	0.035	0.026	0.031	0.050	0.028	0.040	0.033	0.030	0.039	0.031
86 Burnham Avenue, Grand Calumet River	0.238	0.228	0.221	0.088	0.169	0.176	0.144	0.093	0.096	0.158	0.098
56 Indiana Avenue, Little Calumet River	0.021	0.037	0.085	0.052	0.059	0.046	0.029	0.037	0.028	0.039	0.086
76 Halsted Street, Little Calumet River	0.040	0.043	0.049	0.037	0.050	0.078	0.041	0.037	0.036	0.041	0.053
52 Wentworth Avenue, Little Calumet River	0.111	0.137	0.147	0.119	0.121	0.131	0.112	0.115	0.138	0.124	0.134
54 Joe Orr Road, Thorn Creek	0.074	0.089	0.073	0.062	0.064	0.066	0.050	0.131	0.073	0.058	0.073
97 170th Street, Thorn Creek	0.088	0.126	0.115	0.092	0.081	0.097	0.080	0.095	0.111	0.080	0.102
57 Ashland Avenue, Little Calumet River	0.094	0.109	0.108	0.116	0.085	0.114	0.087	0.123	0.128	0.109	0.104
58 Ashland Avenue, Calumet-Sag Channel	0.052	0.069	0.081	0.053	0.058	0.061	0.048	0.052	0.048	0.055	0.066
59 Cicero Avenue, Calumet-Sag Channel	0.046	0.063	0.064	0.049	0.100	0.056	0.056	0.050	0.071	0.078	0.073
43 Route 83, Calumet-Sag Channel	0.054	0.067	0.065	0.053	0.065	0.057	0.054	0.065	0.059	0.094	0.063
Des Plaines River System											
90 Route 19, Poplar Creek	0.114	0.076	0.105	0.076	0.126	0.080	0.080	0.147	0.097	0.083	0.103
110 Springinguth Road, West Branch DuPage River	0.195	0.106	0.133	0.125	0.207	0.113	0.129	0.209	0.126	ND	ND
89 Walnut Lane, West Branch DuPage River	0.049	0.035	0.066	0.035	0.059	0.036	0.033	0.044	0.044	0.043	0.074
64 Lake Street, West Branch DuPage River	ND	ND	0.101	0.099	0.075	0.073	0.065	0.087	0.071	0.076	0.069
111 Arlington Drive, West Branch DuPage River	0.066	0.061	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.081	0.120	0.112	0.104	0.119	0.110	0.089	0.138	0.124	0.096	0.134
80 Arlington Heights Road, Salt Creek	0.054	0.056	0.061	0.046	0.068	0.059	0.046	0.063	0.057	0.052	0.051
18 Devon Avenue, Salt Creek	0.050	0.052	0.079	0.056	0.071	0.057	0.048	0.053	0.052	0.054	0.052
24 Wolf Road, Salt Creek	0.067	0.055	0.061	0.061	0.065	0.065	0.061	0.059	0.055	0.069	0.066
109 Brookfield Avenue, Salt Creek	0.060	0.058	0.066	0.059	0.069	0.059	0.061	0.065	0.055	0.072	0.042
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.065
77 Elmhurst Road, Higgins Creek	0.151	0.098	0.090	0.092	0.149	0.112	0.107	0.106	0.125	0.115	0.120
78 Wille Road, Higgins Creek	0.026	0.021	0.070	0.032	0.060	0.040	0.030	0.023	0.025	0.033	0.048
12 Lake-Cook Road, Buffalo Creek	0.242	0.093	0.143	0.117	0.145	0.142	0.107	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.066	0.061	0.084	0.064	0.079	0.067	0.067	0.086	0.084	0.083	0.089
17 Oakton Street, Des Plaines River	0.051	0.065	0.064	0.068	0.084	0.065	0.062	0.080	0.067	0.093	0.089
19 Belmont Avenue, Des Plaines River	0.046	0.094	0.084	0.062	0.075	0.060	0.061	0.079	0.061	0.076	0.079
20 Roosevelt Road, Des Plaines River	0.054	0.064	0.066	0.062	0.082	0.061	0.061	0.073	0.062	0.074	0.145
22 Ogden Avenue, Des Plaines River	0.066	0.054	0.059	0.051	0.074	0.076	0.058	0.068	0.058	0.077	0.066
23 Willow Springs Road, Des Plaines River	0.053	0.063	0.058	0.055	0.068	0.050	0.054	0.064	0.075	0.062	0.062
29 Stephen Street, Des Plaines River	0.079	0.075	0.059	0.058	0.085	0.055	0.051	0.066	0.059	0.066	0.060
91 Material Service Road, Des Plaines River	0.059	0.080	0.060	0.054	0.068	0.058	0.054	0.068	0.065	0.068	0.065

ND = No Data.

TABLE AII-99: TOTAL MERCURY MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means ($\mu\text{g/L}$)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.200	0.200	0.000	0.000	0.000	0.015	0.000	0.000	0.179	0.000	0.028
103 Golf Road, West Fork North Branch Chicago River	0.200	0.200	0.000	0.000	0.000	0.000	0.015	0.039	0.080	0.016	0.045
31 Lake-Cook Road, Middle Fork North Branch	0.200	0.200	0.000	0.000	0.000	0.000	0.012	0.013	0.121	0.029	0.015
104 Glenview Road, North Branch Chicago River	0.200	0.200	0.000	0.000	0.000	0.007	0.024	0.034	0.111	0.013	0.034
32 Lake-Cook Road, Skokie River	0.200	0.200	0.000	0.000	0.000	0.005	0.022	0.029	0.113	0.019	0.040
105 Frontage Road, Skokie River	0.200	0.200	0.000	0.000	0.000	0.008	0.011	0.062	0.160	0.021	0.030
34 Dempster Street, North Branch Chicago River	0.200	0.200	0.000	0.000	0.000	0.011	0.010	0.034	0.125	0.012	0.031
96 Albany Avenue, North Branch Chicago River	0.200	0.200	0.000	0.000	0.000	0.027	0.006	0.064	0.028	0.016	0.023
35 Central Street, North Shore Channel	0.200	0.200	0.000	0.000	0.000	0.000	0.007	0.016	0.000	0.010	0.038
112 Dempster Street, North Shore Channel	0.200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.200	0.200	0.000	0.000	0.000	0.008	0.009	0.068	0.076	0.000	0.025
36 Touhy Avenue, North Shore Channel	0.200	0.200	0.000	0.000	0.000	0.000	0.011	0.040	0.077	0.018	0.018
101 Foster Avenue, North Shore Channel	0.200	0.200	0.000	0.000	0.000	0.008	0.011	0.046	0.067	0.006	0.026
37 Wilson Avenue, North Branch Chicago River	0.200	0.200	0.000	0.000	0.000	0.000	0.024	0.041	0.095	0.017	0.024
73 Diversey Parkway, North Branch Chicago River	0.200	0.200	0.000	0.000	0.000	0.000	0.011	0.022	0.016	0.010	0.035
46 Grand Avenue, North Branch Chicago River	0.200	0.200	0.000	0.000	0.000	0.017	0.009	0.018	0.039	0.041	0.046
74 Lake Shore Drive, Chicago River	0.200	0.200	0.000	0.000	0.000	0.015	0.005	0.000	0.122	0.044	0.020
100 Wells Street, Chicago River	0.200	0.200	0.000	0.000	0.000	0.012	0.016	0.030	0.061	0.033	0.013
39 Madison Street, South Branch Chicago River	0.200	0.200	0.000	0.000	0.000	0.013	0.016	0.011	0.021	0.058	0.031
108 Loomis Street, South Branch Chicago River	0.200	0.200	0.000	0.000	0.000	0.013	0.024	0.017	0.034	0.040	0.018
99 Archer Avenue, South Fork South Branch Chicago River	0.200	0.200	0.000	0.000	0.000	0.006	0.029	0.020	0.053	0.018	0.018
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.200	0.200	0.000	0.000	0.000	0.004	0.023	0.007	0.021	0.033	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.018
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.200	0.200	0.000	0.000	0.000	0.005	0.022	0.029	0.049	0.038	0.011
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.200	0.200	0.000	0.000	0.000	0.007	0.017	0.000	0.022	0.021	0.015
42 Route 83, Chicago Sanitary & Ship Canal	0.200	0.200	0.000	0.000	0.000	0.018	0.016	0.010	0.087	0.023	0.007
48 Stephen Street, Chicago Sanitary & Ship Canal	0.200	0.200	0.000	0.000	0.000	0.005	0.018	0.016	0.093	0.031	0.008
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.200	0.200	0.000	0.000	0.000	0.010	0.015	0.017	0.079	0.045	0.026
Calumet River System											
49 Ewing Avenue, Calumet River	0.200	0.200	0.000	0.000	0.000	0.000	0.008	0.000	0.110	0.013	0.018
50 Burnham Avenue, Wolf Lake	0.200	0.200	0.000	0.000	0.000	0.010	0.015	0.005	0.020	0.038	0.021
55 130th Street, Calumet River	0.200	0.200	0.000	0.000	0.000	0.000	0.015	0.017	0.051	0.009	0.031
86 Burnham Avenue, Grand Calumet River	0.200	0.200	0.000	0.000	0.000	0.049	0.034	0.148	0.068	0.079	0.055
56 Indiana Avenue, Little Calumet River	0.200	0.200	0.000	0.000	0.000	0.000	0.018	0.019	0.000	0.027	0.034
76 Halsted Street, Little Calumet River	0.200	0.200	0.000	0.000	0.000	0.000	0.021	0.018	0.029	0.007	0.047
52 Wentworth Avenue, Little Calumet River	0.200	0.200	0.000	0.000	0.000	0.000	0.015	0.036	0.017	0.027	0.034
54 Joe Orr Road, Thorn Creek	0.200	0.200	0.000	0.000	0.000	0.000	0.018	0.033	0.000	0.053	0.044
97 170th Street, Thorn Creek	0.200	0.200	0.000	0.000	0.000	0.005	0.015	0.031	0.025	0.034	0.018
57 Ashland Avenue, Little Calumet River	0.200	0.200	0.000	0.000	0.000	0.012	0.015	0.044	0.052	0.025	0.041
58 Ashland Avenue, Calumet-Sag Channel	0.200	0.200	0.000	0.000	0.000	0.007	0.015	0.010	0.032	0.010	0.009
59 Cicero Avenue, Calumet-Sag Channel	0.200	0.200	0.000	0.000	0.000	0.000	0.018	0.019	0.050	0.007	0.021
43 Route 83, Calumet-Sag Channel	0.200	0.200	0.000	0.000	0.000	0.005	0.010	0.023	0.017	0.007	0.028
Des Plaines River System											
90 Route 19, Poplar Creek	0.200	0.200	0.000	0.000	0.000	0.019	0.008	0.045	0.051	0.016	0.028
110 Springinsguth Road, West Branch DuPage River	0.200	0.200	0.000	0.000	0.000	0.007	0.009	0.031	0.039	ND	ND
89 Walnut Lane, West Branch DuPage River	0.200	0.200	0.000	0.000	0.000	0.007	0.008	0.007	0.042	0.016	0.024
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.000	0.000	0.015	0.009	0.013	0.044	0.044	0.029
111 Arlington Drive, West Branch DuPage River	0.200	0.200	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.209	0.200	0.000	0.000	0.000	0.012	0.000	0.008	0.014	0.032	0.051
80 Arlington Heights Road, Salt Creek	0.200	0.200	0.000	0.000	0.000	0.000	0.013	0.023	0.025	0.041	0.030
18 Devon Avenue, Salt Creek	0.200	0.200	0.000	0.000	0.000	0.006	0.018	0.044	0.058	0.040	0.008
24 Wolf Road, Salt Creek	0.200	0.200	0.000	0.000	0.000	0.013	0.013	0.011	0.027	0.066	0.045
109 Brookfield Avenue, Salt Creek	0.200	0.200	0.000	0.000	0.000	0.005	0.013	0.000	0.075	0.035	0.023
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000
77 Elmhurst Road, Higgins Creek	0.200	0.200	0.000	0.000	0.000	0.010	0.000	0.000	0.040	0.048	0.030
78 Wille Road, Higgins Creek	0.200	0.200	0.000	0.000	0.000	0.006	0.013	0.013	0.032	0.038	0.018
12 Lake-Cook Road, Buffalo Creek	0.200	0.200	0.000	0.000	0.000	0.007	0.010	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.200	0.200	0.000	0.000	0.000	0.006	0.020	0.014	0.035	0.021	0.023
17 Oakton Street, Des Plaines River	0.200	0.200	0.000	0.000	0.000	0.009	0.013	0.017	0.025	0.075	0.028
19 Belmont Avenue, Des Plaines River	0.200	0.200	0.000	0.000	0.000	0.000	0.014	0.000	0.037	0.053	0.041
20 Roosevelt Road, Des Plaines River	0.200	0.200	0.000	0.000	0.000	0.005	0.013	0.013	0.032	0.114	0.038
22 Ogden Avenue, Des Plaines River	0.200	0.200	0.000	0.000	0.000	0.006	0.018	0.013	0.050	0.054	0.055
23 Willow Springs Road, Des Plaines River	0.200	0.200	0.000	0.000	0.000	0.007	0.013	0.013	0.016	0.037	0.090
29 Stephen Street, Des Plaines River	0.200	0.200	0.000	0.000	0.000	0.013	0.047	0.011	0.037	0.016	0.044
91 Material Service Road, Des Plaines River	0.200	0.200	0.000	0.000	0.000	0.007	0.012	0.021	0.017	0.015	0.033

ND = No Data.

TABLE AII-100: LOW LEVEL MERCURY MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (ng/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	3.5	3.6	7.0	6.9	3.7	2.4	5.6	ND	ND	ND	ND
103 Golf Road, West Fork North Branch Chicago River	6.7	3.3	9.7	11.0	6.9	3.6	9.5	ND	ND	ND	ND
31 Lake-Cook Road, Middle Fork North Branch	3.8	2.1	1.9	3.2	2.9	2.0	3.6	ND	ND	ND	ND
104 Glenview Road, North Branch Chicago River	3.8	3.3	3.0	3.8	3.9	1.8	6.8	ND	ND	ND	ND
32 Lake-Cook Road, Skokie River	4.0	2.8	5.2	6.5	6.3	2.8	6.2	ND	ND	ND	ND
105 Frontage Road, Skokie River	3.8	2.1	2.4	3.7	3.6	1.4	3.1	ND	ND	ND	ND
34 Dempster Street, North Branch Chicago River	5.7	2.6	3.3	5.3	5.5	2.9	5.8	ND	ND	ND	ND
96 Albany Avenue, North Branch Chicago River	5.9	2.6	4.3	6.3	8.0	3.4	5.7	ND	ND	ND	ND
35 Central Street, North Shore Channel	4.6	2.2	1.8	2.3	2.3	0.7	1.6	ND	ND	ND	ND
112 Dempster Street, North Shore Channel	7.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	4.5	3.0	7.2	4.9	5.4	2.7	4.7	ND	ND	ND	ND
36 Touhy Avenue, North Shore Channel	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
101 Foster Avenue, North Shore Channel	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND
37 Wilson Avenue, North Branch Chicago River	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND
73 Diversey Parkway, North Branch Chicago River	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND
46 Grand Avenue, North Branch Chicago River	ND	ND	ND	12.0	ND	ND	ND	ND	ND	ND	ND
74 Lake Shore Drive, Chicago River	3.7	2.1	1.0	1.7	1.9	1.4	1.3	ND	ND	ND	ND
100 Wells Street, Chicago River	8.3	8.5	2.2	2.9	2.7	1.6	2.1	ND	ND	ND	ND
39 Madison Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108 Loomis Street, South Branch Chicago River	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND
99 Archer Avenue, South Fork South Branch Chicago River	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	6.1	0.0	ND	ND	ND	ND	ND	ND
Calumet River System											
49 Ewing Avenue, Calumet River	4.4	2.5	0.6	2.1	1.4	0.7	3.1	ND	ND	ND	ND
50 Burnham Avenue, Wolf Lake	3.9	1.9	0.9	1.9	1.6	0.2	1.8	ND	ND	ND	ND
55 130th Street, Calumet River	3.9	2.5	2.2	2.1	1.7	1.6	4.2	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
56 Indiana Avenue, Little Calumet River	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
52 Wentworth Avenue, Little Calumet River	3.9	7.1	6.4	8.3	2.7	3.0	6.1	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	5.2	4.6	3.1	4.9	1.6	2.8	2.5	ND	ND	ND	ND
97 170th Street, Thorn Creek	4.4	13.0	15.1	8.3	5.4	5.7	10.5	ND	ND	ND	ND
57 Ashland Avenue, Little Calumet River	6.8	7.3	9.2	8.1	3.6	4.2	7.6	ND	ND	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	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND
43 Route 83, Calumet-Sag Channel	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND
Des Plaines River System											
90 Route 19, Poplar Creek	3.9	2.7	1.5	2.0	1.5	2.6	2.9	ND	ND	ND	ND
110 Springinsguth Road, West Branch DuPage River	5.6	2.7	1.4	3.3	9.8	1.4	4.2	ND	ND	ND	ND
89 Walnut Lane, West Branch DuPage River	5.5	3.1	5.1	3.4	3.7	1.6	4.4	ND	ND	ND	ND
64 Lake Street, West Branch DuPage River	ND	ND	3.0	3.3	2.6	2.3	4.0	ND	ND	ND	ND
111 Arlington Drive, West Branch DuPage River	4.9	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	5.9	4.6	3.3	3.4	2.5	1.5	4.1	ND	ND	ND	ND
80 Arlington Heights Road, Salt Creek	3.9	2.5	2.5	2.5	1.6	0.5	2.3	ND	ND	ND	ND
18 Devon Avenue, Salt Creek	5.5	3.2	2.1	2.7	1.4	0.9	2.2	ND	ND	ND	ND
24 Wolf Road, Salt Creek	5.0	4.4	4.8	4.9	3.1	2.7	6.2	ND	ND	ND	ND
109 Brookfield Avenue, Salt Creek	7.1	2.5	3.9	7.3	3.9	2.5	8.6	ND	ND	ND	ND
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	5.9	4.7	5.2	5.8	4.6	2.2	7.8	ND	ND	ND	ND
78 Wille Road, Higgins Creek	6.3	3.5	0.8	2.3	1.7	0.7	2.0	ND	ND	ND	ND
12 Lake-Cook Road, Buffalo Creek	3.3	3.9	2.3	4.0	2.1	2.1	3.3	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	4.4	3.3	1.9	2.8	1.5	1.4	3.1	ND	ND	ND	ND
17 Oakton Street, Des Plaines River	3.6	3.3	2.4	3.5	2.2	1.7	3.6	ND	ND	ND	ND
19 Belmont Avenue, Des Plaines River	5.2	3.0	2.8	3.4	2.7	1.8	3.9	ND	ND	ND	ND
20 Roosevelt Road, Des Plaines River	4.4	3.4	3.7	4.4	2.9	2.0	4.2	ND	ND	ND	ND
22 Ogden Avenue, Des Plaines River	8.7	2.8	3.7	5.5	3.3	2.5	6.9	ND	ND	ND	ND
23 Willow Springs Road, Des Plaines River	5.9	2.4	3.6	5.2	3.4	2.4	5.3	ND	ND	ND	ND
29 Stephen Street, Des Plaines River	4.7	3.0	4.2	5.1	3.3	2.1	6.4	ND	ND	ND	ND
91 Material Service Road, Des Plaines River	5.4	3.4	3.9	4.9	3.0	2.6	6.2	ND	ND	ND	ND

ND = No Data.

TABLE AII-101: TOTAL ZINC MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.040	0.060	0.013	0.027	0.040	0.030	0.045	0.039	0.052	0.045	0.031
103 Golf Road, West Fork North Branch Chicago River	0.023	0.060	0.006	0.012	0.014	0.022	0.026	0.028	0.032	0.028	0.046
31 Lake-Cook Road, Middle Fork North Branch	0.010	0.060	0.002	0.005	0.017	0.019	0.029	0.019	0.021	0.022	0.022
104 Glenview Road, North Branch Chicago River	0.025	0.062	0.021	0.053	0.028	0.039	0.049	0.038	0.033	0.038	0.035
32 Lake-Cook Road, Skokie River	0.017	0.065	0.007	0.009	0.021	0.021	0.036	0.027	0.021	0.024	0.029
105 Frontage Road, Skokie River	0.020	0.060	0.015	0.023	0.021	0.026	0.029	0.035	0.042	0.047	0.043
34 Dempster Street, North Branch Chicago River	0.023	0.060	0.012	0.015	0.028	0.021	0.025	0.031	0.034	0.046	0.042
96 Albany Avenue, North Branch Chicago River	0.020	0.060	0.007	0.018	0.020	0.023	0.024	0.030	0.032	0.036	0.038
35 Central Street, North Shore Channel	0.010	0.060	0.002	0.009	0.004	0.010	0.011	0.019	0.020	0.025	0.028
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.035	0.060	0.012	0.013	0.018	0.030	0.027	0.030	0.026	0.042	0.037
36 Touhy Avenue, North Shore Channel	0.035	0.060	0.020	0.027	0.034	0.038	0.035	0.042	0.040	0.045	0.058
101 Foster Avenue, North Shore Channel	0.030	0.060	0.019	0.026	0.033	0.039	0.035	0.039	0.047	0.046	0.044
37 Wilson Avenue, North Branch Chicago River	0.033	0.060	0.018	0.025	0.028	0.036	0.032	0.039	0.042	0.043	0.042
73 Diversey Parkway, North Branch Chicago River	0.030	0.063	0.020	0.025	0.030	0.036	0.032	0.037	0.036	0.058	0.045
46 Grand Avenue, North Branch Chicago River	0.038	0.060	0.019	0.029	0.033	0.040	0.041	0.049	0.051	0.064	0.049
74 Lake Shore Drive, Chicago River	0.020	0.060	0.001	0.007	0.010	0.030	0.018	0.029	0.023	0.024	0.023
100 Wells Street, Chicago River	0.033	0.060	0.013	0.012	0.018	0.026	0.021	0.030	0.028	0.030	0.028
39 Madison Street, South Branch Chicago River	0.043	0.060	0.013	0.028	0.031	0.046	0.029	0.043	0.046	0.042	0.077
108 Loomis Street, South Branch Chicago River	0.045	0.060	0.011	0.030	0.037	0.043	0.033	0.038	0.042	0.041	0.040
99 Archer Avenue, South Fork South Branch Chicago River	0.035	0.060	0.010	0.023	0.033	0.032	0.028	0.039	0.040	0.038	0.044
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.038	0.060	0.015	0.030	0.036	0.043	0.042	0.045	0.047	0.065	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.045
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.048	0.062	0.014	0.026	0.034	0.046	0.035	0.040	0.042	0.041	0.046
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.033	0.060	0.020	0.029	0.035	0.046	0.035	0.041	0.037	0.038	0.038
42 Route 83, Chicago Sanitary & Ship Canal	0.030	0.060	0.015	0.028	0.031	0.045	0.032	0.038	0.045	0.047	0.045
48 Stephen Street, Chicago Sanitary & Ship Canal	0.035	0.060	0.015	0.028	0.033	0.045	0.033	0.044	0.056	0.047	0.046
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.028	0.060	0.016	0.029	0.035	0.038	0.038	0.049	0.047	0.049	0.050
Calumet River System											
49 Ewing Avenue, Calumet River	0.010	0.060	0.000	0.008	0.016	0.021	0.016	0.014	0.019	0.018	0.021
50 Burnham Avenue, Wolf Lake	0.010	0.060	0.003	0.009	0.007	0.047	0.008	0.015	0.016	0.019	0.013
55 130th Street, Calumet River	0.010	0.060	0.004	0.005	0.008	0.019	0.053	0.022	0.026	0.022	0.025
86 Burnham Avenue, Grand Calumet River	0.023	0.060	0.021	0.049	0.039	0.053	0.055	0.154	0.062	0.081	0.087
56 Indiana Avenue, Little Calumet River	0.013	0.060	0.007	0.015	0.025	0.033	0.021	0.030	0.032	0.034	0.051
76 Halsted Street, Little Calumet River	0.028	0.073	0.016	0.032	0.059	0.053	0.041	0.051	0.052	0.050	0.065
52 Wentworth Avenue, Little Calumet River	0.020	0.060	0.014	0.027	0.022	0.026	0.027	0.035	0.047	0.036	0.064
54 Joe Orr Road, Thorn Creek	0.033	0.063	0.027	0.042	0.046	0.050	0.050	0.103	0.059	0.040	0.054
97 170th Street, Thorn Creek	0.023	0.066	0.025	0.029	0.031	0.038	0.031	0.046	0.060	0.048	0.054
57 Ashland Avenue, Little Calumet River	0.018	0.060	0.018	0.033	0.027	0.035	0.027	0.059	0.052	0.050	0.041
58 Ashland Avenue, Calumet-Sag Channel	0.028	0.062	0.015	0.033	0.059	0.048	0.040	0.069	0.060	0.055	0.055
59 Cicero Avenue, Calumet-Sag Channel	0.025	0.064	0.012	0.024	0.038	0.032	0.037	0.044	0.055	0.049	0.053
43 Route 83, Calumet-Sag Channel	0.025	0.060	0.010	0.026	0.030	0.035	0.034	0.055	0.046	0.055	0.051
Des Plaines River System											
90 Route 19, Poplar Creek	0.013	0.060	0.002	0.003	0.014	0.013	0.014	0.035	0.017	0.033	0.027
110 Springinguth Road, West Branch DuPage River	0.030	0.060	0.000	0.018	0.029	0.036	0.023	0.035	0.031	ND	ND
89 Walnut Lane, West Branch DuPage River	0.040	0.060	0.030	0.038	0.045	0.042	0.039	0.051	0.062	0.053	0.069
64 Lake Street, West Branch DuPage River	ND	ND	0.032	0.035	0.038	0.034	0.044	0.051	0.048	0.051	0.045
111 Arlington Drive, West Branch DuPage River	0.030	0.060	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.010	0.060	0.004	0.008	0.010	0.020	0.015	0.028	0.022	0.029	0.023
80 Arlington Heights Road, Salt Creek	0.018	0.060	0.011	0.023	0.019	0.036	0.025	0.039	0.078	0.036	0.031
18 Devon Avenue, Salt Creek	0.018	0.060	0.011	0.023	0.020	0.024	0.024	0.042	0.034	0.036	0.035
24 Wolf Road, Salt Creek	0.025	0.060	0.016	0.030	0.035	0.034	0.040	0.049	0.050	0.051	0.061
109 Brookfield Avenue, Salt Creek	0.030	0.060	0.016	0.028	0.032	0.032	0.040	0.050	0.040	0.049	0.045
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.049
77 Elmhurst Road, Higgins Creek	0.010	0.060	0.020	0.021	0.051	0.035	0.042	0.041	0.053	0.050	0.040
78 Wille Road, Higgins Creek	0.040	0.060	0.026	0.036	0.050	0.047	0.049	0.076	0.066	0.066	0.075
12 Lake-Cook Road, Buffalo Creek	0.015	0.060	0.014	0.017	0.016	0.019	0.017	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.010	0.060	0.007	0.019	0.032	0.025	0.024	0.036	0.034	0.043	0.039
17 Oakton Street, Des Plaines River	0.010	0.060	0.003	0.016	0.019	0.023	0.024	0.037	0.032	0.048	0.038
19 Belmont Avenue, Des Plaines River	0.020	0.061	0.012	0.020	0.028	0.029	0.033	0.054	0.040	0.060	0.044
20 Roosevelt Road, Des Plaines River	0.020	0.060	0.015	0.023	0.033	0.031	0.034	0.046	0.037	0.059	0.047
22 Ogden Avenue, Des Plaines River	0.010	0.060	0.017	0.021	0.036	0.037	0.037	0.046	0.036	0.055	0.043
23 Willow Springs Road, Des Plaines River	0.013	0.060	0.010	0.020	0.028	0.028	0.034	0.043	0.037	0.045	0.037
29 Stephen Street, Des Plaines River	0.018	0.060	0.015	0.021	0.027	0.033	0.033	0.042	0.035	0.048	0.041
91 Material Service Road, Des Plaines River	0.013	0.060	0.014	0.020	0.027	0.027	0.033	0.040	0.039	0.052	0.037

ND = No Data.

TABLE AII-102: TOTAL SELENIUM MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.006	0.006	0.000	0.011	0.000	0.000	0.003	0.007	0.010	0.003	0.010
103 Golf Road, West Fork North Branch Chicago River	0.005	0.005	0.000	0.000	0.000	0.000	0.001	0.006	0.015	0.003	0.007
31 Lake-Cook Road, Middle Fork North Branch	0.006	0.006	0.000	0.000	0.000	0.000	0.001	0.005	0.014	0.005	0.005
104 Glenview Road, North Branch Chicago River	0.006	0.005	0.000	0.000	0.000	0.000	0.001	0.004	0.011	0.002	0.003
32 Lake-Cook Road, Skokie River	0.007	0.005	0.000	0.000	0.000	0.000	0.001	0.005	0.012	0.005	0.009
105 Frontage Road, Skokie River	0.007	0.005	0.000	0.000	0.000	0.000	0.001	0.006	0.012	0.006	0.002
34 Dempster Street, North Branch Chicago River	0.006	0.006	0.000	0.000	0.000	0.000	0.001	0.006	0.012	0.008	0.010
96 Albany Avenue, North Branch Chicago River	0.005	0.005	0.000	0.000	0.000	0.000	0.001	0.004	0.009	0.006	0.006
35 Central Street, North Shore Channel	0.006	0.006	0.000	0.013	0.000	0.000	0.000	0.007	0.008	0.003	0.008
112 Dempster Street, North Shore Channel	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.005	0.005	0.000	0.012	0.000	0.000	0.002	0.004	0.011	0.004	0.002
36 Touhy Avenue, North Shore Channel	0.005	0.005	0.000	0.000	0.000	0.000	0.001	0.008	0.010	0.008	0.008
101 Foster Avenue, North Shore Channel	0.005	0.005	0.000	0.000	0.000	0.000	0.001	0.006	0.010	0.006	0.013
37 Wilson Avenue, North Branch Chicago River	0.005	0.006	0.000	0.000	0.000	0.000	0.001	0.007	0.011	0.006	0.017
73 Diversey Parkway, North Branch Chicago River	0.006	0.005	0.000	0.000	0.000	0.000	0.001	0.005	0.010	0.006	0.012
46 Grand Avenue, North Branch Chicago River	0.006	0.005	0.000	0.000	0.000	0.000	0.001	0.009	0.010	0.007	0.006
74 Lake Shore Drive, Chicago River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.006	0.009	0.005	0.009
100 Wells Street, Chicago River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.005	0.008	0.004	0.010
39 Madison Street, South Branch Chicago River	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.007	0.009	0.004	0.010
108 Loomis Street, South Branch Chicago River	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.008	0.007	0.004	0.010
99 Archer Avenue, South Fork South Branch Chicago River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.006	0.009	0.005	0.010
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.005	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.008
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.010	0.008	0.004	0.010
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.008	0.010	0.004	0.006
42 Route 83, Chicago Sanitary & Ship Canal	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.007	0.008	0.004	0.008
48 Stephen Street, Chicago Sanitary & Ship Canal	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.007	0.008	0.005	0.009
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.006	0.005	0.000	0.004	0.000	0.000	0.000	0.007	0.011	0.005	0.007
Calumet River System											
49 Ewing Avenue, Calumet River	0.005	0.005	0.000	0.014	0.000	0.000	0.000	0.004	0.008	0.005	0.005
50 Burnham Avenue, Wolf Lake	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.004	0.007	0.003	0.004
55 130th Street, Calumet River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.005	0.011	0.003	0.008
86 Burnham Avenue, Grand Calumet River	0.005	0.005	0.001	0.000	0.000	0.000	0.000	0.005	0.015	0.004	0.009
56 Indiana Avenue, Little Calumet River	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.005	0.008	0.003	0.009
76 Halsted Street, Little Calumet River	0.005	0.006	0.000	0.010	0.000	0.000	0.000	0.006	0.011	0.007	0.006
52 Wentworth Avenue, Little Calumet River	0.005	0.005	0.000	0.013	0.000	0.000	0.000	0.004	0.012	0.003	0.012
54 Joe Orr Road, Thorn Creek	0.005	0.005	0.000	0.013	0.000	0.000	0.000	0.005	0.006	0.009	0.009
97 170th Street, Thorn Creek	0.006	0.005	0.000	0.011	0.000	0.000	0.000	0.005	0.008	0.005	0.008
57 Ashland Avenue, Little Calumet River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.007	0.012	0.004	0.007
58 Ashland Avenue, Calumet-Sag Channel	0.005	0.005	0.000	0.013	0.000	0.000	0.000	0.005	0.010	0.006	0.012
59 Cicero Avenue, Calumet-Sag Channel	0.006	0.005	0.000	0.013	0.000	0.000	0.000	0.005	0.013	0.003	0.005
43 Route 83, Calumet-Sag Channel	0.005	0.005	0.000	0.013	0.000	0.000	0.000	0.005	0.010	0.004	0.011
Des Plaines River System											
90 Route 19, Poplar Creek	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.008	0.013	0.016	0.010
110 Springinguth Road, West Branch DuPage River	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.009	0.014	ND	ND
89 Walnut Lane, West Branch DuPage River	0.005	0.005	0.000	0.000	0.000	0.000	0.001	0.008	0.012	0.005	0.010
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.000	0.000	0.000	0.000	0.008	0.013	0.005	0.007
111 Arlington Drive, West Branch DuPage River	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.005	0.005	0.000	0.000	0.000	0.000	0.002	0.007	0.013	0.001	0.003
80 Arlington Heights Road, Salt Creek	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.009	0.010	0.003	0.016
18 Devon Avenue, Salt Creek	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.008	0.011	0.005	0.005
24 Wolf Road, Salt Creek	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.009	0.012	0.003	0.003
109 Brookfield Avenue, Salt Creek	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.007	0.011	0.003	0.004
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.020
77 Elmhurst Road, Higgins Creek	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.010	0.014	0.005	0.008
78 Wille Road, Higgins Creek	0.006	0.005	0.000	0.000	0.000	0.000	0.001	0.008	0.011	0.006	0.010
12 Lake-Cook Road, Buffalo Creek	0.006	0.005	0.000	0.000	0.000	0.000	0.001	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.007	0.014	0.006	0.007
17 Oakton Street, Des Plaines River	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.006	0.011	0.004	0.010
19 Belmont Avenue, Des Plaines River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.007	0.010	0.004	0.008
20 Roosevelt Road, Des Plaines River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.007	0.013	0.002	0.006
22 Ogden Avenue, Des Plaines River	0.005	0.005	0.000	0.009	0.000	0.000	0.000	0.010	0.011	0.007	0.017
23 Willow Springs Road, Des Plaines River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.008	0.010	0.004	0.006
29 Stephen Street, Des Plaines River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.008	0.011	0.003	0.003
91 Material Service Road, Des Plaines River	0.005	0.005	0.000	0.000	0.000	0.000	0.002	0.010	0.013	0.005	0.003

ND = No Data.

TABLE AII-103: SOLUBLE CALCIUM MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	84.3	76.7	75.3	65.8	68.8	70.9	57.9	65.7	81.4	53.7	73.3
103 Golf Road, West Fork North Branch Chicago River	92.8	74.9	72.4	65.2	65.8	72.2	70.4	74.0	69.0	66.0	66.2
31 Lake-Cook Road, Middle Fork North Branch	79.5	60.2	63.8	55.7	59.0	63.4	58.4	59.4	62.4	62.0	65.9
104 Glenview Road, North Branch Chicago River	79.5	59.8	65.0	59.7	63.2	61.4	58.1	55.5	62.9	65.7	63.7
32 Lake-Cook Road, Skokie River	84.3	66.8	72.2	61.4	62.6	72.8	63.1	64.0	70.5	66.4	69.8
105 Frontage Road, Skokie River	79.5	60.2	63.7	60.5	63.6	60.2	59.9	55.7	61.7	56.8	62.0
34 Dempster Street, North Branch Chicago River	91.0	63.7	71.7	59.5	61.7	62.6	62.8	61.6	65.7	61.4	63.1
96 Albany Avenue, North Branch Chicago River	88.3	67.0	65.8	62.6	65.2	64.7	64.7	63.7	64.1	62.4	64.7
35 Central Street, North Shore Channel	63.5	38.9	38.1	35.3	38.1	38.6	35.3	32.8	36.4	39.0	39.5
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	61.0	48.6	48.4	46.1	45.8	47.0	45.2	42.7	44.4	46.2	47.4
36 Touhy Avenue, North Shore Channel	59.3	55.6	51.7	58.3	57.9	53.7	49.8	46.8	54.6	51.1	54.8
101 Foster Avenue, North Shore Channel	60.8	54.8	55.2	56.0	59.0	56.6	51.5	47.4	54.7	52.2	54.4
37 Wilson Avenue, North Branch Chicago River	63.3	56.8	60.0	56.4	60.1	56.8	53.4	49.6	57.6	53.8	55.8
73 Diversey Parkway, North Branch Chicago River	65.0	57.3	57.9	56.7	60.8	56.4	53.7	49.1	58.1	52.7	55.1
46 Grand Avenue, North Branch Chicago River	66.8	58.1	55.5	54.8	58.8	56.4	54.0	52.7	57.5	54.4	55.1
74 Lake Shore Drive, Chicago River	54.5	44.5	37.3	36.0	37.5	40.6	36.7	37.9	40.1	39.1	40.2
100 Wells Street, Chicago River	61.5	50.5	43.0	42.6	47.0	44.5	42.3	41.8	43.5	46.2	43.9
39 Madison Street, South Branch Chicago River	63.5	59.3	49.7	51.7	52.8	49.1	49.0	49.0	50.2	53.0	53.3
108 Loomis Street, South Branch Chicago River	63.8	54.2	51.2	52.3	53.1	49.8	50.7	51.2	50.4	51.5	52.9
99 Archer Avenue, South Fork South Branch Chicago River	52.3	54.4	54.6	50.6	56.2	49.4	49.3	48.5	50.7	49.8	50.9
40 Damen Avenue, Chicago Sanitary & Ship Canal	63.8	54.3	51.9	52.8	52.7	50.4	49.6	49.8	50.5	ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	53.0
75 Cicero Avenue, Chicago Sanitary & Ship Canal	64.8	54.5	52.8	50.9	57.0	50.9	48.2	51.1	51.6	49.9	52.5
41 Harlem Avenue, Chicago Sanitary & Ship Canal	62.5	56.9	58.1	56.2	57.7	53.0	47.5	51.4	53.5	52.0	52.4
42 Route 83, Chicago Sanitary & Ship Canal	62.5	59.2	57.4	54.4	57.3	54.1	52.8	53.6	54.7	55.2	54.1
48 Stephen Street, Chicago Sanitary & Ship Canal	69.3	60.2	58.5	54.4	58.8	55.7	55.9	56.1	59.0	57.7	55.8
92 Lockport Forebay, Chicago Sanitary & Ship Canal	70.0	58.7	59.0	56.3	59.2	56.9	55.0	54.9	56.8	55.7	56.4
Calumet River System											
49 Ewing Avenue, Calumet River	36.7	35.3	34.4	34.2	34.3	35.1	32.2	34.4	35.1	35.8	36.4
50 Burnham Avenue, Wolf Lake	42.8	34.5	36.0	34.8	35.0	34.7	28.7	34.8	35.1	31.8	30.4
55 130th Street, Calumet River	49.8	41.2	41.5	41.2	41.5	45.6	38.4	40.9	40.5	41.1	42.4
86 Burnham Avenue, Grand Calumet River	110.3	75.3	78.8	80.8	91.4	86.4	92.8	64.3	77.0	83.9	75.5
56 Indiana Avenue, Little Calumet River	59.3	48.6	47.5	47.4	49.4	51.5	45.1	44.7	45.7	47.4	51.7
76 Halsted Street, Little Calumet River	75.0	62.7	61.6	61.1	65.8	63.3	58.2	60.7	60.4	59.3	60.1
52 Wentworth Avenue, Little Calumet River	84.0	61.3	65.1	71.7	88.8	74.3	80.9	70.9	82.2	90.7	87.2
54 Joe Orr Road, Thorn Creek	89.5	65.7	77.0	74.1	84.4	74.9	79.6	66.9	77.3	60.7	79.1
97 170th Street, Thorn Creek	89.5	67.8	68.6	75.3	85.3	68.0	80.8	78.0	81.3	77.4	85.8
57 Ashland Avenue, Little Calumet River	83.3	65.0	68.2	69.2	80.5	66.1	77.8	68.9	74.3	82.1	80.2
58 Ashland Avenue, Calumet-Sag Channel	75.3	62.2	59.7	59.3	65.7	59.6	61.7	63.2	61.9	62.8	63.4
59 Cicero Avenue, Calumet-Sag Channel	71.8	63.5	62.5	60.8	66.3	58.3	65.2	61.6	62.8	61.7	62.3
43 Route 83, Calumet-Sag Channel	77.0	59.0	64.9	59.3	65.4	59.4	63.0	60.7	59.9	61.1	60.8
Des Plaines River System											
90 Route 19, Poplar Creek	85.0	68.1	69.9	65.5	70.4	66.6	67.0	60.5	70.9	60.5	72.1
110 Springinguth Road, West Branch DuPage River	102.7	84.9	68.9	73.7	79.6	77.6	83.4	72.6	79.9	ND	ND
89 Walnut Lane, West Branch DuPage River	78.8	68.7	62.0	64.9	60.4	60.5	63.2	54.8	58.7	53.0	58.2
64 Lake Street, West Branch DuPage River	ND	ND	75.0	64.0	64.7	56.5	61.2	56.7	63.0	52.7	60.3
111 Arlington Drive, West Branch DuPage River	84.0	66.7	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	91.7	67.8	47.1	60.4	68.4	61.9	60.6	60.1	69.8	53.0	59.0
80 Arlington Heights Road, Salt Creek	79.5	59.8	63.4	59.0	68.9	61.6	61.9	62.7	61.9	56.7	63.8
18 Devon Avenue, Salt Creek	79.8	62.4	67.5	58.2	67.4	61.5	62.0	61.9	61.9	57.2	63.5
24 Wolf Road, Salt Creek	88.0	66.2	70.4	66.4	69.0	61.9	60.7	59.7	66.4	56.9	69.6
109 Brookfield Avenue, Salt Creek	88.3	66.8	66.1	63.6	65.3	60.7	59.6	58.2	66.2	55.1	55.4
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	84.9
77 Elmhurst Road, Higgins Creek	85.7	52.3	46.1	50.2	58.8	40.9	52.5	52.2	70.0	46.3	57.1
78 Wille Road, Higgins Creek	84.5	81.8	71.9	76.9	75.0	68.0	66.7	64.0	67.1	61.2	70.5
12 Lake-Cook Road, Buffalo Creek	89.3	69.7	72.7	66.9	76.2	68.6	70.9	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	75.3	64.2	64.8	59.7	70.8	64.4	69.4	63.4	66.9	62.0	70.2
17 Oakton Street, Des Plaines River	77.5	64.7	62.9	58.9	68.2	62.6	67.1	62.6	68.1	59.4	68.7
19 Belmont Avenue, Des Plaines River	78.5	65.4	62.1	61.1	69.4	61.6	66.5	62.5	67.8	59.3	68.5
20 Roosevelt Road, Des Plaines River	79.5	64.9	61.6	59.2	69.5	60.4	65.2	60.7	67.6	54.0	69.8
22 Ogden Avenue, Des Plaines River	81.5	64.8	63.3	59.3	65.7	59.5	62.8	58.0	65.6	64.9	69.2
23 Willow Springs Road, Des Plaines River	81.5	64.7	61.9	59.5	67.3	59.4	62.1	59.2	66.9	56.2	66.9
29 Stephen Street, Des Plaines River	80.8	64.2	64.2	59.1	68.5	63.2	66.1	62.3	67.1	60.3	70.4
91 Material Service Road, Des Plaines River	80.8	63.5	66.7	60.5	67.9	62.4	67.2	61.8	67.1	62.2	70.4

ND = No Data.

TABLE AII-104: SOLUBLE MAGNESIUM MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	33.7	31.9	30.8	27.8	29.2	28.1	23.9	27.3	33.3	21.6	31.8
103 Golf Road, West Fork North Branch Chicago River	37.8	30.0	29.2	26.3	26.0	29.2	28.7	29.9	26.5	26.0	27.8
31 Lake-Cook Road, Middle Fork North Branch	37.5	25.9	28.2	24.3	25.0	28.9	27.0	30.8	28.1	27.6	30.6
104 Glenview Road, North Branch Chicago River	35.8	25.0	28.5	25.6	26.7	26.8	25.5	25.4	26.5	28.0	27.8
32 Lake-Cook Road, Skokie River	37.0	27.8	31.5	25.5	26.0	30.9	28.3	30.2	30.0	27.9	31.0
105 Frontage Road, Skokie River	36.8	25.5	27.9	26.0	26.8	26.0	26.0	25.0	26.1	23.9	27.2
34 Dempster Street, North Branch Chicago River	39.0	26.9	29.9	24.8	25.5	27.0	26.8	27.2	26.9	24.8	27.0
96 Albany Avenue, North Branch Chicago River	38.3	28.0	27.4	26.1	26.4	27.8	27.3	27.7	26.4	25.7	27.3
35 Central Street, North Shore Channel	24.5	13.5	13.1	12.3	13.0	13.3	11.9	11.3	12.1	13.4	13.8
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	22.0	17.0	17.2	16.3	15.8	16.5	15.9	15.2	15.0	15.6	16.4
36 Touhy Avenue, North Shore Channel	21.0	19.7	18.5	20.8	21.0	19.2	18.0	16.8	19.1	18.2	19.9
101 Foster Avenue, North Shore Channel	21.5	19.5	19.8	19.8	21.4	20.1	18.7	16.9	19.4	18.5	19.7
37 Wilson Avenue, North Branch Chicago River	23.0	20.9	22.7	20.7	22.4	20.9	20.1	18.2	20.9	19.4	20.9
73 Diversey Parkway, North Branch Chicago River	25.0	21.1	21.3	20.6	22.6	20.9	20.0	17.8	21.0	18.8	20.4
46 Grand Avenue, North Branch Chicago River	25.3	21.5	20.4	19.9	21.5	20.8	20.1	19.5	20.5	19.4	20.3
74 Lake Shore Drive, Chicago River	20.3	15.4	12.9	12.3	12.8	14.3	12.6	13.4	14.1	13.1	13.7
100 Wells Street, Chicago River	23.0	18.1	15.2	15.0	16.7	15.7	15.0	14.7	15.3	16.0	15.5
39 Madison Street, South Branch Chicago River	24.3	21.6	18.0	18.9	19.1	17.8	18.2	17.8	17.9	19.1	19.8
108 Loomis Street, South Branch Chicago River	24.3	19.7	18.6	19.0	19.0	18.0	18.8	18.9	18.0	18.1	19.7
99 Archer Avenue, South Fork South Branch Chicago River	17.5	19.5	19.7	17.8	20.2	17.6	18.1	17.4	18.0	17.5	18.5
40 Damen Avenue, Chicago Sanitary & Ship Canal	23.8	19.8	18.8	19.1	19.2	18.1	18.4	18.3	18.0	ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.8
75 Cicero Avenue, Chicago Sanitary & Ship Canal	24.0	19.7	19.3	18.4	20.8	18.4	17.6	18.8	18.5	17.3	19.6
41 Harlem Avenue, Chicago Sanitary & Ship Canal	22.5	20.2	21.0	20.2	21.2	19.0	17.6	18.9	19.1	18.1	19.3
42 Route 83, Chicago Sanitary & Ship Canal	22.5	20.7	20.3	19.6	20.7	19.7	19.5	19.8	19.7	19.5	20.0
48 Stephen Street, Chicago Sanitary & Ship Canal	25.5	21.4	20.9	19.5	21.2	20.6	20.7	21.0	21.4	20.4	20.8
92 Lockport Forebay, Chicago Sanitary & Ship Canal	25.8	20.8	21.2	20.4	21.2	21.0	20.3	20.4	20.6	20.1	20.9
Calumet River System											
49 Ewing Avenue, Calumet River	12.0	11.8	11.7	11.3	11.4	11.7	10.5	11.5	11.6	11.9	11.8
50 Burnham Avenue, Wolf Lake	13.3	12.1	12.6	11.5	12.0	11.7	11.3	13.1	13.0	12.2	12.6
55 130th Street, Calumet River	16.3	14.2	14.5	14.0	14.0	15.7	13.0	14.2	13.9	13.7	14.5
86 Burnham Avenue, Grand Calumet River	40.0	27.3	27.1	37.1	36.8	38.6	47.6	43.0	50.1	62.4	64.5
56 Indiana Avenue, Little Calumet River	21.3	17.2	16.6	16.5	17.2	19.1	16.3	16.7	17.2	17.4	21.2
76 Halsted Street, Little Calumet River	26.5	21.8	21.3	21.2	23.0	22.3	20.7	21.7	21.1	20.1	21.5
52 Wentworth Avenue, Little Calumet River	33.8	23.8	26.3	27.4	34.6	29.7	32.0	28.6	32.1	35.3	35.5
54 Joe Orr Road, Thorn Creek	34.5	24.9	28.3	28.0	31.7	29.6	34.8	30.2	32.5	24.8	35.9
97 170th Street, Thorn Creek	36.5	28.9	28.2	29.9	34.4	27.3	35.7	35.0	35.2	33.5	42.6
57 Ashland Avenue, Little Calumet River	33.3	25.7	26.5	26.9	31.4	25.9	32.8	29.1	30.1	33.3	34.7
58 Ashland Avenue, Calumet-Sag Channel	27.3	22.6	21.6	21.4	23.4	21.5	22.4	23.2	22.3	22.8	24.2
59 Cicero Avenue, Calumet-Sag Channel	26.3	22.8	22.7	22.0	23.8	20.9	24.1	22.7	23.1	22.2	23.3
43 Route 83, Calumet-Sag Channel	28.8	21.5	23.8	21.9	23.8	21.9	23.6	22.7	22.1	22.2	23.3
Des Plaines River System											
90 Route 19, Poplar Creek	37.8	29.6	31.9	28.6	31.6	30.1	29.5	28.2	32.3	26.4	32.5
110 Springinsguth Road, West Branch DuPage River	38.7	31.2	25.2	27.2	29.3	28.5	29.9	26.7	29.4	ND	ND
89 Walnut Lane, West Branch DuPage River	31.0	26.4	23.7	25.1	23.1	23.0	23.9	20.9	21.8	18.9	22.2
64 Lake Street, West Branch DuPage River	ND	ND	28.0	24.4	24.3	21.8	22.9	21.8	23.3	18.9	23.0
111 Arlington Drive, West Branch DuPage River	32.5	25.0	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	38.7	27.3	19.5	25.7	28.4	26.0	25.4	27.6	29.4	21.2	27.4
80 Arlington Heights Road, Salt Creek	31.3	22.5	24.4	22.5	26.4	24.3	24.3	25.0	23.6	21.8	25.5
18 Devon Avenue, Salt Creek	31.5	23.1	25.8	22.6	25.8	24.3	24.4	24.6	23.6	21.4	25.1
24 Wolf Road, Salt Creek	35.8	26.0	27.2	26.3	27.4	25.3	24.6	25.3	26.9	21.9	28.6
109 Brookfield Avenue, Salt Creek	35.8	26.0	26.0	25.2	26.2	24.8	24.1	24.6	26.8	21.4	22.9
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33.6
77 Elmhurst Road, Higgins Creek	32.0	18.4	15.7	18.1	19.1	13.9	17.7	17.8	25.4	14.3	20.1
78 Wille Road, Higgins Creek	33.3	30.5	26.7	29.0	28.0	25.3	24.9	24.3	24.7	21.7	26.1
12 Lake-Cook Road, Buffalo Creek	40.5	29.8	31.6	28.7	33.3	30.2	31.8	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	35.0	28.7	29.0	26.7	31.4	29.4	31.7	28.9	30.1	27.1	32.3
17 Oakton Street, Des Plaines River	35.8	28.4	27.3	25.9	29.7	28.5	30.3	28.6	30.7	25.6	31.4
19 Belmont Avenue, Des Plaines River	35.8	28.0	26.1	26.4	29.5	27.3	29.0	27.7	30.0	23.8	30.2
20 Roosevelt Road, Des Plaines River	36.3	27.7	25.8	25.6	29.7	27.0	28.4	27.2	30.0	32.3	30.9
22 Ogden Avenue, Des Plaines River	36.0	26.9	26.3	25.1	27.6	25.8	26.7	25.6	28.5	25.3	29.9
23 Willow Springs Road, Des Plaines River	35.8	27.1	25.7	25.5	28.5	26.1	26.8	26.4	29.3	22.9	29.5
29 Stephen Street, Des Plaines River	35.5	26.6	26.7	25.1	28.8	27.8	28.4	27.6	29.2	24.6	30.2
91 Material Service Road, Des Plaines River	35.5	26.4	28.0	25.6	28.7	27.5	29.1	27.7	29.3	25.5	30.8

ND = No Data.

TABLE AII-105: SOLUBLE SILVER MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
103 Golf Road, West Fork North Branch Chicago River	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
31 Lake-Cook Road, Middle Fork North Branch	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
104 Glenview Road, North Branch Chicago River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
32 Lake-Cook Road, Skokie River	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
105 Frontage Road, Skokie River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002
34 Dempster Street, North Branch Chicago River	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
96 Albany Avenue, North Branch Chicago River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
35 Central Street, North Shore Channel	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
112 Dempster Street, North Shore Channel	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
36 Touhy Avenue, North Shore Channel	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
101 Foster Avenue, North Shore Channel	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
37 Wilson Avenue, North Branch Chicago River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73 Diversey Parkway, North Branch Chicago River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
46 Grand Avenue, North Branch Chicago River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
74 Lake Shore Drive, Chicago River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
100 Wells Street, Chicago River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
39 Madison Street, South Branch Chicago River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
108 Loomis Street, South Branch Chicago River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
99 Archer Avenue, South Fork South Branch Chicago River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
42 Route 83, Chicago Sanitary & Ship Canal	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
48 Stephen Street, Chicago Sanitary & Ship Canal	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
Calumet River System											
49 Ewing Avenue, Calumet River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
50 Burnham Avenue, Wolf Lake	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
55 130th Street, Calumet River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
86 Burnham Avenue, Grand Calumet River	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
56 Indiana Avenue, Little Calumet River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
76 Halsted Street, Little Calumet River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
52 Wentworth Avenue, Little Calumet River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
54 Joe Orr Road, Thorn Creek	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97 170th Street, Thorn Creek	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
57 Ashland Avenue, Little Calumet River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
58 Ashland Avenue, Calumet-Sag Channel	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
59 Cicero Avenue, Calumet-Sag Channel	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
43 Route 83, Calumet-Sag Channel	0.001	0.002	0.000	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	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
110 Springinguth Road, West Branch DuPage River	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND
89 Walnut Lane, West Branch DuPage River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
111 Arlington Drive, West Branch DuPage River	0.001	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
80 Arlington Heights Road, Salt Creek	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
18 Devon Avenue, Salt Creek	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
24 Wolf Road, Salt Creek	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
109 Brookfield Avenue, Salt Creek	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000
77 Elmhurst Road, Higgins Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
78 Wille Road, Higgins Creek	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
12 Lake-Cook Road, Buffalo Creek	0.002	0.002	0.000	0.000	0.000	0.000	0.000	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17 Oakton Street, Des Plaines River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
19 Belmont Avenue, Des Plaines River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
20 Roosevelt Road, Des Plaines River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
22 Ogden Avenue, Des Plaines River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
23 Willow Springs Road, Des Plaines River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
29 Stephen Street, Des Plaines River	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
91 Material Service Road, Des Plaines River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001

ND = No Data.

TABLE AII-106: SOLUBLE ARSENIC MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.020	0.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
103 Golf Road, West Fork North Branch Chicago River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
31 Lake-Cook Road, Middle Fork North Branch	0.020	0.020	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.002
104 Glenview Road, North Branch Chicago River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
32 Lake-Cook Road, Skokie River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
105 Frontage Road, Skokie River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
34 Dempster Street, North Branch Chicago River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96 Albany Avenue, North Branch Chicago River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
35 Central Street, North Shore Channel	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112 Dempster Street, North Shore Channel	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36 Touhy Avenue, North Shore Channel	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
101 Foster Avenue, North Shore Channel	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
37 Wilson Avenue, North Branch Chicago River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
73 Diversey Parkway, North Branch Chicago River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
46 Grand Avenue, North Branch Chicago River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
74 Lake Shore Drive, Chicago River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
100 Wells Street, Chicago River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
39 Madison Street, South Branch Chicago River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
108 Loomis Street, South Branch Chicago River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
99 Archer Avenue, South Fork South Branch Chicago River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.002
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
42 Route 83, Chicago Sanitary & Ship Canal	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
48 Stephen Street, Chicago Sanitary & Ship Canal	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
Calumet River System											
49 Ewing Avenue, Calumet River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
50 Burnham Avenue, Wolf Lake	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
55 130th Street, Calumet River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
86 Burnham Avenue, Grand Calumet River	0.025	0.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
56 Indiana Avenue, Little Calumet River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
76 Halsted Street, Little Calumet River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.004
52 Wentworth Avenue, Little Calumet River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
54 Joe Orr Road, Thorn Creek	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
97 170th Street, Thorn Creek	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005
57 Ashland Avenue, Little Calumet River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
58 Ashland Avenue, Calumet-Sag Channel	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
59 Cicero Avenue, Calumet-Sag Channel	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.003
43 Route 83, Calumet-Sag Channel	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
Des Plaines River System											
90 Route 19, Poplar Creek	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110 Springinguth Road, West Branch DuPage River	0.022	0.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND
89 Walnut Lane, West Branch DuPage River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
111 Arlington Drive, West Branch DuPage River	0.020	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80 Arlington Heights Road, Salt Creek	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
18 Devon Avenue, Salt Creek	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
24 Wolf Road, Salt Creek	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
109 Brookfield Avenue, Salt Creek	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
77 Elmhurst Road, Higgins Creek	0.021	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
78 Wille Road, Higgins Creek	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
12 Lake-Cook Road, Buffalo Creek	0.020	0.020	0.000	0.000	0.000	0.000	0.000	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.002
17 Oakton Street, Des Plaines River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
19 Belmont Avenue, Des Plaines River	0.021	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
20 Roosevelt Road, Des Plaines River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22 Ogden Avenue, Des Plaines River	0.021	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
23 Willow Springs Road, Des Plaines River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29 Stephen Street, Des Plaines River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91 Material Service Road, Des Plaines River	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001

ND = No Data.

TABLE AII-107: SOLUBLE BARIUM MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.066	0.067	0.060	0.051	0.052	0.054	0.042	0.043	0.054	0.034	0.044
103 Golf Road, West Fork North Branch Chicago River	0.058	0.049	0.046	0.042	0.043	0.046	0.044	0.046	0.042	0.043	0.040
31 Lake-Cook Road, Middle Fork North Branch	0.040	0.034	0.037	0.032	0.035	0.037	0.035	0.034	0.034	0.037	0.036
104 Glenview Road, North Branch Chicago River	0.036	0.030	0.029	0.028	0.032	0.030	0.028	0.026	0.028	0.033	0.027
32 Lake-Cook Road, Skokie River	0.046	0.037	0.041	0.034	0.036	0.042	0.035	0.035	0.040	0.039	0.039
105 Frontage Road, Skokie River	0.033	0.027	0.027	0.026	0.030	0.027	0.026	0.025	0.025	0.024	0.025
34 Dempster Street, North Branch Chicago River	0.049	0.035	0.037	0.030	0.034	0.033	0.033	0.032	0.033	0.032	0.030
96 Albany Avenue, North Branch Chicago River	0.044	0.036	0.035	0.033	0.037	0.035	0.034	0.033	0.032	0.032	0.032
35 Central Street, North Shore Channel	0.033	0.022	0.022	0.019	0.022	0.022	0.020	0.019	0.020	0.021	0.022
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.024	0.023	0.022	0.021	0.022	0.022	0.020	0.021	0.020	0.021	0.019
36 Touhy Avenue, North Shore Channel	0.024	0.024	0.020	0.024	0.024	0.022	0.019	0.018	0.019	0.017	0.019
101 Foster Avenue, North Shore Channel	0.025	0.023	0.022	0.023	0.025	0.023	0.020	0.018	0.019	0.018	0.018
37 Wilson Avenue, North Branch Chicago River	0.027	0.026	0.026	0.025	0.027	0.024	0.022	0.020	0.021	0.020	0.021
73 Diversey Parkway, North Branch Chicago River	0.026	0.025	0.024	0.024	0.027	0.023	0.021	0.019	0.021	0.019	0.020
46 Grand Avenue, North Branch Chicago River	0.027	0.025	0.022	0.023	0.026	0.023	0.021	0.020	0.020	0.019	0.019
74 Lake Shore Drive, Chicago River	0.027	0.025	0.022	0.021	0.022	0.022	0.021	0.021	0.020	0.021	0.021
100 Wells Street, Chicago River	0.027	0.024	0.022	0.023	0.024	0.022	0.021	0.020	0.020	0.020	0.021
39 Madison Street, South Branch Chicago River	0.026	0.026	0.022	0.023	0.024	0.022	0.021	0.020	0.019	0.017	0.020
108 Loomis Street, South Branch Chicago River	0.027	0.024	0.023	0.023	0.024	0.022	0.022	0.021	0.019	0.019	0.020
99 Archer Avenue, South Fork South Branch Chicago River	0.025	0.025	0.023	0.023	0.026	0.022	0.021	0.020	0.018	0.017	0.020
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.026	0.024	0.022	0.024	0.024	0.022	0.021	0.020	0.019	ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.020
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.025	0.023	0.021	0.022	0.025	0.022	0.020	0.020	0.019	0.017	0.020
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.022	0.021	0.020	0.020	0.022	0.019	0.016	0.016	0.016	0.015	0.017
42 Route 83, Chicago Sanitary & Ship Canal	0.018	0.019	0.018	0.019	0.020	0.017	0.017	0.016	0.016	0.015	0.016
48 Stephen Street, Chicago Sanitary & Ship Canal	0.021	0.020	0.019	0.019	0.021	0.018	0.018	0.017	0.017	0.017	0.017
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.021	0.021	0.020	0.020	0.021	0.019	0.018	0.017	0.018	0.017	0.018
Calumet River System											
49 Ewing Avenue, Calumet River	0.021	0.022	0.021	0.020	0.021	0.020	0.019	0.020	0.020	0.019	0.021
50 Burnham Avenue, Wolf Lake	0.035	0.033	0.034	0.032	0.033	0.034	0.025	0.030	0.029	0.025	0.024
55 130th Street, Calumet River	0.031	0.029	0.027	0.028	0.029	0.030	0.026	0.027	0.027	0.024	0.029
86 Burnham Avenue, Grand Calumet River	0.033	0.025	0.025	0.023	0.025	0.022	0.019	0.016	0.016	0.018	0.017
56 Indiana Avenue, Little Calumet River	0.030	0.028	0.026	0.029	0.030	0.029	0.026	0.025	0.026	0.023	0.028
76 Halsted Street, Little Calumet River	0.020	0.022	0.018	0.021	0.021	0.021	0.017	0.018	0.018	0.016	0.018
52 Wentworth Avenue, Little Calumet River	0.032	0.028	0.030	0.030	0.034	0.029	0.033	0.028	0.033	0.034	0.032
54 Joe Orr Road, Thorn Creek	0.026	0.026	0.031	0.026	0.030	0.025	0.029	0.026	0.030	0.024	0.026
97 170th Street, Thorn Creek	0.033	0.029	0.029	0.031	0.034	0.028	0.033	0.032	0.034	0.027	0.029
57 Ashland Avenue, Little Calumet River	0.034	0.031	0.031	0.030	0.034	0.029	0.033	0.029	0.032	0.032	0.030
58 Ashland Avenue, Calumet-Sag Channel	0.022	0.023	0.022	0.022	0.022	0.022	0.019	0.020	0.020	0.018	0.020
59 Cicero Avenue, Calumet-Sag Channel	0.023	0.023	0.022	0.023	0.023	0.021	0.021	0.019	0.021	0.019	0.019
43 Route 83, Calumet-Sag Channel	0.024	0.022	0.023	0.022	0.024	0.023	0.021	0.019	0.021	0.017	0.020
Des Plaines River System											
90 Route 19, Poplar Creek	0.064	0.059	0.062	0.059	0.065	0.071	0.085	0.095	0.091	0.071	0.061
110 Springinsguth Road, West Branch DuPage River	0.048	0.045	0.042	0.040	0.046	0.043	0.049	0.044	0.046	ND	ND
89 Walnut Lane, West Branch DuPage River	0.035	0.033	0.027	0.028	0.028	0.027	0.027	0.022	0.022	0.024	0.024
64 Lake Street, West Branch DuPage River	ND	ND	0.038	0.030	0.031	0.026	0.029	0.026	0.026	0.025	0.028
111 Arlington Drive, West Branch DuPage River	0.038	0.033	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.047	0.038	0.030	0.034	0.042	0.039	0.037	0.041	0.045	0.036	0.035
80 Arlington Heights Road, Salt Creek	0.036	0.028	0.027	0.024	0.028	0.024	0.028	0.028	0.024	0.027	0.024
18 Devon Avenue, Salt Creek	0.036	0.028	0.028	0.024	0.028	0.024	0.028	0.027	0.024	0.026	0.024
24 Wolf Road, Salt Creek	0.036	0.031	0.031	0.029	0.032	0.029	0.027	0.025	0.028	0.024	0.028
109 Brookfield Avenue, Salt Creek	0.037	0.032	0.031	0.029	0.032	0.029	0.027	0.026	0.029	0.025	0.022
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.037
77 Elmhurst Road, Higgins Creek	0.058	0.041	0.040	0.038	0.051	0.036	0.048	0.049	0.059	0.040	0.048
78 Wille Road, Higgins Creek	0.033	0.028	0.022	0.027	0.023	0.022	0.021	0.018	0.019	0.018	0.022
12 Lake-Cook Road, Buffalo Creek	0.041	0.038	0.042	0.037	0.043	0.039	0.041	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.035	0.035	0.035	0.028	0.034	0.034	0.038	0.031	0.031	0.031	0.034
17 Oakton Street, Des Plaines River	0.036	0.037	0.038	0.029	0.035	0.035	0.041	0.033	0.033	0.032	0.035
19 Belmont Avenue, Des Plaines River	0.036	0.034	0.034	0.029	0.035	0.033	0.037	0.031	0.032	0.027	0.033
20 Roosevelt Road, Des Plaines River	0.037	0.035	0.034	0.028	0.035	0.033	0.037	0.031	0.033	0.027	0.034
22 Ogden Avenue, Des Plaines River	0.038	0.033	0.033	0.028	0.033	0.031	0.033	0.028	0.031	0.027	0.032
23 Willow Springs Road, Des Plaines River	0.037	0.033	0.032	0.028	0.034	0.031	0.033	0.029	0.031	0.027	0.031
29 Stephen Street, Des Plaines River	0.037	0.032	0.031	0.028	0.033	0.032	0.034	0.028	0.031	0.028	0.032
91 Material Service Road, Des Plaines River	0.036	0.032	0.032	0.028	0.034	0.032	0.033	0.027	0.030	0.028	0.031

ND = No Data.

TABLE AII-108: SOLUBLE BORON MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.120	0.147	0.156	0.147	0.146	0.143	0.126	0.176	0.195	0.132	0.118
103 Golf Road, West Fork North Branch Chicago River	0.113	0.127	0.125	0.122	0.103	0.149	0.138	0.178	0.130	0.122	0.139
31 Lake-Cook Road, Middle Fork North Branch	0.070	0.076	0.088	0.074	0.079	0.110	0.111	0.163	0.162	0.098	0.101
104 Glenview Road, North Branch Chicago River	0.103	0.108	0.131	0.115	0.111	0.141	0.133	0.170	0.146	0.130	0.148
32 Lake-Cook Road, Skokie River	0.090	0.091	0.109	0.105	0.093	0.115	0.128	0.151	0.123	0.115	0.103
105 Frontage Road, Skokie River	0.115	0.124	0.136	0.129	0.118	0.150	0.151	0.175	0.161	0.174	0.167
34 Dempster Street, North Branch Chicago River	0.110	0.115	0.113	0.111	0.113	0.139	0.135	0.174	0.143	0.159	0.151
96 Albany Avenue, North Branch Chicago River	0.115	0.115	0.123	0.120	0.105	0.139	0.141	0.177	0.141	0.150	0.148
35 Central Street, North Shore Channel	0.060	0.070	0.013	0.036	0.033	0.035	0.035	0.030	0.032	0.044	0.030
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.178	0.108	0.077	0.083	0.074	0.088	0.109	0.085	0.071	0.081	0.104
36 Touhy Avenue, North Shore Channel	0.170	0.153	0.161	0.156	0.164	0.186	0.180	0.168	0.158	0.173	0.169
101 Foster Avenue, North Shore Channel	0.170	0.137	0.156	0.148	0.162	0.183	0.184	0.164	0.159	0.157	0.158
37 Wilson Avenue, North Branch Chicago River	0.150	0.124	0.142	0.136	0.144	0.160	0.162	0.155	0.147	0.148	0.144
73 Diversey Parkway, North Branch Chicago River	0.168	0.128	0.145	0.131	0.138	0.166	0.155	0.150	0.148	0.155	0.141
46 Grand Avenue, North Branch Chicago River	0.158	0.123	0.134	0.123	0.129	0.155	0.152	0.161	0.142	0.150	0.146
74 Lake Shore Drive, Chicago River	0.093	0.087	0.040	0.041	0.054	0.057	0.055	0.053	0.060	0.050	0.044
100 Wells Street, Chicago River	0.120	0.101	0.064	0.061	0.077	0.070	0.074	0.073	0.082	0.096	0.068
39 Madison Street, South Branch Chicago River	0.138	0.122	0.109	0.106	0.107	0.107	0.118	0.126	0.130	0.130	0.125
108 Loomis Street, South Branch Chicago River	0.138	0.109	0.114	0.106	0.111	0.110	0.121	0.126	0.125	0.118	0.123
99 Archer Avenue, South Fork South Branch Chicago River	0.110	0.110	0.129	0.104	0.122	0.114	0.114	0.128	0.125	0.130	0.121
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.135	0.108	0.115	0.106	0.108	0.108	0.119	0.126	0.129	ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.23
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.148	0.110	0.121	0.099	0.128	0.119	0.117	0.126	0.126	0.132	0.130
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.173	0.154	0.160	0.154	0.155	0.168	0.161	0.165	0.187	0.176	0.169
42 Route 83, Chicago Sanitary & Ship Canal	0.253	0.211	0.232	0.171	0.166	0.212	0.205	0.207	0.236	0.206	0.218
48 Stephen Street, Chicago Sanitary & Ship Canal	0.248	0.193	0.212	0.161	0.168	0.196	0.198	0.201	0.199	0.202	0.211
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.237	0.191	0.203	0.167	0.179	0.198	0.209	0.209	0.185	0.186	0.185
Calumet River System											
49 Ewing Avenue, Calumet River	0.050	0.070	0.032	0.038	0.036	0.042	0.044	0.036	0.030	0.028	0.029
50 Burnham Avenue, Wolf Lake	0.238	0.238	0.236	0.239	0.172	0.169	0.108	0.142	0.131	0.082	0.088
55 130th Street, Calumet River	0.183	0.116	0.096	0.123	0.117	0.152	0.103	0.109	0.094	0.065	0.108
86 Burnham Avenue, Grand Calumet River	1.000	0.767	0.686	0.357	0.642	0.528	0.578	0.271	0.403	0.375	0.358
56 Indiana Avenue, Little Calumet River	0.203	0.131	0.115	0.134	0.146	0.167	0.131	0.111	0.109	0.113	0.145
76 Halsted Street, Little Calumet River	0.210	0.185	0.172	0.176	0.197	0.195	0.218	0.193	0.170	0.177	0.186
52 Wentworth Avenue, Little Calumet River	0.175	0.132	0.175	0.175	0.250	0.228	0.231	0.216	0.220	0.256	0.296
54 Joe Orr Road, Thorn Creek	0.260	0.196	0.220	0.263	0.316	0.314	0.391	0.252	0.288	0.243	0.327
97 170th Street, Thorn Creek	0.193	0.178	0.185	0.214	0.237	0.222	0.290	0.235	0.242	0.230	0.290
57 Ashland Avenue, Little Calumet River	0.178	0.168	0.188	0.199	0.227	0.200	0.247	0.222	0.196	0.254	0.247
58 Ashland Avenue, Calumet-Sag Channel	0.198	0.166	0.159	0.167	0.191	0.174	0.219	0.199	0.173	0.181	0.208
59 Cicero Avenue, Calumet-Sag Channel	0.193	0.168	0.174	0.163	0.192	0.167	0.214	0.199	0.177	0.184	0.188
43 Route 83, Calumet-Sag Channel	0.203	0.153	0.183	0.158	0.176	0.168	0.198	0.195	0.165	0.156	0.172
Des Plaines River System											
90 Route 19, Poplar Creek	0.050	0.070	0.037	0.050	0.051	0.055	0.057	0.061	0.049	0.046	0.041
110 Springinguth Road, West Branch DuPage River	0.053	0.095	0.077	0.084	0.094	0.076	0.077	0.074	0.110	ND	ND
89 Walnut Lane, West Branch DuPage River	0.193	0.172	0.215	0.211	0.214	0.248	0.242	0.267	0.245	0.231	0.262
64 Lake Street, West Branch DuPage River	ND	ND	0.119	0.157	0.183	0.188	0.186	0.222	0.209	0.204	0.203
111 Arlington Drive, West Branch DuPage River	0.140	0.144	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.070	0.099	0.075	0.085	0.083	0.084	0.088	0.092	0.081	0.068	0.077
80 Arlington Heights Road, Salt Creek	0.158	0.132	0.190	0.147	0.168	0.196	0.186	0.192	0.179	0.171	0.185
18 Devon Avenue, Salt Creek	0.148	0.146	0.197	0.143	0.165	0.199	0.190	0.198	0.172	0.164	0.174
24 Wolf Road, Salt Creek	0.165	0.161	0.164	0.150	0.176	0.183	0.184	0.227	0.175	0.160	0.198
109 Brookfield Avenue, Salt Creek	0.165	0.155	0.184	0.156	0.180	0.181	0.199	0.254	0.178	0.158	0.227
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.159
77 Elmhurst Road, Higgins Creek	0.177	0.082	0.055	0.067	0.113	0.089	0.078	0.074	0.077	0.055	0.057
78 Wille Road, Higgins Creek	0.230	0.224	0.202	0.201	0.235	0.254	0.285	0.341	0.284	0.256	0.306
12 Lake-Cook Road, Buffalo Creek	0.075	0.081	0.091	0.083	0.088	0.093	0.099	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.088	0.115	0.141	0.121	0.150	0.153	0.170	0.211	0.168	0.179	0.162
17 Oakton Street, Des Plaines River	0.090	0.115	0.144	0.111	0.141	0.138	0.151	0.204	0.158	0.165	0.152
19 Belmont Avenue, Des Plaines River	0.103	0.124	0.152	0.121	0.151	0.152	0.166	0.225	0.168	0.169	0.178
20 Roosevelt Road, Des Plaines River	0.103	0.124	0.157	0.116	0.163	0.152	0.166	0.230	0.165	0.184	0.189
22 Ogden Avenue, Des Plaines River	0.120	0.128	0.152	0.128	0.162	0.156	0.184	0.229	0.162	0.182	0.191
23 Willow Springs Road, Des Plaines River	0.115	0.129	0.158	0.125	0.166	0.158	0.182	0.234	0.165	0.165	0.203
29 Stephen Street, Des Plaines River	0.115	0.121	0.146	0.119	0.157	0.167	0.189	0.235	0.161	0.184	0.182
91 Material Service Road, Des Plaines River	0.118	0.124	0.151	0.122	0.158	0.170	0.196	0.241	0.161	0.195	0.193

ND = No Data.

TABLE AII-109: SOLUBLE CADMIUM MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
103 Golf Road, West Fork North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000
31 Lake-Cook Road, Middle Fork North Branch	0.001	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000
104 Glenview Road, North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
32 Lake-Cook Road, Skokie River	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
105 Frontage Road, Skokie River	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
34 Dempster Street, North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
96 Albany Avenue, North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
35 Central Street, North Shore Channel	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112 Dempster Street, North Shore Channel	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36 Touhy Avenue, North Shore Channel	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
101 Foster Avenue, North Shore Channel	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37 Wilson Avenue, North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73 Diversey Parkway, North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46 Grand Avenue, North Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74 Lake Shore Drive, Chicago River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100 Wells Street, Chicago River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39 Madison Street, South Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
108 Loomis Street, South Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
99 Archer Avenue, South Fork South Branch Chicago River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42 Route 83, Chicago Sanitary & Ship Canal	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48 Stephen Street, Chicago Sanitary & Ship Canal	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Calumet River System											
49 Ewing Avenue, Calumet River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50 Burnham Avenue, Wolf Lake	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55 130th Street, Calumet River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
86 Burnham Avenue, Grand Calumet River	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000
56 Indiana Avenue, Little Calumet River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76 Halsted Street, Little Calumet River	0.001	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
52 Wentworth Avenue, Little Calumet River	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001
54 Joe Orr Road, Thorn Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001
97 170th Street, Thorn Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
57 Ashland Avenue, Little Calumet River	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000
58 Ashland Avenue, Calumet-Sag Channel	0.001	0.001	0.000	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000
59 Cicero Avenue, Calumet-Sag Channel	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
43 Route 83, Calumet-Sag Channel	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
Des Plaines River System											
90 Route 19, Poplar Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110 Springinguth Road, West Branch DuPage River	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	ND
89 Walnut Lane, West Branch DuPage River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
111 Arlington Drive, West Branch DuPage River	0.001	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80 Arlington Heights Road, Salt Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18 Devon Avenue, Salt Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24 Wolf Road, Salt Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
109 Brookfield Avenue, Salt Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001
77 Elmhurst Road, Higgins Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.000
78 Wille Road, Higgins Creek	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001
12 Lake-Cook Road, Buffalo Creek	0.001	0.001	0.002	0.000	0.000	0.000	0.000	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001
17 Oakton Street, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
19 Belmont Avenue, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20 Roosevelt Road, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22 Ogden Avenue, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23 Willow Springs Road, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
29 Stephen Street, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91 Material Service Road, Des Plaines River	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ND = No Data.

TABLE AII-110: SOLUBLE COPPER MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.007	0.008	0.005	0.001	0.000	0.004	0.003	0.003	0.009	0.005	0.010
103 Golf Road, West Fork North Branch Chicago River	0.005	0.005	0.000	0.000	0.000	0.001	0.000	0.001	0.002	0.002	0.007
31 Lake-Cook Road, Middle Fork North Branch	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.007
104 Glenview Road, North Branch Chicago River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.001	0.006
32 Lake-Cook Road, Skokie River	0.005	0.006	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.001	0.007
105 Frontage Road, Skokie River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.002	0.008
34 Dempster Street, North Branch Chicago River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.001	0.006
96 Albany Avenue, North Branch Chicago River	0.005	0.005	0.000	0.000	0.000	0.001	0.001	0.001	0.002	0.001	0.006
35 Central Street, North Shore Channel	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.006
112 Dempster Street, North Shore Channel	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.004
36 Touhy Avenue, North Shore Channel	0.005	0.005	0.000	0.002	0.000	0.001	0.000	0.000	0.001	0.001	0.006
101 Foster Avenue, North Shore Channel	0.005	0.005	0.000	0.000	0.000	0.001	0.002	0.000	0.001	0.001	0.003
37 Wilson Avenue, North Branch Chicago River	0.005	0.005	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.001	0.006
73 Diversey Parkway, North Branch Chicago River	0.005	0.005	0.001	0.000	0.000	0.001	0.000	0.000	0.001	0.000	0.005
46 Grand Avenue, North Branch Chicago River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.006
74 Lake Shore Drive, Chicago River	0.006	0.006	0.001	0.000	0.000	0.001	0.001	0.001	0.003	0.002	0.004
100 Wells Street, Chicago River	0.006	0.005	0.002	0.000	0.000	0.002	0.002	0.002	0.002	0.001	0.004
39 Madison Street, South Branch Chicago River	0.005	0.005	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.002	0.004
108 Loomis Street, South Branch Chicago River	0.005	0.005	0.002	0.000	0.000	0.002	0.002	0.002	0.002	0.002	0.005
99 Archer Avenue, South Fork South Branch Chicago River	0.005	0.005	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.001	0.006
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.007	0.005	0.000	0.000	0.000	0.001	0.001	0.002	0.002	ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.005	0.005	0.000	0.000	0.000	0.001	0.001	0.001	0.002	0.002	0.005
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.003
42 Route 83, Chicago Sanitary & Ship Canal	0.005	0.005	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.004
48 Stephen Street, Chicago Sanitary & Ship Canal	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.005
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.005
Calumet River System											
49 Ewing Avenue, Calumet River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
50 Burnham Avenue, Wolf Lake	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002
55 130th Street, Calumet River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.001	0.003
86 Burnham Avenue, Grand Calumet River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
56 Indiana Avenue, Little Calumet River	0.005	0.005	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.003
76 Halsted Street, Little Calumet River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.003
52 Wentworth Avenue, Little Calumet River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.006
54 Joe Orr Road, Thorn Creek	0.005	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.005
97 170th Street, Thorn Creek	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.002
57 Ashland Avenue, Little Calumet River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.004
58 Ashland Avenue, Calumet-Sag Channel	0.005	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.004
59 Cicero Avenue, Calumet-Sag Channel	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.004
43 Route 83, Calumet-Sag Channel	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.003
Des Plaines River System											
90 Route 19, Poplar Creek	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.004
110 Springinguth Road, West Branch DuPage River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.001	ND	ND
89 Walnut Lane, West Branch DuPage River	0.006	0.006	0.002	0.001	0.001	0.004	0.003	0.004	0.005	0.004	0.010
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	0.008
111 Arlington Drive, West Branch DuPage River	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.005	0.005	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.003
80 Arlington Heights Road, Salt Creek	0.005	0.005	0.001	0.000	0.000	0.002	0.002	0.002	0.003	0.002	0.009
18 Devon Avenue, Salt Creek	0.005	0.005	0.001	0.000	0.000	0.001	0.002	0.003	0.003	0.002	0.007
24 Wolf Road, Salt Creek	0.005	0.005	0.002	0.000	0.000	0.002	0.002	0.003	0.003	0.003	0.008
109 Brookfield Avenue, Salt Creek	0.005	0.005	0.000	0.000	0.000	0.002	0.001	0.002	0.003	0.003	0.008
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010
77 Elmhurst Road, Higgins Creek	0.005	0.005	0.000	0.000	0.000	0.001	0.001	0.001	0.002	0.003	0.007
78 Wille Road, Higgins Creek	0.005	0.005	0.004	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.006
12 Lake-Cook Road, Buffalo Creek	0.005	0.005	0.000	0.000	0.000	0.000	0.000	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.002	0.006
17 Oakton Street, Des Plaines River	0.005	0.005	0.001	0.000	0.000	0.000	0.001	0.001	0.002	0.001	0.005
19 Belmont Avenue, Des Plaines River	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.002	0.007
20 Roosevelt Road, Des Plaines River	0.005	0.005	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.007
22 Ogden Avenue, Des Plaines River	0.005	0.005	0.000	0.000	0.000	0.001	0.001	0.002	0.002	0.002	0.006
23 Willow Springs Road, Des Plaines River	0.005	0.005	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.002	0.007
29 Stephen Street, Des Plaines River	0.005	0.007	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.002	0.007
91 Material Service Road, Des Plaines River	0.005	0.005	0.000	0.000	0.000	0.001	0.000	0.001	0.002	0.002	0.008

ND = No Data.

TABLE AII-111: SOLUBLE CHROMIUM MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.000
103 Golf Road, West Fork North Branch Chicago River	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.001
31 Lake-Cook Road, Middle Fork North Branch	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.001
104 Glenview Road, North Branch Chicago River	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.002
32 Lake-Cook Road, Skokie River	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.002
105 Frontage Road, Skokie River	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.001
34 Dempster Street, North Branch Chicago River	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.004
96 Albany Avenue, North Branch Chicago River	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.002
35 Central Street, North Shore Channel	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.003
112 Dempster Street, North Shore Channel	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001
36 Touhy Avenue, North Shore Channel	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.002
101 Foster Avenue, North Shore Channel	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.003
37 Wilson Avenue, North Branch Chicago River	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.004
73 Diversey Parkway, North Branch Chicago River	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.003
46 Grand Avenue, North Branch Chicago River	0.006	0.003	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.002	0.002
74 Lake Shore Drive, Chicago River	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.002
100 Wells Street, Chicago River	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.001
39 Madison Street, South Branch Chicago River	0.005	0.003	0.000	0.000	0.000	0.001	0.001	0.000	0.001	0.002	0.003
108 Loomis Street, South Branch Chicago River	0.005	0.004	0.000	0.000	0.000	0.001	0.001	0.000	0.001	0.001	0.002
99 Archer Avenue, South Fork South Branch Chicago River	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.002
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.001	ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.002
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.005	0.003	0.000	0.000	0.000	0.002	0.001	0.000	0.000	0.001	0.001
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.005	0.003	0.000	0.000	0.004	0.001	0.001	0.001	0.002	0.003	0.001
42 Route 83, Chicago Sanitary & Ship Canal	0.005	0.004	0.000	0.000	0.000	0.001	0.001	0.001	0.002	0.002	0.001
48 Stephen Street, Chicago Sanitary & Ship Canal	0.005	0.003	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.002	0.003
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.005	0.003	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.002	0.002
Calumet River System											
49 Ewing Avenue, Calumet River	0.005	0.003	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.001
50 Burnham Avenue, Wolf Lake	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.003
55 130th Street, Calumet River	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.006
86 Burnham Avenue, Grand Calumet River	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.002	0.004
56 Indiana Avenue, Little Calumet River	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.007
76 Halsted Street, Little Calumet River	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.002	0.003
52 Wentworth Avenue, Little Calumet River	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.003
54 Joe Orr Road, Thorn Creek	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.004
97 170th Street, Thorn Creek	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.002	0.003
57 Ashland Avenue, Little Calumet River	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.007
58 Ashland Avenue, Calumet-Sag Channel	0.005	0.003	0.000	0.000	0.000	0.001	0.001	0.000	0.001	0.001	0.007
59 Cicero Avenue, Calumet-Sag Channel	0.005	0.003	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.005
43 Route 83, Calumet-Sag Channel	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.005
Des Plaines River System											
90 Route 19, Poplar Creek	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.003
110 Springinguth Road, West Branch DuPage River	0.005	0.003	0.000	0.000	0.000	0.001	0.001	0.000	0.001	ND	ND
89 Walnut Lane, West Branch DuPage River	0.005	0.004	0.000	0.000	0.000	0.001	0.001	0.000	0.001	0.001	0.001
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.000	0.000	0.001	0.001	0.000	0.001	0.001	0.002
111 Arlington Drive, West Branch DuPage River	0.005	0.003	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.004
80 Arlington Heights Road, Salt Creek	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.002
18 Devon Avenue, Salt Creek	0.005	0.003	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.002
24 Wolf Road, Salt Creek	0.005	0.003	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.003
109 Brookfield Avenue, Salt Creek	0.006	0.003	0.000	0.000	0.000	0.001	0.004	0.002	0.004	0.001	0.005
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000
77 Elmhurst Road, Higgins Creek	0.005	0.003	0.000	0.001	0.000	0.001	0.002	0.000	0.001	0.001	0.002
78 Wille Road, Higgins Creek	0.005	0.003	0.000	0.000	0.000	0.001	0.001	0.001	0.002	0.001	0.003
12 Lake-Cook Road, Buffalo Creek	0.005	0.003	0.000	0.001	0.000	0.001	0.001	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.005	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.002
17 Oakton Street, Des Plaines River	0.005	0.003	0.000	0.000	0.000	0.001	0.001	0.000	0.001	0.001	0.002
19 Belmont Avenue, Des Plaines River	0.036	0.003	0.000	0.000	0.000	0.001	0.001	0.014	0.001	0.025	0.002
20 Roosevelt Road, Des Plaines River	0.005	0.003	0.001	0.000	0.000	0.001	0.001	0.004	0.001	0.013	0.002
22 Ogden Avenue, Des Plaines River	0.011	0.003	0.000	0.000	0.000	0.001	0.001	0.001	0.002	0.001	0.001
23 Willow Springs Road, Des Plaines River	0.005	0.003	0.012	0.000	0.000	0.001	0.002	0.004	0.001	0.001	0.000
29 Stephen Street, Des Plaines River	0.005	0.003	0.000	0.000	0.000	0.001	0.002	0.002	0.001	0.001	0.001
91 Material Service Road, Des Plaines River	0.005	0.003	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.003

ND = No Data.

TABLE AII-112: SOLUBLE IRON MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.100	0.200	0.025	0.057	0.054	0.055	0.046	0.041	0.042	0.042	0.173
103 Golf Road, West Fork North Branch Chicago River	0.100	0.200	0.023	0.041	0.049	0.024	0.037	0.029	0.031	0.025	0.123
31 Lake-Cook Road, Middle Fork North Branch	0.100	0.200	0.073	0.074	0.086	0.081	0.063	0.072	0.052	0.070	0.192
104 Glenview Road, North Branch Chicago River	0.100	0.208	0.021	0.051	0.054	0.037	0.033	0.029	0.035	0.045	0.124
32 Lake-Cook Road, Skokie River	0.100	0.200	0.032	0.077	0.073	0.060	0.062	0.040	0.052	0.071	0.168
105 Frontage Road, Skokie River	0.100	0.200	0.079	0.042	0.042	0.047	0.026	0.023	0.027	0.036	0.119
34 Dempster Street, North Branch Chicago River	0.100	0.200	0.041	0.048	0.058	0.042	0.033	0.025	0.035	0.035	0.120
96 Albany Avenue, North Branch Chicago River	0.100	0.200	0.023	0.042	0.061	0.032	0.050	0.027	0.028	0.038	0.120
35 Central Street, North Shore Channel	0.100	0.200	0.014	0.048	0.015	0.015	0.024	0.022	0.040	0.021	0.076
112 Dempster Street, North Shore Channel	0.100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.100	0.200	0.025	0.027	0.024	0.026	0.023	0.025	0.036	0.047	0.075
36 Touhy Avenue, North Shore Channel	0.100	0.200	0.021	0.031	0.030	0.028	0.031	0.025	0.029	0.026	0.093
101 Foster Avenue, North Shore Channel	0.100	0.200	0.024	0.032	0.032	0.035	0.029	0.030	0.033	0.037	0.107
37 Wilson Avenue, North Branch Chicago River	0.100	0.200	0.025	0.047	0.042	0.034	0.032	0.035	0.041	0.038	0.104
73 Diversey Parkway, North Branch Chicago River	0.100	0.200	0.028	0.044	0.045	0.039	0.035	0.036	0.043	0.049	0.108
46 Grand Avenue, North Branch Chicago River	0.100	0.200	0.026	0.041	0.048	0.038	0.033	0.033	0.042	0.048	0.106
74 Lake Shore Drive, Chicago River	0.100	0.200	0.000	0.005	0.014	0.014	0.009	0.008	0.015	0.012	0.055
100 Wells Street, Chicago River	0.100	0.200	0.011	0.017	0.029	0.017	0.014	0.014	0.020	0.021	0.068
39 Madison Street, South Branch Chicago River	0.100	0.200	0.026	0.033	0.043	0.024	0.023	0.025	0.031	0.035	0.098
108 Loomis Street, South Branch Chicago River	0.100	0.200	0.027	0.031	0.045	0.024	0.021	0.033	0.032	0.027	0.096
99 Archer Avenue, South Fork South Branch Chicago River	0.108	0.200	0.045	0.043	0.056	0.025	0.019	0.019	0.034	0.028	0.105
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.100	0.200	0.032	0.039	0.043	0.024	0.021	0.023	0.034	0.030	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.094
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.100	0.200	0.026	0.032	0.038	0.020	0.020	0.026	0.022	0.020	0.091
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.100	0.200	0.033	0.037	0.034	0.027	0.027	0.027	0.033	0.029	0.096
42 Route 83, Chicago Sanitary & Ship Canal	0.100	0.317	0.049	0.037	0.028	0.028	0.033	0.028	0.046	0.033	0.100
48 Stephen Street, Chicago Sanitary & Ship Canal	0.117	0.233	0.025	0.043	0.038	0.030	0.033	0.025	0.041	0.031	0.103
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.100	0.204	0.026	0.044	0.035	0.028	0.031	0.025	0.033	0.030	0.100
Calumet River System											
49 Ewing Avenue, Calumet River	0.100	0.200	0.000	0.000	0.000	0.006	0.004	0.004	0.005	0.006	0.044
50 Burnham Avenue, Wolf Lake	0.129	0.200	0.014	0.014	0.006	0.024	0.007	0.008	0.014	0.010	0.050
55 130th Street, Calumet River	0.100	0.200	0.002	0.014	0.007	0.016	0.008	0.007	0.004	0.011	0.054
86 Burnham Avenue, Grand Calumet River	0.318	0.210	0.110	0.107	0.101	0.128	0.034	0.070	0.057	0.052	0.220
56 Indiana Avenue, Little Calumet River	0.100	0.200	0.003	0.007	0.005	0.009	0.007	0.006	0.006	0.013	0.078
76 Halsted Street, Little Calumet River	0.100	0.200	0.022	0.030	0.034	0.030	0.032	0.038	0.038	0.037	0.107
52 Wentworth Avenue, Little Calumet River	0.100	0.200	0.071	0.069	0.067	0.072	0.061	0.082	0.084	0.054	0.155
54 Joe Orr Road, Thorn Creek	0.100	0.200	0.089	0.084	0.090	0.063	0.056	0.078	0.069	0.082	0.191
97 170th Street, Thorn Creek	0.100	0.200	0.076	0.051	0.051	0.051	0.036	0.040	0.049	0.053	0.156
57 Ashland Avenue, Little Calumet River	0.100	0.200	0.052	0.055	0.051	0.062	0.031	0.046	0.081	0.057	0.136
58 Ashland Avenue, Calumet-Sag Channel	0.100	0.200	0.047	0.043	0.043	0.040	0.032	0.032	0.053	0.040	0.112
59 Cicero Avenue, Calumet-Sag Channel	0.100	0.200	0.045	0.043	0.036	0.051	0.038	0.029	0.033	0.034	0.102
43 Route 83, Calumet-Sag Channel	0.100	0.200	0.035	0.039	0.029	0.073	0.020	0.017	0.020	0.025	0.099
Des Plaines River System											
90 Route 19, Poplar Creek	0.100	0.200	0.058	0.080	0.084	0.054	0.050	0.055	0.042	0.057	0.151
110 Springinguth Road, West Branch DuPage River	0.218	0.250	0.294	0.154	0.242	0.217	0.250	0.160	0.155	ND	ND
89 Walnut Lane, West Branch DuPage River	0.100	0.200	0.033	0.051	0.065	0.061	0.050	0.054	0.054	0.069	0.119
64 Lake Street, West Branch DuPage River	ND	ND	0.045	0.048	0.051	0.037	0.037	0.042	0.038	0.049	0.108
111 Arlington Drive, West Branch DuPage River	0.100	0.200	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.100	0.200	0.039	0.052	0.051	0.041	0.027	0.043	0.054	0.095	0.125
80 Arlington Heights Road, Salt Creek	0.100	0.200	0.056	0.073	0.056	0.048	0.039	0.044	0.050	0.055	0.152
18 Devon Avenue, Salt Creek	0.100	0.200	0.045	0.070	0.056	0.044	0.038	0.037	0.050	0.049	0.136
24 Wolf Road, Salt Creek	0.100	0.200	0.030	0.051	0.049	0.036	0.032	0.051	0.032	0.056	0.127
109 Brookfield Avenue, Salt Creek	0.100	0.200	0.032	0.049	0.053	0.037	0.034	0.039	0.035	0.040	0.084
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.184
77 Elmhurst Road, Higgins Creek	0.100	0.200	0.035	0.063	0.070	0.059	0.048	0.052	0.060	0.086	0.123
78 Wille Road, Higgins Creek	0.100	0.200	0.032	0.051	0.051	0.044	0.045	0.046	0.051	0.044	0.134
12 Lake-Cook Road, Buffalo Creek	0.100	0.200	0.037	0.059	0.048	0.036	0.027	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.100	0.200	0.036	0.056	0.048	0.055	0.026	0.027	0.031	0.037	0.127
17 Oakton Street, Des Plaines River	0.100	0.200	0.046	0.052	0.045	0.047	0.035	0.028	0.030	0.032	0.124
19 Belmont Avenue, Des Plaines River	0.100	0.200	0.031	0.056	0.045	0.064	0.031	0.033	0.033	0.034	0.123
20 Roosevelt Road, Des Plaines River	0.100	0.200	0.025	0.052	0.042	0.052	0.027	0.035	0.032	0.040	0.127
22 Ogden Avenue, Des Plaines River	0.100	0.200	0.036	0.053	0.046	0.046	0.035	0.037	0.042	0.046	0.121
23 Willow Springs Road, Des Plaines River	0.100	0.200	0.035	0.048	0.032	0.051	0.046	0.029	0.047	0.033	0.112
29 Stephen Street, Des Plaines River	0.100	0.200	0.031	0.058	0.036	0.035	0.021	0.019	0.039	0.026	0.118
91 Material Service Road, Des Plaines River	0.100	0.200	0.027	0.043	0.035	0.032	0.023	0.020	0.040	0.032	0.120

ND = No Data.

TABLE AII-113: SOLUBLE LEAD MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.020	0.030	0.000	0.007	0.006	0.004	0.002	0.002	0.004	0.002	0.000
103 Golf Road, West Fork North Branch Chicago River	0.020	0.030	0.000	0.000	0.002	0.002	0.003	0.001	0.004	0.002	0.001
31 Lake-Cook Road, Middle Fork North Branch	0.020	0.030	0.000	0.000	0.002	0.002	0.003	0.002	0.004	0.001	0.001
104 Glenview Road, North Branch Chicago River	0.020	0.030	0.000	0.007	0.006	0.002	0.003	0.002	0.003	0.002	0.001
32 Lake-Cook Road, Skokie River	0.020	0.030	0.000	0.000	0.005	0.001	0.004	0.001	0.005	0.001	0.001
105 Frontage Road, Skokie River	0.020	0.030	0.000	0.006	0.005	0.002	0.003	0.001	0.003	0.002	0.001
34 Dempster Street, North Branch Chicago River	0.020	0.030	0.000	0.007	0.006	0.002	0.004	0.001	0.004	0.002	0.001
96 Albany Avenue, North Branch Chicago River	0.020	0.030	0.000	0.006	0.005	0.002	0.003	0.001	0.004	0.002	0.001
35 Central Street, North Shore Channel	0.020	0.030	0.000	0.000	0.000	0.001	0.003	0.001	0.003	0.001	0.001
112 Dempster Street, North Shore Channel	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.020	0.030	0.000	0.000	0.005	0.001	0.003	0.001	0.003	0.001	0.001
36 Touhy Avenue, North Shore Channel	0.020	0.030	0.000	0.007	0.005	0.002	0.003	0.001	0.003	0.002	0.001
101 Foster Avenue, North Shore Channel	0.020	0.030	0.000	0.006	0.005	0.002	0.003	0.001	0.003	0.002	0.001
37 Wilson Avenue, North Branch Chicago River	0.020	0.030	0.000	0.006	0.005	0.002	0.003	0.001	0.003	0.002	0.001
73 Diversey Parkway, North Branch Chicago River	0.020	0.030	0.000	0.007	0.005	0.002	0.003	0.001	0.003	0.002	0.001
46 Grand Avenue, North Branch Chicago River	0.020	0.030	0.000	0.006	0.005	0.002	0.003	0.001	0.003	0.002	0.001
74 Lake Shore Drive, Chicago River	0.020	0.030	0.000	0.000	0.003	0.001	0.003	0.001	0.003	0.001	0.001
100 Wells Street, Chicago River	0.020	0.030	0.000	0.000	0.005	0.002	0.003	0.001	0.002	0.002	0.001
39 Madison Street, South Branch Chicago River	0.020	0.030	0.000	0.000	0.005	0.002	0.004	0.001	0.003	0.002	0.001
108 Loomis Street, South Branch Chicago River	0.020	0.030	0.000	0.005	0.006	0.002	0.003	0.001	0.003	0.002	0.001
99 Archer Avenue, South Fork South Branch Chicago River	0.020	0.030	0.000	0.000	0.004	0.001	0.003	0.001	0.003	0.002	0.001
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.020	0.030	0.000	0.000	0.005	0.001	0.003	0.001	0.003	ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.020	0.030	0.000	0.005	0.005	0.002	0.003	0.001	0.003	0.002	0.001
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.020	0.030	0.000	0.006	0.004	0.001	0.003	0.001	0.003	0.002	0.001
42 Route 83, Chicago Sanitary & Ship Canal	0.020	0.030	0.000	0.007	0.007	0.001	0.003	0.002	0.003	0.002	0.002
48 Stephen Street, Chicago Sanitary & Ship Canal	0.020	0.030	0.002	0.007	0.005	0.001	0.003	0.002	0.003	0.002	0.001
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.020	0.030	0.000	0.005	0.005	0.002	0.003	0.002	0.003	0.002	0.001
Calumet River System											
49 Ewing Avenue, Calumet River	0.020	0.030	0.004	0.000	0.000	0.001	0.002	0.001	0.002	0.001	0.001
50 Burnham Avenue, Wolf Lake	0.020	0.030	0.002	0.000	0.003	0.001	0.002	0.001	0.002	0.001	0.001
55 130th Street, Calumet River	0.020	0.030	0.002	0.000	0.002	0.001	0.003	0.001	0.002	0.001	0.001
86 Burnham Avenue, Grand Calumet River	0.020	0.030	0.000	0.000	0.003	0.002	0.003	0.002	0.003	0.001	0.001
56 Indiana Avenue, Little Calumet River	0.020	0.030	0.000	0.000	0.002	0.001	0.002	0.002	0.003	0.001	0.001
76 Halsted Street, Little Calumet River	0.020	0.030	0.000	0.006	0.006	0.001	0.003	0.002	0.003	0.002	0.001
52 Wentworth Avenue, Little Calumet River	0.020	0.030	0.000	0.000	0.003	0.001	0.003	0.001	0.003	0.001	0.001
54 Joe Orr Road, Thorn Creek	0.020	0.030	0.000	0.000	0.000	0.002	0.003	0.002	0.004	0.001	0.000
97 170th Street, Thorn Creek	0.020	0.030	0.000	0.000	0.003	0.002	0.003	0.002	0.004	0.002	0.001
57 Ashland Avenue, Little Calumet River	0.020	0.030	0.000	0.000	0.003	0.001	0.003	0.002	0.004	0.001	0.001
58 Ashland Avenue, Calumet-Sag Channel	0.020	0.030	0.000	0.007	0.005	0.001	0.003	0.002	0.003	0.002	0.001
59 Cicero Avenue, Calumet-Sag Channel	0.020	0.030	0.000	0.000	0.002	0.001	0.003	0.002	0.003	0.002	0.001
43 Route 83, Calumet-Sag Channel	0.020	0.030	0.000	0.000	0.002	0.001	0.003	0.002	0.003	0.002	0.001
Des Plaines River System											
90 Route 19, Poplar Creek	0.020	0.030	0.000	0.008	0.004	0.001	0.003	0.002	0.004	0.002	0.001
110 Springinsguth Road, West Branch DuPage River	0.020	0.030	0.000	0.000	0.004	0.002	0.004	0.002	0.005	ND	ND
89 Walnut Lane, West Branch DuPage River	0.020	0.030	0.000	0.007	0.003	0.002	0.003	0.001	0.004	0.002	0.001
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.009	0.003	0.002	0.004	0.001	0.003	0.002	0.001
111 Arlington Drive, West Branch DuPage River	0.020	0.030	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.020	0.030	0.000	0.000	0.000	0.002	0.003	0.002	0.005	0.001	0.001
80 Arlington Heights Road, Salt Creek	0.020	0.030	0.002	0.006	0.003	0.003	0.003	0.001	0.004	0.002	0.000
18 Devon Avenue, Salt Creek	0.020	0.030	0.002	0.007	0.003	0.002	0.003	0.001	0.004	0.002	0.001
24 Wolf Road, Salt Creek	0.020	0.030	0.000	0.007	0.004	0.001	0.003	0.002	0.004	0.002	0.001
109 Brookfield Avenue, Salt Creek	0.020	0.030	0.002	0.006	0.003	0.002	0.003	0.001	0.005	0.002	0.003
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000
77 Elmhurst Road, Higgins Creek	0.020	0.030	0.000	0.000	0.006	0.002	0.004	0.002	0.005	0.003	0.000
78 Wille Road, Higgins Creek	0.020	0.030	0.005	0.006	0.003	0.001	0.003	0.002	0.004	0.002	0.001
12 Lake-Cook Road, Buffalo Creek	0.020	0.030	0.003	0.009	0.004	0.003	0.003	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.020	0.030	0.002	0.006	0.003	0.002	0.004	0.002	0.005	0.002	0.001
17 Oakton Street, Des Plaines River	0.020	0.030	0.000	0.006	0.003	0.001	0.004	0.002	0.004	0.001	0.001
19 Belmont Avenue, Des Plaines River	0.020	0.030	0.000	0.006	0.003	0.002	0.003	0.002	0.004	0.002	0.001
20 Roosevelt Road, Des Plaines River	0.020	0.030	0.000	0.006	0.003	0.001	0.003	0.002	0.004	0.001	0.001
22 Ogden Avenue, Des Plaines River	0.020	0.030	0.002	0.006	0.003	0.002	0.004	0.001	0.004	0.003	0.001
23 Willow Springs Road, Des Plaines River	0.020	0.030	0.002	0.006	0.004	0.003	0.003	0.002	0.004	0.001	0.002
29 Stephen Street, Des Plaines River	0.020	0.030	0.000	0.006	0.003	0.002	0.003	0.002	0.004	0.002	0.001
91 Material Service Road, Des Plaines River	0.020	0.030	0.002	0.006	0.004	0.002	0.003	0.001	0.004	0.002	0.001

ND = No Data.

TABLE AII-114: SOLUBLE NICKEL MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.005	0.008	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.003
103 Golf Road, West Fork North Branch Chicago River	0.005	0.008	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.003
31 Lake-Cook Road, Middle Fork North Branch	0.005	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
104 Glenview Road, North Branch Chicago River	0.005	0.008	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.003
32 Lake-Cook Road, Skokie River	0.005	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
105 Frontage Road, Skokie River	0.005	0.008	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.003
34 Dempster Street, North Branch Chicago River	0.005	0.008	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.003
96 Albany Avenue, North Branch Chicago River	0.005	0.008	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.002
35 Central Street, North Shore Channel	0.005	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
112 Dempster Street, North Shore Channel	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.008	0.008	0.000	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.002
36 Touhy Avenue, North Shore Channel	0.006	0.008	0.000	0.001	0.000	0.001	0.001	0.001	0.002	0.003	0.003
101 Foster Avenue, North Shore Channel	0.008	0.008	0.000	0.001	0.000	0.001	0.001	0.002	0.002	0.003	0.004
37 Wilson Avenue, North Branch Chicago River	0.005	0.008	0.000	0.001	0.000	0.001	0.001	0.002	0.001	0.003	0.004
73 Diversey Parkway, North Branch Chicago River	0.007	0.010	0.000	0.001	0.000	0.001	0.001	0.002	0.002	0.003	0.004
46 Grand Avenue, North Branch Chicago River	0.010	0.008	0.000	0.002	0.000	0.002	0.002	0.003	0.003	0.005	0.006
74 Lake Shore Drive, Chicago River	0.006	0.008	0.000	0.000	0.000	0.001	0.002	0.000	0.000	0.001	0.001
100 Wells Street, Chicago River	0.006	0.008	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.003	0.002
39 Madison Street, South Branch Chicago River	0.006	0.008	0.001	0.000	0.000	0.001	0.001	0.002	0.003	0.004	0.005
108 Loomis Street, South Branch Chicago River	0.006	0.008	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.004	0.004
99 Archer Avenue, South Fork South Branch Chicago River	0.006	0.008	0.000	0.001	0.001	0.002	0.001	0.002	0.002	0.004	0.004
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.006	0.008	0.001	0.001	0.000	0.001	0.001	0.003	0.002	ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.006	0.008	0.000	0.001	0.000	0.002	0.002	0.002	0.003	0.003	0.005
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.008	0.008	0.001	0.001	0.001	0.003	0.004	0.004	0.004	0.004	0.005
42 Route 83, Chicago Sanitary & Ship Canal	0.008	0.009	0.002	0.002	0.002	0.005	0.004	0.005	0.007	0.005	0.007
48 Stephen Street, Chicago Sanitary & Ship Canal	0.007	0.015	0.001	0.002	0.001	0.004	0.003	0.004	0.005	0.005	0.006
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.006	0.009	0.001	0.002	0.002	0.004	0.004	0.004	0.004	0.005	0.005
Calumet River System											
49 Ewing Avenue, Calumet River	0.005	0.008	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.001
50 Burnham Avenue, Wolf Lake	0.005	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
55 130th Street, Calumet River	0.005	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.002
86 Burnham Avenue, Grand Calumet River	0.005	0.009	0.000	0.001	0.001	0.001	0.002	0.002	0.003	0.002	0.006
56 Indiana Avenue, Little Calumet River	0.005	0.008	0.000	0.000	0.000	0.002	0.000	0.001	0.001	0.001	0.004
76 Halsted Street, Little Calumet River	0.005	0.008	0.000	0.000	0.001	0.001	0.000	0.002	0.001	0.002	0.003
52 Wentworth Avenue, Little Calumet River	0.005	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.003
54 Joe Orr Road, Thorn Creek	0.005	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
97 170th Street, Thorn Creek	0.007	0.008	0.001	0.001	0.001	0.001	0.002	0.004	0.002	0.001	0.006
57 Ashland Avenue, Little Calumet River	0.005	0.008	0.000	0.001	0.001	0.001	0.002	0.002	0.001	0.002	0.004
58 Ashland Avenue, Calumet-Sag Channel	0.005	0.008	0.000	0.000	0.001	0.001	0.000	0.002	0.001	0.001	0.003
59 Cicero Avenue, Calumet-Sag Channel	0.005	0.008	0.000	0.000	0.001	0.001	0.001	0.003	0.002	0.002	0.003
43 Route 83, Calumet-Sag Channel	0.005	0.008	0.001	0.000	0.001	0.002	0.001	0.002	0.002	0.002	0.004
Des Plaines River System											
90 Route 19, Poplar Creek	0.005	0.008	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.003
110 Springinsguth Road, West Branch DuPage River	0.005	0.009	0.000	0.000	0.000	0.000	0.000	0.001	0.001	ND	ND
89 Walnut Lane, West Branch DuPage River	0.005	0.009	0.001	0.003	0.002	0.002	0.001	0.002	0.000	0.000	0.003
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.004	0.001	0.002	0.002	0.002	0.000	0.000	0.002
111 Arlington Drive, West Branch DuPage River	0.005	0.008	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.005	0.008	0.000	0.000	0.001	0.000	0.000	0.001	0.000	0.000	0.003
80 Arlington Heights Road, Salt Creek	0.006	0.008	0.005	0.001	0.002	0.002	0.001	0.002	0.001	0.001	0.003
18 Devon Avenue, Salt Creek	0.007	0.008	0.006	0.001	0.002	0.002	0.001	0.002	0.002	0.000	0.003
24 Wolf Road, Salt Creek	0.006	0.008	0.003	0.002	0.002	0.002	0.002	0.003	0.004	0.002	0.008
109 Brookfield Avenue, Salt Creek	0.009	0.008	0.003	0.002	0.002	0.002	0.002	0.003	0.004	0.002	0.010
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.002
77 Elmhurst Road, Higgins Creek	0.005	0.008	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.001	0.003
78 Wille Road, Higgins Creek	0.007	0.008	0.006	0.002	0.005	0.006	0.007	0.012	0.006	0.004	0.007
12 Lake-Cook Road, Buffalo Creek	0.006	0.008	0.000	0.001	0.000	0.000	0.001	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.005	0.008	0.000	0.000	0.000	0.001	0.001	0.003	0.002	0.003	0.004
17 Oakton Street, Des Plaines River	0.005	0.008	0.000	0.002	0.000	0.001	0.000	0.002	0.001	0.002	0.003
19 Belmont Avenue, Des Plaines River	0.005	0.010	0.000	0.001	0.001	0.001	0.002	0.005	0.002	0.003	0.005
20 Roosevelt Road, Des Plaines River	0.005	0.008	0.000	0.001	0.001	0.001	0.001	0.004	0.002	0.002	0.005
22 Ogden Avenue, Des Plaines River	0.006	0.008	0.000	0.000	0.001	0.001	0.002	0.003	0.002	0.003	0.006
23 Willow Springs Road, Des Plaines River	0.006	0.008	0.000	0.000	0.002	0.001	0.002	0.003	0.002	0.003	0.005
29 Stephen Street, Des Plaines River	0.005	0.008	0.000	0.000	0.001	0.002	0.001	0.003	0.002	0.002	0.005
91 Material Service Road, Des Plaines River	0.005	0.009	0.000	0.000	0.001	0.001	0.001	0.003	0.002	0.003	0.006

ND = No Data.

TABLE AII-115: SOLUBLE MANGANESE MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.053	0.057	0.076	0.054	0.043	0.056	0.039	0.059	0.054	0.032	0.034
103 Golf Road, West Fork North Branch Chicago River	0.066	0.041	0.048	0.057	0.046	0.044	0.041	0.054	0.043	0.037	0.047
31 Lake-Cook Road, Middle Fork North Branch	0.094	0.062	0.154	0.058	0.056	0.124	0.045	0.100	0.071	0.057	0.111
104 Glenview Road, North Branch Chicago River	0.049	0.048	0.055	0.063	0.044	0.038	0.033	0.054	0.035	0.025	0.023
32 Lake-Cook Road, Skokie River	0.092	0.071	0.089	0.059	0.067	0.097	0.051	0.094	0.109	0.065	0.066
105 Frontage Road, Skokie River	0.023	0.031	0.025	0.032	0.026	0.021	0.012	0.021	0.020	0.012	0.013
34 Dempster Street, North Branch Chicago River	0.056	0.041	0.056	0.043	0.047	0.047	0.033	0.044	0.036	0.034	0.032
96 Albany Avenue, North Branch Chicago River	0.056	0.040	0.040	0.036	0.056	0.033	0.031	0.033	0.022	0.025	0.023
35 Central Street, North Shore Channel	0.010	0.017	0.012	0.011	0.025	0.009	0.009	0.005	0.010	0.010	0.012
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.025	0.026	0.025	0.014	0.016	0.013	0.016	0.011	0.018	0.019	0.013
36 Touhy Avenue, North Shore Channel	0.029	0.020	0.018	0.010	0.017	0.013	0.009	0.013	0.013	0.010	0.017
101 Foster Avenue, North Shore Channel	0.030	0.025	0.013	0.019	0.015	0.015	0.011	0.013	0.016	0.012	0.015
37 Wilson Avenue, North Branch Chicago River	0.032	0.021	0.025	0.018	0.019	0.019	0.013	0.018	0.017	0.015	0.018
73 Diversey Parkway, North Branch Chicago River	0.035	0.072	0.029	0.025	0.021	0.024	0.018	0.019	0.020	0.021	0.019
46 Grand Avenue, North Branch Chicago River	0.027	0.032	0.025	0.027	0.038	0.039	0.022	0.025	0.028	0.024	0.023
74 Lake Shore Drive, Chicago River	0.025	0.021	0.012	0.011	0.012	0.010	0.004	0.011	0.007	0.007	0.009
100 Wells Street, Chicago River	0.041	0.048	0.017	0.013	0.029	0.019	0.010	0.015	0.014	0.016	0.012
39 Madison Street, South Branch Chicago River	0.041	0.042	0.031	0.021	0.028	0.024	0.014	0.040	0.020	0.022	0.023
108 Loomis Street, South Branch Chicago River	0.036	0.106	0.028	0.024	0.040	0.032	0.019	0.028	0.021	0.020	0.023
99 Archer Avenue, South Fork South Branch Chicago River	0.052	0.038	0.029	0.037	0.043	0.025	0.019	0.028	0.026	0.024	0.033
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.041	0.031	0.026	0.023	0.034	0.024	0.021	0.022	0.021	ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.025
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.037	0.026	0.023	0.025	0.032	0.020	0.019	0.018	0.018	0.020	0.022
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.018	0.023	0.041	0.022	0.018	0.018	0.014	0.013	0.013	0.013	0.013
42 Route 83, Chicago Sanitary & Ship Canal	0.025	0.024	0.020	0.017	0.020	0.016	0.015	0.017	0.018	0.020	0.016
48 Stephen Street, Chicago Sanitary & Ship Canal	0.035	0.037	0.026	0.022	0.025	0.021	0.023	0.028	0.027	0.026	0.024
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.035	0.074	0.031	0.028	0.057	0.030	0.026	0.025	0.029	0.026	0.030
Calumet River System											
49 Ewing Avenue, Calumet River	0.016	0.014	0.006	0.021	0.009	0.010	0.007	0.008	0.008	0.006	0.006
50 Burnham Avenue, Wolf Lake	0.011	0.016	0.022	0.010	0.013	0.008	0.005	0.008	0.014	0.004	0.006
55 130th Street, Calumet River	0.011	0.019	0.017	0.014	0.036	0.013	0.011	0.012	0.014	0.005	0.004
86 Burnham Avenue, Grand Calumet River	0.237	0.197	0.198	0.081	0.157	0.131	0.132	0.067	0.083	0.108	0.078
56 Indiana Avenue, Little Calumet River	0.017	0.025	0.029	0.019	0.021	0.019	0.009	0.012	0.009	0.008	0.011
76 Halsted Street, Little Calumet River	0.028	0.032	0.038	0.025	0.033	0.035	0.025	0.029	0.027	0.026	0.031
52 Wentworth Avenue, Little Calumet River	0.099	0.073	0.093	0.084	0.105	0.096	0.084	0.089	0.114	0.090	0.094
54 Joe Orr Road, Thorn Creek	0.058	0.057	0.051	0.047	0.058	0.057	0.042	0.060	0.059	0.026	0.054
97 170th Street, Thorn Creek	0.070	0.051	0.062	0.060	0.061	0.058	0.051	0.061	0.064	0.046	0.046
57 Ashland Avenue, Little Calumet River	0.074	0.057	0.058	0.065	0.065	0.081	0.065	0.081	0.083	0.083	0.063
58 Ashland Avenue, Calumet-Sag Channel	0.052	0.045	0.050	0.035	0.042	0.038	0.037	0.039	0.036	0.033	0.043
59 Cicero Avenue, Calumet-Sag Channel	0.047	0.047	0.047	0.035	0.056	0.041	0.040	0.036	0.046	0.033	0.044
43 Route 83, Calumet-Sag Channel	0.061	0.049	0.047	0.034	0.048	0.042	0.038	0.039	0.057	0.024	0.034
Des Plaines River System											
90 Route 19, Poplar Creek	0.063	0.047	0.067	0.054	0.090	0.050	0.047	0.077	0.048	0.040	0.057
110 Springinguth Road, West Branch DuPage River	0.105	0.096	0.117	0.109	0.182	0.093	0.116	0.186	0.092	ND	ND
89 Walnut Lane, West Branch DuPage River	0.037	0.025	0.047	0.023	0.039	0.026	0.024	0.034	0.031	0.029	0.048
64 Lake Street, West Branch DuPage River	ND	ND	0.063	0.044	0.049	0.035	0.037	0.053	0.042	0.037	0.036
111 Arlington Drive, West Branch DuPage River	0.056	0.040	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.068	0.054	0.025	0.022	0.035	0.033	0.021	0.036	0.044	0.023	0.034
80 Arlington Heights Road, Salt Creek	0.031	0.026	0.032	0.023	0.039	0.031	0.014	0.024	0.030	0.020	0.018
18 Devon Avenue, Salt Creek	0.026	0.030	0.042	0.030	0.051	0.030	0.017	0.026	0.031	0.021	0.020
24 Wolf Road, Salt Creek	0.036	0.035	0.034	0.034	0.040	0.032	0.027	0.031	0.035	0.029	0.035
109 Brookfield Avenue, Salt Creek	0.041	0.038	0.041	0.038	0.040	0.036	0.031	0.035	0.034	0.026	0.023
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.037
77 Elmhurst Road, Higgins Creek	0.087	0.061	0.027	0.069	0.077	0.067	0.057	0.072	0.091	0.074	0.073
78 Wille Road, Higgins Creek	0.029	0.015	0.022	0.026	0.051	0.028	0.023	0.016	0.018	0.019	0.022
12 Lake-Cook Road, Buffalo Creek	0.249	0.040	0.056	0.056	0.066	0.047	0.043	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.047	0.031	0.036	0.032	0.035	0.030	0.025	0.036	0.033	0.030	0.029
17 Oakton Street, Des Plaines River	0.028	0.029	0.028	0.026	0.030	0.030	0.032	0.039	0.028	0.025	0.034
19 Belmont Avenue, Des Plaines River	0.033	0.060	0.038	0.029	0.034	0.032	0.032	0.045	0.035	0.029	0.052
20 Roosevelt Road, Des Plaines River	0.031	0.034	0.030	0.025	0.034	0.028	0.034	0.039	0.034	0.021	0.050
22 Ogden Avenue, Des Plaines River	0.029	0.024	0.026	0.020	0.033	0.028	0.026	0.029	0.028	0.033	0.027
23 Willow Springs Road, Des Plaines River	0.032	0.028	0.027	0.018	0.039	0.028	0.030	0.033	0.052	0.019	0.028
29 Stephen Street, Des Plaines River	0.051	0.043	0.023	0.016	0.032	0.027	0.024	0.022	0.027	0.018	0.021
91 Material Service Road, Des Plaines River	0.029	0.037	0.023	0.014	0.030	0.019	0.020	0.021	0.027	0.019	0.016

ND = No Data.

TABLE AII-116: SOLUBLE MERCURY MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means ($\mu\text{g/L}$)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	0.093	ND	0.000
103 Golf Road, West Fork North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	0.000	0.080	0.020	0.008
31 Lake-Cook Road, Middle Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	0.030	0.075	0.010
104 Glenview Road, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	0.000	ND	0.000
32 Lake-Cook Road, Skokie River	ND	ND	ND	ND	ND	ND	ND	0.025	0.000	0.065	0.013
105 Frontage Road, Skokie River	ND	ND	ND	ND	ND	ND	ND	ND	0.045	0.014	0.000
34 Dempster Street, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	0.000	0.018	0.075	0.012
96 Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	0.000	0.000	0.075	0.058
35 Central Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	0.000	ND	0.000	0.008
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	0.000	0.012	ND	0.038
36 Touhy Avenue, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	0.000	0.015	0.000	0.030
101 Foster Avenue, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	0.000	0.023	0.000	0.008
37 Wilson Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	0.080	0.015	0.000	0.000
73 Diversey Parkway, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	0.000	0.000	0.027
46 Grand Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	0.000	0.103	0.000	0.025
74 Lake Shore Drive, Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	0.167	0.015	0.090
100 Wells Street, Chicago River	ND	ND	ND	ND	ND	ND	ND	0.000	0.083	0.000	0.030
39 Madison Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	0.050	0.075	0.030
108 Loomis Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	0.000	0.000	0.020
99 Archer Avenue, South Fork South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	0.000	0.000	0.023
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	0.000	ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010
75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	0.000	0.000	0.000
41 Harlem Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	0.000	0.007	0.033
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	0.000	0.030	0.000	0.000
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	0.016	0.087	0.000
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	0.000	0.025	0.002	0.013
Calumet River System											
49 Ewing Avenue, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	0.090	0.000	0.028
50 Burnham Avenue, Wolf Lake	ND	ND	ND	ND	ND	ND	ND	ND	0.000	0.000	0.000
55 130th Street, Calumet River	ND	ND	ND	ND	ND	ND	0.000	ND	0.000	ND	0.020
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	0.040	0.085	0.020	0.022	0.026
56 Indiana Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	0.000	ND	ND	0.000	0.020
76 Halsted Street, Little Calumet River	ND	ND	ND	ND	ND	ND	0.000	ND	0.000	0.000	0.019
52 Wentworth Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	0.000	0.000	ND	0.000	0.020
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.070	0.020
97 170th Street, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000	0.000
57 Ashland Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	0.000	0.000	0.000	0.000	0.018
58 Ashland Avenue, Calumet-Sag Channel	ND	ND	ND	ND	ND	ND	0.050	ND	0.000	0.070	0.023
59 Cicero Avenue, Calumet-Sag Channel	ND	ND	ND	ND	ND	ND	0.000	ND	0.043	0.000	0.022
43 Route 83, Calumet-Sag Channel	ND	ND	ND	ND	ND	ND	0.000	0.000	ND	0.000	0.028
Des Plaines River System											
90 Route 19, Poplar Creek	ND	ND	ND	ND	ND	0.000	ND	0.060	0.055	0.000	0.013
110 Springinguth Road, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	0.000	0.080	ND	ND
89 Walnut Lane, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	ND	0.000	0.000	0.007
64 Lake Street, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	ND	0.043	0.000	0.003
111 Arlington Drive, West Branch DuPage River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	0.080	0.000	0.000
80 Arlington Heights Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	0.000	0.000	0.000	0.020
18 Devon Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	0.000	0.027	0.070	0.000
24 Wolf Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	0.030	0.020	0.004
109 Brookfield Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	0.050	0.000	0.005
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND	0.000	0.000	0.033
78 Wille Road, Higgins Creek	ND	ND	ND	ND	ND	ND	0.000	0.000	0.050	0.000	0.005
12 Lake-Cook Road, Buffalo Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	0.000	0.063	0.045	0.048
17 Oakton Street, Des Plaines River	ND	ND	ND	ND	ND	ND	0.080	0.080	0.070	0.033	0.020
19 Belmont Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	0.030	0.000	0.003
20 Roosevelt Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	0.000	0.000	0.015
22 Ogden Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	0.025	0.090	0.004
23 Willow Springs Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	0.000	0.000	0.000	0.018
29 Stephen Street, Des Plaines River	ND	ND	ND	ND	ND	ND	0.000	ND	0.000	0.005	0.003
91 Material Service Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	0.000	0.100	0.000	0.018

ND = No Data.

TABLE AII-117: SOLUBLE ZINC MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.022	0.023	0.009	0.014	0.015	0.028	0.020	0.019	0.029	0.012	0.010
103 Golf Road, West Fork North Branch Chicago River	0.013	0.021	0.005	0.004	0.003	0.016	0.014	0.011	0.012	0.008	0.012
31 Lake-Cook Road, Middle Fork North Branch	0.010	0.020	0.000	0.003	0.000	0.011	0.012	0.005	0.007	0.004	0.007
104 Glenview Road, North Branch Chicago River	0.014	0.022	0.007	0.011	0.010	0.017	0.019	0.018	0.019	0.013	0.017
32 Lake-Cook Road, Skokie River	0.010	0.020	0.000	0.004	0.001	0.011	0.015	0.011	0.010	0.006	0.009
105 Frontage Road, Skokie River	0.017	0.023	0.013	0.014	0.010	0.019	0.022	0.023	0.019	0.022	0.021
34 Dempster Street, North Branch Chicago River	0.013	0.020	0.007	0.003	0.004	0.017	0.016	0.014	0.017	0.014	0.017
96 Albany Avenue, North Branch Chicago River	0.011	0.020	0.003	0.006	0.007	0.016	0.021	0.015	0.012	0.012	0.017
35 Central Street, North Shore Channel	0.010	0.020	0.000	0.002	0.003	0.010	0.010	0.004	0.006	0.006	0.007
112 Dempster Street, North Shore Channel	0.012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.021	0.023	0.012	0.010	0.009	0.022	0.025	0.018	0.015	0.015	0.020
36 Touhy Avenue, North Shore Channel	0.028	0.028	0.027	0.023	0.026	0.037	0.034	0.029	0.029	0.029	0.032
101 Foster Avenue, North Shore Channel	0.029	0.023	0.024	0.022	0.026	0.037	0.034	0.028	0.032	0.027	0.027
37 Wilson Avenue, North Branch Chicago River	0.023	0.022	0.018	0.017	0.020	0.032	0.028	0.031	0.025	0.024	0.025
73 Diversey Parkway, North Branch Chicago River	0.023	0.023	0.018	0.017	0.019	0.031	0.027	0.024	0.025	0.024	0.025
46 Grand Avenue, North Branch Chicago River	0.024	0.022	0.019	0.018	0.019	0.029	0.029	0.028	0.023	0.026	0.028
74 Lake Shore Drive, Chicago River	0.017	0.024	0.003	0.002	0.003	0.016	0.013	0.012	0.013	0.009	0.013
100 Wells Street, Chicago River	0.022	0.022	0.009	0.006	0.011	0.018	0.017	0.014	0.014	0.018	0.014
39 Madison Street, South Branch Chicago River	0.023	0.023	0.012	0.015	0.016	0.021	0.021	0.023	0.027	0.023	0.023
108 Loomis Street, South Branch Chicago River	0.023	0.023	0.018	0.016	0.017	0.025	0.023	0.022	0.022	0.023	0.023
99 Archer Avenue, South Fork South Branch Chicago River	0.016	0.021	0.011	0.013	0.017	0.021	0.020	0.017	0.020	0.020	0.019
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.021	0.021	0.012	0.015	0.016	0.026	0.024	0.023	0.022	ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.023
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.019	0.022	0.011	0.011	0.020	0.029	0.022	0.021	0.020	0.019	0.021
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.023	0.022	0.022	0.017	0.022	0.030	0.024	0.023	0.022	0.023	0.022
42 Route 83, Chicago Sanitary & Ship Canal	0.023	0.024	0.021	0.018	0.019	0.029	0.026	0.024	0.028	0.026	0.028
48 Stephen Street, Chicago Sanitary & Ship Canal	0.022	0.022	0.014	0.016	0.019	0.027	0.024	0.022	0.025	0.024	0.025
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.020	0.021	0.015	0.017	0.021	0.026	0.027	0.024	0.025	0.024	0.025
Calumet River System											
49 Ewing Avenue, Calumet River	0.010	0.020	0.000	0.002	0.001	0.009	0.008	0.005	0.011	0.005	0.004
50 Burnham Avenue, Wolf Lake	0.010	0.020	0.000	0.001	0.001	0.010	0.007	0.004	0.004	0.001	0.004
55 130th Street, Calumet River	0.010	0.020	0.003	0.000	0.002	0.012	0.017	0.008	0.008	0.003	0.007
86 Burnham Avenue, Grand Calumet River	0.010	0.020	0.000	0.026	0.008	0.019	0.031	0.020	0.021	0.021	0.031
56 Indiana Avenue, Little Calumet River	0.012	0.021	0.004	0.001	0.003	0.017	0.013	0.009	0.010	0.009	0.015
76 Halsted Street, Little Calumet River	0.019	0.022	0.017	0.016	0.022	0.029	0.026	0.026	0.024	0.031	0.032
52 Wentworth Avenue, Little Calumet River	0.011	0.020	0.005	0.007	0.010	0.013	0.014	0.013	0.014	0.012	0.018
54 Joe Orr Road, Thorn Creek	0.030	0.025	0.024	0.034	0.041	0.041	0.044	0.032	0.039	0.021	0.036
97 170th Street, Thorn Creek	0.013	0.020	0.005	0.013	0.019	0.019	0.021	0.020	0.024	0.023	0.030
57 Ashland Avenue, Little Calumet River	0.014	0.020	0.005	0.011	0.014	0.016	0.016	0.019	0.016	0.024	0.014
58 Ashland Avenue, Calumet-Sag Channel	0.017	0.022	0.009	0.016	0.028	0.028	0.030	0.036	0.029	0.031	0.024
59 Cicero Avenue, Calumet-Sag Channel	0.017	0.023	0.008	0.011	0.020	0.021	0.025	0.023	0.021	0.019	0.025
43 Route 83, Calumet-Sag Channel	0.017	0.022	0.006	0.012	0.015	0.024	0.024	0.026	0.022	0.019	0.023
Des Plaines River System											
90 Route 19, Poplar Creek	0.010	0.020	0.000	0.001	0.005	0.010	0.007	0.005	0.004	0.010	0.007
110 Springinguth Road, West Branch DuPage River	0.014	0.019	0.002	0.008	0.015	0.019	0.015	0.011	0.011	ND	ND
89 Walnut Lane, West Branch DuPage River	0.039	0.029	0.030	0.032	0.034	0.040	0.034	0.036	0.043	0.032	0.036
64 Lake Street, West Branch DuPage River	ND	ND	0.014	0.022	0.025	0.030	0.029	0.027	0.032	0.027	0.026
111 Arlington Drive, West Branch DuPage River	0.027	0.023	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.010	0.020	0.000	0.005	0.002	0.009	0.007	0.004	0.007	0.003	0.003
80 Arlington Heights Road, Salt Creek	0.017	0.020	0.014	0.018	0.015	0.023	0.022	0.021	0.035	0.018	0.019
18 Devon Avenue, Salt Creek	0.019	0.020	0.017	0.017	0.014	0.020	0.018	0.028	0.024	0.018	0.019
24 Wolf Road, Salt Creek	0.019	0.022	0.015	0.016	0.019	0.021	0.024	0.029	0.025	0.025	0.029
109 Brookfield Avenue, Salt Creek	0.019	0.023	0.013	0.013	0.017	0.022	0.023	0.026	0.027	0.017	0.025
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.028
77 Elmhurst Road, Higgins Creek	0.011	0.022	0.000	0.007	0.017	0.011	0.020	0.017	0.021	0.016	0.013
78 Wille Road, Higgins Creek	0.034	0.025	0.023	0.032	0.041	0.040	0.047	0.062	0.057	0.049	0.048
12 Lake-Cook Road, Buffalo Creek	0.010	0.020	0.002	0.001	0.002	0.008	0.008	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.011	0.020	0.009	0.007	0.011	0.015	0.016	0.021	0.019	0.018	0.017
17 Oakton Street, Des Plaines River	0.013	0.020	0.006	0.007	0.009	0.013	0.017	0.019	0.018	0.014	0.016
19 Belmont Avenue, Des Plaines River	0.017	0.023	0.009	0.011	0.014	0.018	0.022	0.027	0.022	0.025	0.024
20 Roosevelt Road, Des Plaines River	0.011	0.020	0.011	0.008	0.015	0.017	0.022	0.026	0.021	0.020	0.023
22 Ogden Avenue, Des Plaines River	0.016	0.020	0.013	0.008	0.016	0.021	0.023	0.024	0.021	0.028	0.022
23 Willow Springs Road, Des Plaines River	0.016	0.020	0.010	0.006	0.014	0.019	0.021	0.022	0.021	0.017	0.019
29 Stephen Street, Des Plaines River	0.013	0.020	0.010	0.007	0.013	0.021	0.022	0.021	0.022	0.019	0.020
91 Material Service Road, Des Plaines River	0.018	0.022	0.007	0.007	0.012	0.018	0.020	0.018	0.020	0.021	0.018

ND = No Data.

TABLE AII-118: SOLUBLE SELENIUM MEAN HISTORY
2002 THROUGH 2012

Sampling Station (No. Name)	Annual Means (mg/L)										
	12	11	10	09	08	07	06	05	04	03	02
Chicago River System											
106 Dundee Road, West Fork North Branch Chicago River	0.006	0.030	0.000	0.000	0.000	0.000	0.002	0.011	0.006	0.000	0.007
103 Golf Road, West Fork North Branch Chicago River	0.006	0.030	0.000	0.000	0.000	0.000	0.002	0.007	0.008	0.005	0.006
31 Lake-Cook Road, Middle Fork North Branch	0.006	0.030	0.000	0.000	0.000	0.000	0.002	0.005	0.005	0.002	0.006
104 Glenview Road, North Branch Chicago River	0.006	0.030	0.000	0.000	0.000	0.000	0.004	0.006	0.006	0.002	0.004
32 Lake-Cook Road, Skokie River	0.006	0.030	0.000	0.000	0.000	0.000	0.003	0.006	0.007	0.004	0.005
105 Frontage Road, Skokie River	0.006	0.030	0.000	0.000	0.000	0.000	0.001	0.005	0.005	0.006	0.001
34 Dempster Street, North Branch Chicago River	0.006	0.030	0.000	0.000	0.000	0.000	0.001	0.008	0.006	0.005	0.005
96 Albany Avenue, North Branch Chicago River	0.007	0.030	0.000	0.000	0.000	0.002	0.002	0.007	0.007	0.003	0.006
35 Central Street, North Shore Channel	0.005	0.030	0.000	0.000	0.000	0.000	0.001	0.007	0.005	0.003	0.005
112 Dempster Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
102 Oakton Street, North Shore Channel	0.006	0.030	0.000	0.000	0.000	0.002	0.001	0.005	0.005	0.001	0.003
36 Touhy Avenue, North Shore Channel	0.006	0.030	0.000	0.000	0.000	0.002	0.002	0.006	0.005	0.006	0.005
101 Foster Avenue, North Shore Channel	0.006	0.030	0.000	0.000	0.000	0.000	0.001	0.007	0.007	0.004	0.004
37 Wilson Avenue, North Branch Chicago River	0.005	0.030	0.000	0.000	0.000	0.002	0.002	0.008	0.006	0.004	0.006
73 Diversey Parkway, North Branch Chicago River	0.006	0.030	0.000	0.000	0.000	0.000	0.002	0.006	0.005	0.005	0.004
46 Grand Avenue, North Branch Chicago River	0.006	0.030	0.000	0.000	0.000	0.000	0.001	0.007	0.006	0.005	0.007
74 Lake Shore Drive, Chicago River	0.006	0.030	0.000	0.000	0.000	0.000	0.001	0.005	0.005	0.003	0.001
100 Wells Street, Chicago River	0.007	0.030	0.000	0.000	0.000	0.000	0.002	0.003	0.007	0.004	0.002
39 Madison Street, South Branch Chicago River	0.007	0.030	0.000	0.000	0.000	0.000	0.001	0.006	0.007	0.002	0.002
108 Loomis Street, South Branch Chicago River	0.007	0.030	0.000	0.000	0.000	0.000	0.000	0.007	0.009	0.005	0.002
99 Archer Avenue, South Fork South Branch Chicago River	0.005	0.030	0.000	0.000	0.000	0.000	0.000	0.005	0.007	0.004	0.002
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.006	0.030	0.000	0.000	0.000	0.000	0.000	0.006	0.005	ND	ND
107 Western Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.004
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.006	0.030	0.000	0.000	0.000	0.000	0.000	0.006	0.005	0.004	0.004
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.006	0.030	0.000	0.000	0.000	0.000	0.000	0.006	0.009	0.003	0.001
42 Route 83, Chicago Sanitary & Ship Canal	0.006	0.030	0.000	0.000	0.000	0.000	0.000	0.005	0.006	0.002	0.001
48 Stephen Street, Chicago Sanitary & Ship Canal	0.007	0.030	0.000	0.000	0.000	0.000	0.001	0.005	0.006	0.004	0.002
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.006	0.030	0.000	0.000	0.000	0.000	0.002	0.005	0.006	0.004	0.005
Calumet River System											
49 Ewing Avenue, Calumet River	0.005	0.030	0.000	0.000	0.000	0.000	0.003	0.005	0.007	0.004	0.002
50 Burnham Avenue, Wolf Lake	0.005	0.030	0.000	0.000	0.000	0.000	0.004	0.004	0.005	0.003	0.002
55 130th Street, Calumet River	0.005	0.030	0.000	0.000	0.000	0.000	0.003	0.002	0.004	0.003	0.002
86 Burnham Avenue, Grand Calumet River	0.007	0.030	0.005	0.000	0.000	0.000	0.002	0.006	0.008	0.002	0.005
56 Indiana Avenue, Little Calumet River	0.005	0.030	0.000	0.000	0.000	0.000	0.002	0.003	0.004	0.003	0.005
76 Halsted Street, Little Calumet River	0.005	0.030	0.000	0.000	0.000	0.000	0.003	0.004	0.005	0.005	0.003
52 Wentworth Avenue, Little Calumet River	0.005	0.030	0.000	0.000	0.000	0.000	0.002	0.004	0.008	0.003	0.003
54 Joe Orr Road, Thorn Creek	0.006	0.030	0.000	0.000	0.000	0.000	0.003	0.005	0.005	0.008	0.000
97 170th Street, Thorn Creek	0.006	0.030	0.000	0.000	0.000	0.000	0.002	0.004	0.005	0.004	0.006
57 Ashland Avenue, Little Calumet River	0.006	0.030	0.000	0.000	0.000	0.000	0.003	0.004	0.005	0.003	0.005
58 Ashland Avenue, Calumet-Sag Channel	0.006	0.030	0.000	0.000	0.000	0.000	0.002	0.005	0.005	0.005	0.001
59 Cicero Avenue, Calumet-Sag Channel	0.005	0.030	0.000	0.000	0.000	0.000	0.003	0.004	0.007	0.004	0.005
43 Route 83, Calumet-Sag Channel	0.005	0.030	0.000	0.000	0.000	0.000	0.003	0.004	0.005	0.004	0.005
Des Plaines River System											
90 Route 19, Poplar Creek	0.006	0.030	0.000	0.000	0.000	0.000	0.000	0.005	0.008	0.003	0.006
110 Springinguth Road, West Branch DuPage River	0.006	0.030	0.000	0.000	0.000	0.000	0.001	0.008	0.005	ND	ND
89 Walnut Lane, West Branch DuPage River	0.005	0.030	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.004	0.003
64 Lake Street, West Branch DuPage River	ND	ND	0.000	0.000	0.000	0.002	0.000	0.007	0.004	0.005	0.005
111 Arlington Drive, West Branch DuPage River	0.005	0.030	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.006	0.030	0.000	0.000	0.000	0.000	0.001	0.005	0.007	0.001	0.006
80 Arlington Heights Road, Salt Creek	0.005	0.030	0.008	0.000	0.000	0.000	0.001	0.007	0.005	0.002	0.004
18 Devon Avenue, Salt Creek	0.006	0.030	0.000	0.000	0.000	0.000	0.001	0.008	0.005	0.003	0.002
24 Wolf Road, Salt Creek	0.006	0.030	0.000	0.000	0.000	0.000	0.001	0.006	0.006	0.003	0.008
109 Brookfield Avenue, Salt Creek	0.006	0.030	0.000	0.000	0.000	0.000	0.000	0.005	0.006	0.003	0.011
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
77 Elmhurst Road, Higgins Creek	0.006	0.030	0.000	0.000	0.000	0.000	0.000	0.009	0.006	0.003	0.002
78 Wille Road, Higgins Creek	0.005	0.030	0.000	0.000	0.000	0.000	0.000	0.006	0.006	0.004	0.006
12 Lake-Cook Road, Buffalo Creek	0.006	0.030	0.000	0.000	0.000	0.000	0.001	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.006	0.030	0.000	0.000	0.000	0.000	0.000	0.006	0.005	0.005	0.010
17 Oakton Street, Des Plaines River	0.006	0.030	0.000	0.000	0.000	0.002	0.000	0.005	0.008	0.003	0.006
19 Belmont Avenue, Des Plaines River	0.005	0.030	0.000	0.000	0.000	0.000	0.001	0.006	0.006	0.004	0.005
20 Roosevelt Road, Des Plaines River	0.005	0.030	0.000	0.000	0.000	0.000	0.000	0.005	0.006	0.003	0.006
22 Ogden Avenue, Des Plaines River	0.006	0.030	0.000	0.000	0.000	0.002	0.001	0.008	0.007	0.005	0.010
23 Willow Springs Road, Des Plaines River	0.006	0.030	0.000	0.000	0.000	0.000	0.001	0.006	0.005	0.003	0.005
29 Stephen Street, Des Plaines River	0.005	0.030	0.000	0.000	0.000	0.000	0.001	0.006	0.006	0.002	0.006
91 Material Service Road, Des Plaines River	0.006	0.030	0.008	0.000	0.000	0.000	0.000	0.006	0.006	0.003	0.003

ND = No Data.

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 AND DOWNSTREAM LOCATIONS OF THE TERRENCE J. O'BRIEN WATER RECLAMATION PLANT IN 2012

Parameter (Unit)	¹ Significance Probabilities for Testing Null Hypothesis (H_0)					
	H_0 :Normal U ²	H_0 :Normal D ³	$H_0 : \sigma_u = \sigma_d$ 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
DO (mg/L)	1.000	0.665	0.003	...	0.177	...
Temp (°C)	0.999	0.997	0.470	0.351	...	...
pH	0.984	0.985	0.001	...	0.118	...
Alk (mg/L)	0.993	0.596	0.191	0.674	...	...
Cl (mg/L)	1.000	0.212	0.543	0.819	...	...
Turb (NTU)	-	-	-	-	-	-
TKN (mg/L)	0.491	0.096	0.061	0.065	...	...
NH ₄ -N (mg/L)	0.491	0.259	0.000	...	0.007	...
NH ₃ -N (mg/L)	0.999	0.094	0.043	...	0.496	...
ORG-N (mg/L)	0.565	0.982	0.526	0.958	...	...
NO ₂ + NO ₃ (mg/L)	1.000	0.997	0.000	0.000	...	...
TS (mg/L)	1.000	0.654	0.074	0.674	...	...
TSS (mg/L)	1.000	0.964	0.428	0.036	...	...
VSS (mg/L)	0.598	0.117	0.006	...	0.527	...
TDS (mg/L)	1.000	0.633	0.073	0.694	...	...
Phenol (µg/L)	-	-	-	-	-	-
SO ₄ (mg/L)	1.000	0.914	0.000	...	0.651	...
FOG (mg/L)	-	-	-	-	-	-
TP (mg/L)	0.491	0.722	0.006	0.000	...	...
CN (mg/L)	-	-	-	-	-	-
WAD-CN (mg/L)	0.491	0.045	0.012	...	...	1.000
F (mg/L)	0.988	0.905	0.219	0.000	...	...
TOC (mg/L)	0.988	0.480	0.069	0.003	...	...
FC (#/100ml)*	1.000	0.152	0.315	0.000	...	...
Ca (mg/L)	1.000	0.674	0.037	...	0.908	...
Mg (mg/L)	0.999	0.642	0.030	...	0.892	...
Hard (mg/L)	1.000	0.832	0.031	...	0.990	...
G. Alpha (pCi/L)	1.000	0.608	0.117	0.428	...	...

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 AND DOWNSTREAM LOCATIONS OF THE TERRENCE J. O'BRIEN WATER RECLAMATION PLANT IN 2012

Parameter (Unit)	¹ Significance Probabilities for Testing Null Hypothesis (H_0)					
	H_0 :Normal U ²	H_0 :Normal D ³	$H_0 : \sigma_u = \sigma_d$ 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
G. Beta (pCi/L)	0.933	1.000	0.330	0.000	...	...
Chlrphl ($\mu\text{g/L}$)	0.871	0.130	0.000	...	0.315	...
Bzn ($\mu\text{g/L}$)	-	-	-	-	-	-
Ebnzn ($\mu\text{g/L}$)	-	-	-	-	-	-
Toln ($\mu\text{g/L}$)	-	-	-	-	-	-
Xyln ($\mu\text{g/L}$)	-	-	-	-	-	-
xylnmp ($\mu\text{g/L}$)	-	-	-	-	-	-
xylno ($\mu\text{g/L}$)	-	-	-	-	-	-
Ag (mg/L)	-	-	-	-	-	-
As (mg/L)	-	-	-	-	-	-
Ba (mg/L)	1.000	0.848	0.074	0.015	...	...
B (mg/L)	0.491	0.837	0.004	0.000	...	...
Cd (mg/L)	-	-	-	-	-	-
Cu (mg/L)	-	-	-	-	-	-
Cr (mg/L)	-	-	-	-	-	-
Cr ⁺⁶ ($\mu\text{g/L}$)	-	-	-	-	-	-
Fe (mg/L)	1.000	0.818	0.470	0.285	...	...
Pb (mg/L)	-	-	-	-	-	-
Ni (mg/L)	-	-	-	-	-	-
Mn (mg/L)	1.000	0.117	0.004	...	0.422	...
Hg ($\mu\text{g/L}$)	-	-	-	-	-	-
Hg- (ng/L)	-	-	-	-	-	-
Zn (mg/L)	-	-	-	-	-	-
Se (mg/L)	1.000	0.055	0.077	0.113	...	...
Sol. Ca (mg/L)	1.000	1.000	0.486	0.006	...	...
Sol. Mg (mg/L)	1.000	1.000	0.235	0.101	...	...
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 AND DOWNSTREAM LOCATIONS OF THE TERENCE J. O'BRIEN WATER RECLAMATION PLANT IN 2012

Parameter (Unit)	¹ Significance Probabilities for Testing Null Hypothesis (H_0)					
	H_0 :Normal U ²	H_0 :Normal D ³	$H_0 : \sigma_u = \sigma_d$ 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)	-	-	-	-	-	-
Sol. Cd (mg/L)	-	-	-	-	-	-
Sol. Cu (mg/L)	-	-	-	-	-	-
Sol. Cr (mg/L)	-	-	-	-	-	-
Sol. Fe (mg/L)	-	-	-	-	-	-
Sol. Pb (mg/L)	-	-	-	-	-	-
Sol. Ni (mg/L)	-	-	-	-	-	-
Sol. Mn (mg/L)	1.000	1.000	0.474	0.183	...	...
Sol. Zn (mg/L)	-	-	-	-	-	-
Sol. Se (mg/L)	-	-	-	-	-	-

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

²Upstream (U).

³Downstream (D).

*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 AND DOWNSTREAM LOCATIONS OF THE STICKNEY WATER RECLAMATION PLANT IN 2012

Parameter (Unit)	¹ Significance Probabilities for Testing Null Hypothesis (H_0)					
	H_0 :Normal U ²	H_0 :Normal D ³	$H_0 : \sigma_u = \sigma_d$ 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
DO (mg/L)	0.982	1.000	0.243	0.135	...	...
Temp (°C)	0.991	0.967	0.361	0.862	...	...
pH	1.000	1.000	0.029	...	0.140	...
Alk (mg/L)	0.825	0.999	0.318	0.402	...	...
Cl (mg/L)	0.736	0.796	0.167	0.932	...	...
Turb (NTU)	0.999	1.000	0.368	0.299	...	...
TKN (mg/L)	0.272	0.268	0.008	...	0.499	...
NH ₄ -N (mg/L)	0.291	0.317	0.002	...	0.079	...
NH ₃ -N (mg/L)	0.976	0.825	0.398	0.945	...	...
ORG-N (mg/L)	0.977	0.897	0.421	0.265	...	...
NO ₂ + NO ₃ (mg/L)	0.997	0.979	0.443	0.069	...	...
TS (mg/L)	0.891	0.900	0.130	0.765	...	...
TSS (mg/L)	0.719	0.696	0.100	0.101	...	...
VSS (mg/L)	0.077	0.283	0.174	0.358	...	...
TDS (mg/L)	0.901	0.924	0.134	0.728	...	...
Phenol (µg/L)	-	-	-	-	-	-
SO ₄ (mg/L)	1.000	0.991	0.304	0.042	...	...
FOG (mg/L)	-	-	-	-	-	-
TP (mg/L)	1.000	0.974	0.415	0.443	...	...
CN (mg/L)	-	-	-	-	-	-
WAD-CN (mg/L)	0.030	0.006	0.076	...	...	0.304
F (mg/L)	0.991	0.987	0.097	0.193	...	...
TOC (mg/L)	0.675	0.483	0.409	0.076	...	...
FC (#/100ml)*	0.962	1.000	0.194	0.000	...	...
Ca (mg/L)	0.979	0.972	0.286	0.703	...	...
Mg (mg/L)	0.927	0.969	0.298	0.938	...	...
Hard (mg/L)	0.961	0.919	0.289	0.797	...	...
G. Alpha (pCi/L)	0.521	0.747	0.482	0.479	...	...

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 AND DOWNSTREAM LOCATIONS OF THE STICKNEY WATER RECLAMATION PLANT IN 2012

Parameter (Unit)	¹ Significance Probabilities for Testing Null Hypothesis (H_0)					
	H_0 :Normal U ²	H_0 :Normal D ³	$H_0 : \sigma_u = \sigma_d$ 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
G. Beta (pCi/L)	1.000	0.851	0.400	0.036	...	...
Chlrphl (μ g/L)	0.952	0.618	0.402	0.579	...	...
Bzn (μ g/L)	-	-	-	-	-	-
Ebnzn (μ g/L)	-	-	-	-	-	-
Toln (μ g/L)	-	-	-	-	-	-
Xyln (μ g/L)	-	-	-	-	-	-
xylnmp (μ g/L)	-	-	-	-	-	-
xyln (μ g/L)	-	-	-	-	-	-
Ag (mg/L)	-	-	-	-	-	-
As (mg/L)	-	-	-	-	-	-
Ba (mg/L)	0.962	0.976	0.440	0.063	...	...
B (mg/L)	0.296	1.000	0.497	0.025	...	...
Cd (mg/L)	-	-	-	-	-	-
Cu (mg/L)	1.000	1.000	0.346	0.337	...	...
Cr (mg/L)	-	-	-	-	-	-
Cr ⁺⁶ (μ g/L)	-	-	-	-	-	-
Fe (mg/L)	1.000	1.000	0.464	0.088	...	...
Pb (mg/L)	-	-	-	-	-	-
Ni (mg/L)	1.000	1.000	0.072	0.311	...	...
Mn (mg/L)	0.079	0.959	0.000	...	0.185	...
Hg (μ g/L)	-	-	-	-	-	-
Hg- (ng/L)	-	-	-	-	-	-
Zn (mg/L)	1.000	0.818	0.013	...	0.318	...
Se (mg/L)	0.016	0.006	0.009	...	...	0.546
Sol. Ca (mg/L)	1.000	1.000	0.368	0.492	...	...
Sol. Mg (mg/L)	0.999	1.000	0.434	0.372	...	...
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 AND DOWNSTREAM LOCATIONS OF THE STICKNEY WATER RECLAMATION PLANT IN 2012

Parameter (Unit)	¹ Significance Probabilities for Testing Null Hypothesis (H_0)					
	H_0 :Normal U ²	H_0 :Normal D ³	$H_0 : \sigma_u = \sigma_d$ 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)	1.000	1.000	0.265	0.129	...	...
Sol. B (mg/L)	1.000	0.999	0.206	0.227	...	...
Sol. Cd (mg/L)	-	-	-	-	-	-
Sol. Cu (mg/L)	-	-	-	-	-	-
Sol. Cr (mg/L)	-	-	-	-	-	-
Sol. Fe (mg/L)	-	-	-	-	-	-
Sol. Pb (mg/L)	-	-	-	-	-	-
Sol. Ni (mg/L)	0.037	0.307	0.337	...	...	0.123
Sol. Mn (mg/L)	0.948	1.000	0.070	0.275	...	...
Sol. Zn (mg/L)	0.603	0.609	0.304	0.414	...	...
Sol. Se (mg/L)	1.000	0.818	0.472	0.730	...	...

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

²Upstream (U).

³Downstream (D).

*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 AND DOWNSTREAM LOCATIONS OF THE CALUMET WATER RECLAMATION PLANT IN 2012

Parameter (Unit)	¹ Significance Probabilities for Testing Null Hypothesis (H_0)					
	H_0 :Normal U ²	H_0 :Normal D ³	$H_0 : \sigma_u = \sigma_d$ 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
DO (mg/L)	1.000	1.000	0.002	...	0.284	...
Temp (°C)	1.000	0.979	0.318	0.697	...	...
pH	0.996	0.999	0.061	0.725	...	...
Alk (mg/L)	1.000	0.983	0.258	0.023	...	...
Cl (mg/L)	0.785	0.880	0.223	0.194	...	...
Turb (NTU)	1.000	0.999	0.345	0.049	...	...
TKN (mg/L)	-	-	-	-	-	-
NH ₄ -N (mg/L)	0.334	0.999	0.482	0.074	...	...
NH ₃ -N (mg/L)	0.978	0.485	0.094	0.197	...	...
ORG-N (mg/L)	0.334	0.549	0.015	...	0.646	...
NO ₂ + NO ₃ (mg/L)	0.772	0.665	0.031	...	...	0.002
TS (mg/L)	0.953	0.973	0.079	0.387	...	...
TSS (mg/L)	0.784	0.757	0.021	...	0.403	...
VSS (mg/L)	0.101	0.856	0.151	0.664	...	...
TDS (mg/L)	0.951	0.988	0.089	0.379	...	...
Phenol (µg/L)	-	-	-	-	-	-
SO ₄ (mg/L)	0.996	0.990	0.118	0.037	...	...
FOG (mg/L)	-	-	-	-	-	-
TP (mg/L)	0.508	1.000	0.405	0.000	...	...
CN (mg/L)	-	-	-	-	-	-
WAD-CN (mg/L)	0.022	0.124	0.088	...	...	0.015
F (mg/L)	0.999	0.734	0.491	0.000	...	...
TOC (mg/L)	0.995	0.928	0.217	0.003	...	...
FC (#/100ml)*	1.000	0.726	0.452	0.014	...	...
Ca (mg/L)	0.999	0.992	0.348	0.023	...	...
Mg (mg/L)	0.934	0.869	0.365	0.045	...	...
Hard (mg/L)	0.994	0.967	0.352	0.030	...	...
G. Alpha (pCi/L)	1.000	0.907	0.445	0.250	...	...

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 AND DOWNSTREAM LOCATIONS OF THE CALUMET WATER RECLAMATION PLANT IN 2012

Parameter (Unit)	¹ Significance Probabilities for Testing Null Hypothesis (H_0)					
	H_0 :Normal U ²	H_0 :Normal D ³	$H_0 : \sigma_u = \sigma_d$ 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
G. Beta (pCi/L)	0.714	0.999	0.465	0.183	...	...
Chlrphl (μ g/L)	0.626	0.751	0.356	0.681	...	...
Bzn (μ g/L)	-	-	-	-	-	-
Ebnzn (μ g/L)	-	-	-	-	-	-
Toln (μ g/L)	-	-	-	-	-	-
Xyln (μ g/L)	-	-	-	-	-	-
xylnmp (μ g/L)	-	-	-	-	-	-
xyln (μ g/L)	-	-	-	-	-	-
Ag (mg/L)	0.022	0.025	0.236	...	...	0.642
As (mg/L)	-	-	-	-	-	-
Ba (mg/L)	0.971	0.993	0.114	0.001	...	...
B (mg/L)	1.000	1.000	0.131	0.041	...	...
Cd (mg/L)	-	-	-	-	-	-
Cu (mg/L)	-	-	-	-	-	-
Cr (mg/L)	-	-	-	-	-	-
Cr ⁺⁶ (μ g/L)	-	-	-	-	-	-
Fe (mg/L)	0.999	1.000	0.350	0.576	...	...
Pb (mg/L)	-	-	-	-	-	-
Ni (mg/L)	-	-	-	-	-	-
Mn (mg/L)	1.000	0.296	0.000	...	0.124	...
Hg (μ g/L)	-	-	-	-	-	-
Hg- (ng/L)	-	-	-	-	-	-
Zn (mg/L)	0.999	1.000	0.278	0.075	...	...
Se (mg/L)	0.057	0.101	0.133	0.775	...	...
Sol. Ca (mg/L)	1.000	1.000	0.223	0.013	...	...
Sol. Mg (mg/L)	0.999	1.000	0.180	0.012	...	...
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 AND DOWNSTREAM LOCATIONS OF THE CALUMET WATER RECLAMATION PLANT IN 2012

Parameter (Unit)	¹ Significance Probabilities for Testing Null Hypothesis (H ₀)					
	H ₀ :Normal U ²	H ₀ :Normal D ³	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)	1.000	1.000	0.339	0.013	...	...
Sol. B (mg/L)	1.000	0.973	0.481	0.799	...	...
Sol. Cd (mg/L)	-	-	-	-	-	-
Sol. Cu (mg/L)	-	-	-	-	-	-
Sol. Cr (mg/L)	-	-	-	-	-	-
Sol. Fe (mg/L)	-	-	-	-	-	-
Sol. Pb (mg/L)	-	-	-	-	-	-
Sol. Ni (mg/L)	-	-	-	-	-	-
Sol. Mn (mg/L)	1.000	1.000	0.248	0.227	...	...
Sol. Zn (mg/L)	0.048	0.863	0.027	...	...	0.036
Sol. Se (mg/L)	-	-	-	-	-	-

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

²Upstream (U).

³Downstream (D).

*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 AND DOWNSTREAM LOCATIONS OF THE JOHN E. EGAN WATER RECLAMATION PLANT IN 2012

Parameter (Unit)	¹ Significance Probabilities for Testing Null Hypothesis (H_0)					
	H_0 :Normal U ²	H_0 :Normal D ³	$H_0 : \sigma_u = \sigma_d$ 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
DO (mg/L)	0.989	1.000	0.190	0.609	...	...
Temp (°C)	0.999	0.998	0.487	0.683	...	...
pH	0.953	0.996	0.333	0.764	...	...
Alk (mg/L)	0.998	0.903	0.134	0.733	...	...
Cl (mg/L)	0.858	0.995	0.136	0.130	...	...
Turb (NTU)	1.000	1.000	0.299	0.134	...	...
TKN (mg/L)	-	-	-	-	-	-
NH ₄ -N (mg/L)	0.030	0.312	0.120	...	...	0.574
NH ₃ -N (mg/L)	0.847	0.997	0.452	0.943	...	...
ORG-N (mg/L)	0.030	0.432	0.000	...	...	0.276
NO ₂ + NO ₃ (mg/L)	0.086	0.995	0.000	...	0.006	...
TS (mg/L)	0.880	0.989	0.326	0.371	...	...
TSS (mg/L)	0.821	0.999	0.010	...	0.073	...
VSS (mg/L)	0.327	1.000	0.040	...	0.129	...
TDS (mg/L)	0.813	0.981	0.332	0.398	...	...
Phenol (µg/L)	-	-	-	-	-	-
SO ₄ (mg/L)	0.987	0.990	0.002	...	0.012	...
FOG (mg/L)	-	-	-	-	-	-
TP (mg/L)	0.057	0.862	0.000	...	0.056	...
CN (mg/L)	0.012	0.321	0.034	...	...	0.295
WAD-CN (mg/L)	0.030	0.817	0.063	...	...	0.301
F (mg/L)	0.248	0.913	0.000	...	0.047	...
TOC (mg/L)	0.989	0.985	0.189	0.148	...	...
FC (#/100ml)*	0.683	0.998	0.368	0.011	...	...
Ca (mg/L)	0.670	1.000	0.064	0.158	...	...
Mg (mg/L)	0.794	1.000	0.099	0.548	...	...
Hard (mg/L)	0.723	1.000	0.077	0.260	...	...
G. Alpha (pCi/L)	0.989	1.000	0.300	0.700	...	...

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 AND DOWNSTREAM LOCATIONS OF THE JOHN E. EGAN WATER RECLAMATION PLANT IN 2012

Parameter (Unit)	¹ Significance Probabilities for Testing Null Hypothesis (H_0)					
	H_0 :Normal U ²	H_0 :Normal D ³	$H_0 : \sigma_u = \sigma_d$ 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
G. Beta (pCi/L)	0.967	0.817	0.000	...	0.021	...
Chlrphl (μ g/L)	0.830	0.755	0.008	...	0.074	...
Bzn (μ g/L)	-	-	-	-	-	-
Ebnzn (μ g/L)	-	-	-	-	-	-
Toln (μ g/L)	-	-	-	-	-	-
Xyln (μ g/L)	-	-	-	-	-	-
xylnmp (μ g/L)	-	-	-	-	-	-
xyln (μ g/L)	-	-	-	-	-	-
Ag (mg/L)	0.057	0.604	0.336	0.523	...	...
As (mg/L)	-	-	-	-	-	-
Ba (mg/L)	0.997	1.000	0.458	0.261	...	...
B (mg/L)	0.999	1.000	0.000	...	0.013	...
Cd (mg/L)	-	-	-	-	-	-
Cu (mg/L)	-	-	-	-	-	-
Cr (mg/L)	-	-	-	-	-	-
Cr ⁺⁶ (μ g/L)	-	-	-	-	-	-
Fe (mg/L)	1.000	1.000	0.011	...	0.153	...
Pb (mg/L)	-	-	-	-	-	-
Ni (mg/L)	-	-	-	-	-	-
Mn (mg/L)	1.000	1.000	0.017	...	0.078	...
Hg (μ g/L)	-	-	-	-	-	-
Hg- (ng/L)	0.730	0.604	0.123	0.050	...	...
Zn (mg/L)	-	-	-	-	-	-
Se (mg/L)	0.074	0.145	0.071	0.880	...	...
Sol. Ca (mg/L)	1.000	1.000	0.389	0.072	...	...
Sol. Mg (mg/L)	1.000	0.988	0.441	0.018	...	...
Sol. Ag (mg/L)	0.057	0.604	0.336	0.229	...	...
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 AND DOWNSTREAM LOCATIONS OF THE JOHN E. EGAN WATER RECLAMATION PLANT IN 2012

Parameter (Unit)	¹ Significance Probabilities for Testing Null Hypothesis (H_0)					
	H_0 :Normal U ²	H_0 :Normal D ³	$H_0 : \sigma_u = \sigma_d$ 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)	1.000	1.000	0.019	...	0.049	...
Sol. B (mg/L)	1.000	1.000	0.056	0.017	...	...
Sol. Cd (mg/L)	-	-	-	-	-	-
Sol. Cu (mg/L)	-	-	-	-	-	-
Sol. Cr (mg/L)	-	-	-	-	-	-
Sol. Fe (mg/L)	-	-	-	-	-	-
Sol. Pb (mg/L)	-	-	-	-	-	-
Sol. Ni (mg/L)	0.012	0.431	0.000	...	...	0.105
Sol. Mn (mg/L)	1.000	1.000	0.175	0.033	...	...
Sol. Zn (mg/L)	-	-	-	-	-	-
Sol. Se (mg/L)	-	-	-	-	-	-

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

²Upstream (U).

³Downstream (D).

*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 AND DOWNSTREAM LOCATIONS OF THE JAMES C. KIRIE WATER RECLAMATION PLANT IN 2012

Parameter (Unit)	¹ Significance Probabilities for Testing Null Hypothesis (H_0)					
	H_0 :Normal U ²	H_0 :Normal D ³	$H_0 : \sigma_u = \sigma_d$ 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
DO (mg/L)	0.998	0.996	0.252	0.828	...	...
Temp (°C)	1.000	0.999	0.230	0.477	...	...
pH	1.000	0.688	0.067	0.429	...	...
Alk (mg/L)	0.999	1.000	0.277	0.829	...	...
Cl (mg/L)	0.999	0.907	0.002	...	0.162	...
Turb (NTU)	1.000	0.999	0.134	0.053	...	...
TKN (mg/L)	0.078	0.057	0.237	0.464	...	...
NH ₄ -N (mg/L)	0.822	0.836	0.098	0.341	...	...
NH ₃ -N (mg/L)	0.612	0.665	0.339	0.503	...	...
ORG-N (mg/L)	0.415	0.587	0.266	0.803	...	...
NO ₂ + NO ₃ (mg/L)	0.628	1.000	0.000	0.000	...	...
TS (mg/L)	0.999	0.993	0.089	0.241	...	...
TSS (mg/L)	0.910	0.051	0.019	...	0.014	...
VSS (mg/L)	0.873	0.498	0.152	0.009	...	...
TDS (mg/L)	1.000	0.995	0.094	0.335	...	...
Phenol (µg/L)	-	-	-	-	-	-
SO ₄ (mg/L)	1.000	0.597	0.292	0.003	...	...
FOG (mg/L)	-	-	-	-	-	-
TP (mg/L)	0.536	0.984	0.000	0.001	...	...
CN (mg/L)	0.078	0.012	0.008	...	...	0.816
WAD-CN (mg/L)	0.355	0.057	0.371	0.658	...	...
F (mg/L)	0.938	1.000	0.012	0.000	...	...
TOC (mg/L)	0.633	0.860	0.108	0.751	...	...
FC (#/100ml)*	0.787	1.000	0.428	0.820	...	...
Ca (mg/L)	1.000	0.949	0.189	0.646	...	...
Mg (mg/L)	0.999	0.995	0.242	0.495	...	...
Hard (mg/L)	1.000	0.977	0.210	0.583	...	...
G. Alpha (pCi/L)	1.000	0.437	0.312	0.667	...	...

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 AND DOWNSTREAM LOCATIONS OF THE JAMES C. KIRIE WATER RECLAMATION PLANT IN 2012

Parameter (Unit)	¹ Significance Probabilities for Testing Null Hypothesis (H_0)					
	H_0 :Normal U ²	H_0 :Normal D ³	$H_0 : \sigma_u = \sigma_d$ 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
G. Beta (pCi/L)	0.973	0.401	0.001	...	0.002	...
Chlrphl ($\mu\text{g/L}$)	0.969	0.467	0.000	...	0.009	...
Bzn ($\mu\text{g/L}$)	-	-	-	-	-	-
Ebnzn ($\mu\text{g/L}$)	-	-	-	-	-	-
Toln ($\mu\text{g/L}$)	-	-	-	-	-	-
Xyln ($\mu\text{g/L}$)	-	-	-	-	-	-
xylnmp ($\mu\text{g/L}$)	-	-	-	-	-	-
xylno ($\mu\text{g/L}$)	-	-	-	-	-	-
Ag (mg/L)	0.355	0.124	0.455	0.962	...	...
As (mg/L)	-	-	-	-	-	-
Ba (mg/L)	0.948	0.988	0.033	...	...	0.001
B (mg/L)	0.986	0.994	0.442	0.000	...	...
Cd (mg/L)	-	-	-	-	-	-
Cu (mg/L)	-	-	-	-	-	-
Cr (mg/L)	-	-	-	-	-	-
Cr ⁺⁶ ($\mu\text{g/L}$)	-	-	-	-	-	-
Fe (mg/L)	1.000	1.000	0.441	0.007	...	...
Pb (mg/L)	-	-	-	-	-	-
Ni (mg/L)	-	-	-	-	-	-
Mn (mg/L)	0.897	0.999	0.000	...	0.025	...
Hg ($\mu\text{g/L}$)	-	-	-	-	-	-
Hg- (ng/L)	0.931	0.725	0.193	0.827	...	...
Zn (mg/L)	-	-	-	-	-	-
Se (mg/L)	0.230	0.074	0.276	0.698	...	...
Sol. Ca (mg/L)	0.999	1.000	0.463	0.859	...	...
Sol. Mg (mg/L)	1.000	1.000	0.398	0.663	...	...
Sol. Ag (mg/L)	0.355	0.124	0.455	0.962	...	...
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 AND DOWNSTREAM LOCATIONS OF THE JAMES C. KIRIE WATER RECLAMATION PLANT IN 2012

Parameter (Unit)	¹ Significance Probabilities for Testing Null Hypothesis (H_0)					
	H_0 :Normal U ²	H_0 :Normal D ³	$H_0 : \sigma_u = \sigma_d$ 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)	1.000	0.999	0.133	0.001	...	...
Sol. B (mg/L)	1.000	1.000	0.055	0.173	...	...
Sol. Cd (mg/L)	-	-	-	-	-	-
Sol. Cu (mg/L)	-	-	-	-	-	-
Sol. Cr (mg/L)	-	-	-	-	-	-
Sol. Fe (mg/L)	-	-	-	-	-	-
Sol. Pb (mg/L)	-	-	-	-	-	-
Sol. Ni (mg/L)	0.078	0.917	0.000	...	0.014	...
Sol. Mn (mg/L)	1.000	1.000	0.284	0.005	...	...
Sol. Zn (mg/L)	0.078	0.933	0.002	0.000	...	...
Sol. Se (mg/L)	0.999	0.818	0.017	...	0.503	...

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

²Upstream (U).

³Downstream (D).

*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-6: SIGNIFICANCE PROBABILITIES DUE TO OR ASSOCIATED WITH TESTING FOR EQUALITY OF MEAN CONCENTRATIONS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM AND DOWNSTREAM LOCATIONS OF THE HANOVER PARK WATER RECLAMATION PLANT IN 2012

Parameter (Unit)	¹ Significance Probabilities for Testing Null Hypothesis (H_0)					
	H_0 :Normal U ²	H_0 :Normal D ³	$H_0 : \sigma_u = \sigma_d$ 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
DO (mg/L)	0.651	1.000	0.003	...	0.037	...
Temp (°C)	1.000	1.000	0.304	0.916	...	...
pH	0.975	1.000	0.402	0.220	...	...
Alk (mg/L)	0.999	1.000	0.275	0.228	...	...
Cl (mg/L)	0.988	1.000	0.023	...	0.002	...
Turb (NTU)	1.000	1.000	0.082	0.883	...	...
TKN (mg/L)	0.283	0.971	0.063	0.537	...	...
NH ₄ -N (mg/L)	0.271	0.145	0.000	...	0.104	...
NH ₃ -N (mg/L)	0.435	0.971	0.000	...	0.146	...
ORG-N (mg/L)	1.000	0.980	0.099	0.092	...	...
NO ₂ + NO ₃ (mg/L)	0.884	0.946	0.000	0.000	...	...
TS (mg/L)	0.999	1.000	0.185	0.049	...	...
TSS (mg/L)	0.886	0.982	0.011	...	0.481	...
VSS (mg/L)	0.219	1.000	0.046	...	0.709	...
TDS (mg/L)	1.000	1.000	0.201	0.052	...	...
Phenol (µg/L)	-	-	-	-	-	-
SO ₄ (mg/L)	0.919	0.981	0.000	...	0.747	...
FOG (mg/L)	-	-	-	-	-	-
TP (mg/L)	0.614	1.000	0.000	...	0.002	...
CN (mg/L)	0.012	0.145	0.006	...	...	0.740
WAD-CN (mg/L)	0.025	0.968	0.013	...	...	0.073
F (mg/L)	0.904	1.000	0.060	0.004	...	...
TOC (mg/L)	1.000	0.704	0.002	...	0.001	...
FC (#/100ml)*	1.000	0.992	0.315	0.132	...	...
Ca (mg/L)	0.903	1.000	0.072	0.486	...	...
Mg (mg/L)	0.911	1.000	0.123	0.897	...	...
Hard (mg/L)	0.848	1.000	0.091	0.640	...	...
G. Alpha (pCi/L)	1.000	0.947	0.011	...	0.076	...

TABLE AIII-6 (Continued): SIGNIFICANCE PROBABILITIES DUE TO OR ASSOCIATED WITH TESTING FOR EQUALITY OF MEAN CONCENTRATIONS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM AND DOWNSTREAM LOCATIONS OF THE HANOVER PARK WATER RECLAMATION PLANT IN 2012

Parameter (Unit)	¹ Significance Probabilities for Testing Null Hypothesis (H_0)					
	H_0 :Normal U ²	H_0 :Normal D ³	$H_0 : \sigma_u = \sigma_d$ 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
G. Beta (pCi/L)	0.789	1.000	0.343	0.005	...	...
Chlrphl ($\mu\text{g/L}$)	0.627	0.746	0.000	...	0.045	...
Bzn ($\mu\text{g/L}$)	-	-	-	-	-	-
Ebnzn ($\mu\text{g/L}$)	-	-	-	-	-	-
Toln ($\mu\text{g/L}$)	-	-	-	-	-	-
Xyln ($\mu\text{g/L}$)	-	-	-	-	-	-
xylnmp ($\mu\text{g/L}$)	-	-	-	-	-	-
xylno ($\mu\text{g/L}$)	-	-	-	-	-	-
Ag (mg/L)	0.057	0.312	0.429	0.956	...	...
As (mg/L)	-	-	-	-	-	-
Ba (mg/L)	0.882	0.943	0.080	0.004	...	...
B (mg/L)	0.882	0.884	0.001	...	...	0.001
Cd (mg/L)	-	-	-	-	-	-
Cu (mg/L)	0.999	1.000	0.026	...	0.231	...
Cr (mg/L)	0.999	0.818	0.290	0.751	...	...
Cr ⁺⁶ ($\mu\text{g/L}$)	-	-	-	-	-	-
Fe (mg/L)	1.000	0.818	0.122	0.004	...	...
Pb (mg/L)	-	-	-	-	-	-
Ni (mg/L)	-	-	-	-	-	-
Mn (mg/L)	0.606	0.919	0.010	...	0.001	...
Hg ($\mu\text{g/L}$)	-	-	-	-	-	-
Hg- (ng/L)	0.804	1.000	0.183	0.893	...	...
Zn (mg/L)	1.000	1.000	0.164	0.542	...	...
Se (mg/L)	-	-	-	-	-	-
Sol. Ca (mg/L)	1.000	1.000	0.040	...	0.217	...
Sol. Mg (mg/L)	1.000	1.000	0.042	...	0.303	...
Sol. Ag (mg/L)	0.328	0.604	0.278	0.708	...	...
Sol. As (mg/L)	-	-	-	-	-	-

TABLE AIII-6 (Continued): SIGNIFICANCE PROBABILITIES DUE TO OR ASSOCIATED WITH TESTING FOR EQUALITY OF MEAN CONCENTRATIONS OF 67 WATER QUALITY PARAMETERS ASSAYED AT UPSTREAM AND DOWNSTREAM LOCATIONS OF THE HANOVER PARK WATER RECLAMATION PLANT IN 2012

Parameter (Unit)	¹ Significance Probabilities for Testing Null Hypothesis (H_0)					
	H_0 :Normal U ²	H_0 :Normal D ³	$H_0 : \sigma_u = \sigma_d$ 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)	1.000	1.000	0.179	0.064	...	...
Sol. B (mg/L)	0.999	1.000	0.028	...	0.003	...
Sol. Cd (mg/L)	-	-	-	-	-	-
Sol. Cu (mg/L)	-	-	-	-	-	-
Sol. Cr (mg/L)	-	-	-	-	-	-
Sol. Fe (mg/L)	-	-	-	-	-	-
Sol. Pb (mg/L)	-	-	-	-	-	-
Sol. Ni (mg/L)	0.012	0.145	0.000	...	...	0.740
Sol. Mn (mg/L)	1.000	1.000	0.268	0.005	...	...
Sol. Zn (mg/L)	0.012	0.819	0.468	0.001	...	...
Sol. Se (mg/L)	1.000	0.818	0.142	0.243	...	...

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

²Upstream (U).

³Downstream (D).

*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.