

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
WATER QUALITY STANDARDS AND)
EFFLUENT LIMITATIONS FOR THE) R08-9
CHICAGO AREA WATERWAY SYSTEM) (Rulemaking - Water)
AND THE LOWER DES PLAINES RIVER:)
PROPOSED AMENDMENTS TO 35 Ill.)
Adm. Code Parts 301, 302, 303 and 304)

PRE-FILED TESTIMONY OF SAMUEL G. DENNISON ON BEHALF OF THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO CONCERNING DISSOLVED OXYGEN (DO) STANDARDS PROPOSED FOR PROTECTING AQUATIC LIFE IN THE DESIGNATED AQUATIC LIFE USE A WATERS AND AQUATIC LIFE USE B WATERS OF THE CHICAGO AREA WATERWAY SYSTEM

My name is Samuel G. Dennison. I am a Biologist IV in the Environmental Monitoring and Research Division of the Research and Development Department of the Metropolitan Water Reclamation District of Greater Chicago (District). I received a Bachelor of Arts degree with a major in Biology from Saint Mary's University in Winona, Minnesota, a Master of Science degree in Fisheries Biology from Iowa State University in Ames, Iowa, and a Doctor of Philosophy degree in Biology from the Illinois Institute of Technology in Chicago, Illinois. I am a Certified Fisheries Professional with the American Fisheries Society and also a Past President of the Illinois Chapter of the American Fisheries Society.

I have been employed by the District since 1971. My primary responsibility from 1974 through 2003 was monitoring the fish populations in Chicago area waterways. Since 2003, I have served as Head of the Aquatic Ecology and Water Quality Section within the Environmental Monitoring and Research Division, where I supervise a staff of ten persons. As Section Head I have had the responsibility of continuing the District's Continuous Dissolved Oxygen Monitoring Program that was initiated in August 1998.

My testimony today will discuss the District's continuous DO monitoring program and demonstrate that the various waters in the Chicago Area Waterway System do not always meet the proposed DO standards.

Over the years, increased pollutant loading from urbanization throughout the Chicago metropolitan area and low stream velocities in Chicago area deep-draft waterways have caused dissolved oxygen (DO) concentrations to fall below DO standards established by the Illinois Pollution Control Board (IPCB). More than 30 years ago, the Metropolitan Water Reclamation District of Greater Chicago (District) determined that applicable IPCB DO standards for Chicago area waterways could not be met exclusively by advanced wastewater treatment at its three major regional water reclamation plants (WRPs), Calumet, North Side, and Stickney, and by the capture and treatment of combined sewer overflows (CSOs). In order to increase the DO concentration in the Chicago and Calumet River Systems, the District designed and constructed artificial aeration systems (instream diffuser and sidestream elevated pool aeration [SEPA] stations) during the late 1970s and early 1990s, respectively.

Currently there are 19 continuous DO monitoring stations in the deep-draft waterways of the Chicago River System, Des Plaines River System, and Calumet River. These monitoring stations are shown in Figure 1 of Attachment 1.

The continuous water quality monitors used to collect these data were manufactured by YSI Incorporated (YSI) of Yellow Springs, Ohio. DO was measured hourly using the YSI Model 6920 or Model 6600 monitor. In order to protect and safeguard the monitors from marine navigation and vandalism, the monitors were deployed in the field in stainless steel pipes. Two different installation designs were employed: (1) a 3-foot length of 8-inch diameter stainless steel pipe secured to shore by means of a chain, was positioned on the bottom of the waterway and

oriented downstream such that the water passed through the pipe, and (2) a fixed length of 8-inch diameter stainless steel pipe, with multiple 2-inch circular openings, was vertically mounted on the side of a bridge abutment.

Servicing the monitors followed a weekly schedule. District Industrial Waste Division personnel retrieved each monitor from the field following seven days of continuous monitoring. Prior to retrieval, a water sample for chemical DO analysis using the Winkler titration method was collected next to the protective housing. An additional monitor, that had been previously calibrated and serviced in the laboratory, was then deployed to replace the retrieved monitor. The retrieved monitors were returned to the laboratory for data downloading, exterior cleaning, servicing, and calibration of the DO sensors. The monitors were temporarily stored in holding tanks containing tap water for subsequent deployment during the following week.

Hourly DO data were directly exported electronically from individual monitors to a specially designed Microsoft Access[®] computer database for data processing and storage. Following data downloading, the weekly DO data were carefully reviewed for accuracy, using a method outlined in ATTACHMENT 1. After careful review of the DO data, weekly summary statistics (mean, minimum, maximum, and percent observations above DO standard) and individual line drawings for each monitoring station showing hourly DO concentrations were prepared. (Program description from Polls, 2002).

Results from the Continuous Dissolved Oxygen Monitoring Program show that many waterways in the CAWS do not comply with the DO standards proposed by IEPA. Table 1 in ATTACHMENT 2 was generated comparing District DO data from January, 2005 through December, 2007 to the proposed Aquatic Life Use A DO standard. Continuous DO monitors at six stations throughout the Calumet River System indicated limited compliance with the 5.0

mg/L proposed seasonal standard. Continuous DO monitors at Route 83 on the Calumet-Sag Channel show that the annual compliance with the 5.0 mg/L seasonal standard would have been as low as 63.8 percent in 2005. At Torrence Avenue on the Grand Calumet River, annual compliance with the proposed 5.0 mg/L DO standard would have ranged between 47.7-62.0 percent between 2005-2007.

In the North Branch of the Chicago River at Fullerton Avenue, compliance with the Aquatic Life Use A seasonal DO standard of 5.0 mg/L would have only been 65 percent during 2005, which was a very dry year.

Table 2 in ATTACHMENT 2 indicates annual compliance with the proposed 7-day mean of daily minima DO standard of 4.0 mg/L was as low as 17.3 percent at 36th Street in Bubbly Creek during 2006. Annual compliance with this proposed DO standard in the Chicago Sanitary and Ship Canal ranged from 73.0-87.2 percent at Cicero Avenue, and 68.0-72.3 percent at Lockport Powerhouse during 2005-2007.

During wet weather, the DO in the waterways can be severely impacted and elicit DO concentrations of less than 3 mg/L. ATTACHMENT 3 shows DO at various stations in the Chicago Area Waterway System during an example rain event in August, 2006. The effect on DO in the CAWS from combined sewer overflows and especially District pumping stations can last for days following a storm event. Comparing the DO graphs in ATTACHMENT 3 helps to illustrate that CSOs do not impact all of the CAWS at the same time or in the same manner following rain events. This may explain why there are not frequent fish kills throughout the system, since fish are likely to practice avoidance of the low DO segments.

With the severe aquatic habitat limitations of the Chicago Area Waterway System, requiring an enhanced seasonal 5.0 mg/L minimum DO standard in the Chicago Area Waterway

System will merely increase the District's energy consumption and involve construction of many additional aeration systems without substantially increasing the likelihood that fish populations will become any more self sustaining than they are now.

Respectfully submitted,

Samuel G. Dennison

By: Samuel G. Dennison

Testimony Attachments

1. R&D Report No. 07-25. 2007 DO report
2. Summary Compliance with proposed DO Standard
3. Wet weather DO recovery graphs for the CAWS

References

Polls, Irwin. 2002. Continuous Dissolved Oxygen Monitoring from Wilmette to Lockport in the Chicago Waterway System During August 1998 through July 2000. District R&D Report No. 02-11.

Attachment 1

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

**RESEARCH AND DEVELOPMENT
DEPARTMENT**

REPORT NO. 07-25

*CONTINUOUS DISSOLVED OXYGEN MONITORING
IN THE DEEP-DRAFT CHICAGO WATERWAY SYSTEM
DURING 2006*

May 2007

Metropolitan Water Reclamation District of Greater Chicago
100 East Erie Street Chicago, Illinois 60611-2803 312-751-5600

**CONTINUOUS DISSOLVED OXYGEN MONITORING
IN THE DEEP-DRAFT CHICAGO WATERWAY SYSTEM
DURING 2006**

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Particular thanks are due to Joan Scrima for reviewing, formatting, and typing the report.

DISCLAIMER

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

INTRODUCTION

The Chicago Waterway System (CWS) consists of 78 miles of canals, which serve the Chicago area for two principal purposes, the drainage of urban storm water runoff and treated municipal wastewater effluent and the support of commercial navigation. Approximately 75 percent of the length is composed of man-made canals where no waterway existed previously, and the remainder is composed of natural streams that have been deepened, straightened and/or widened to such an extent that reversion to the natural state is not possible. The flow of water in the CWS is artificially controlled by hydraulic structures. The CWS has two river systems, the Calumet River System and the Chicago River System (Lanyon, 2002).

Over the years, increased pollutant loading from urbanization throughout the Chicago metropolitan area and low stream velocities in Chicago area deep-draft waterways have caused dissolved oxygen (DO) concentrations to fall below DO standards established by the Illinois Pollution Control Board (IPCB). More than 30 years ago, the Metropolitan Water Reclamation District of Greater Chicago (District) determined that applicable IPCB DO standards for Chicago area waterways could not be met exclusively by advanced wastewater treatment at its three major regional water reclamation plants (WRPs), Calumet, North Side, and Stickney, and by the capture and treatment of combined sewer overflows (CSOs). In order to increase the DO concentration in the Chicago and Calumet River Systems, the District designed and constructed artificial aeration systems (instream diffuser and sidestream elevated pool aeration [SEPA] stations) during the late 1970s and early 1990s, respectively.

From October 1994 through May 1996, the Research and Development Department (R&D) conducted weekly DO surveys in the Chicago River System. Water samples were collected manually, chemically fixed in the field, and returned to the laboratory for titration. The results from these surveys showed that DO concentrations in selected waterway reaches were less than IPCB DO standards applicable to these reaches.

In August 1996, R&D began developing a comprehensive field-monitoring program in order to locate and identify reaches in the Chicago River System where the DO concentration is less than the applicable IPCB DO standard. Initially, the program was to focus on the Chicago River System for a two-year period and has since been extended. Subsequently, the scope of the monitoring program was first expanded to include the Calumet River System, and then later the Chicago area wadeable streams. The resulting data have been used for the calibration and verification of a water quality model for the CWS.

Data in this report are from the 20 deep-draft continuous DO monitoring stations of the District's Continuous Dissolved Oxygen Monitoring (CDOM) Program. This report covers the monitoring results for the period January 2006 through December 2006 for the deep-draft waterways of the Chicago River System, Des Plaines River System, and Calumet River System.

MONITORING STATIONS

Locations and Descriptions

The CDOM Program and the Ambient Water Quality Monitoring (AWQM) Program supply the District with water quality data throughout the year for both the wadeable and deep-draft waterways within its jurisdiction. All stations for both programs are shown in Figure 1. Descriptions of the locations for the deep-draft monitoring stations are listed in Table 1.

Designated Uses

The IPCB has assigned water uses for specific water bodies within the state of Illinois. All waters in Illinois are designated for General Use, except those selected as Secondary Contact and Indigenous Aquatic Life Waters (Secondary Contact)

In the Chicago and Calumet River Systems, General Use Waters include the North Shore Channel from Lake Michigan to the North Side WRP, and the Chicago and Calumet Rivers.

Secondary Contact Waters include the North Shore Channel from the North Side WRP to the North Branch of the Chicago River, the North Branch of the Chicago River from the North Shore Channel to the Chicago River, the South Branch of the Chicago River, Bubbly Creek, the Chicago Sanitary and Ship Canal, the Grand Calumet River, the deep-draft portion of the Little Calumet River, the Calumet-Sag Channel, and the Des Plaines River from its confluence with the Chicago Sanitary and Ship Canal to the Interstate Highway 55 bridge southwest of Joliet.

Water Quality Standards

The IPCB has established water quality standards for DO in both General Use and Secondary Contact Waters. In General Use Waters, the DO shall not be less than 6.0 mg/L during 16 hours of any 24-hour period, nor less than 5.0 mg/L at any time. In Secondary Contact Waters, the DO shall not be less than 4.0 mg/L at any time, except in the Calumet-Sag Channel where the DO shall not be less than 3.0 mg/L at any time. For this report, we have selected the 5.0 mg/L DO standard when calculating percent compliance for General Use Waters.

MATERIALS AND METHODS

Water Quality Monitor

The continuous water quality monitors (monitor) used to collect this data were manufactured by YSI Incorporated (YSI) of Yellow Springs, Ohio. DO was measured hourly using the YSI Model 6920 or Model 6600 monitor. In order to protect and safeguard the monitors from marine navigation and vandalism, the monitors were deployed in the field in stainless steel pipes. Two different installation designs were employed: (1) a 3-foot stainless steel pipe was positioned on the bottom of the waterway and oriented downstream such that the water passed through the pipe, and (2) a fixed length of pipe, with multiple 2-inch circular openings, was vertically mounted on the side of a bridge abutment.

Servicing the monitors followed a weekly schedule. Industrial Waste Division personnel retrieved each monitor from the field following seven days of continuous monitoring. Prior to retrieval, a water sample for DO analysis was collected next to the protective housing. An additional monitor, that had been previously calibrated and serviced in the laboratory, was then deployed to replace the retrieved monitor. The retrieved monitors were returned to the laboratory for data downloading, exterior cleaning, servicing, and calibration of the DO sensors. The monitors were temporarily stored in holding tanks containing tap water for subsequent deployment during the following week.

Data Management and Review

Hourly DO data were directly exported electronically from individual monitors to a specially designed Access[®] database for data processing and storage. Following data downloading, the weekly DO data were carefully reviewed for accuracy.

The review process included the following:

1. Comparing a grab sample DO concentration measured in the field with a DO concentration recorded by a retrieved monitor (DO rejection criteria = difference greater than 2.0 mg/L).
2. Comparing the last hourly DO concentration measured by a retrieved monitor with the first hourly DO concentration recorded by a deployed monitor (DO rejection criteria = difference greater than 2.0 mg/L).
3. Comparing a DO concentration measured in a laboratory holding tank and a DO concentration recorded by a retrieved monitor (DO rejection criteria = difference greater than 1.0 mg/L).

Criterion 3 would entail rejection of all hourly readings; criteria 1 and 2 may or may not reject all readings.

After careful review of the DO data, weekly summary statistics (mean, minimum, maximum, and percent observations above DO standard) and individual line drawings for each monitoring station showing hourly DO concentrations were prepared.

Verification of Representative Data

During the spring, summer, and fall of 2006, cross-sectional DO surveys were conducted in the CWS to determine if a fixed continuous monitoring location represented the DO concentration across the waterway. Verification was achieved by comparing the DO concentrations measured in grab samples at multiple fixed locations and depths across the waterway with the fixed monitor measurements. The results from the cross-sectional surveys clearly showed that the differences across the waterway were minimal and equivalent to the DO concentration measured by the monitor at the fixed locations.

RESULTS

The annual minimum, maximum, and mean DO concentrations measured at all 20 stations during 2006 are shown in Table 2.

The number and percent of measured DO concentrations rejected and removed from the Access[®] database following review during 2006 are summarized in Table 3.

The number and percent of DO concentrations above the applicable IPCB DO standard for each waterway during 2006 are presented in Table 4. The DO data shown in Table 4 do not include the DO concentrations rejected during the data review.

Table 5 shows the percent distribution of DO concentrations from <1.0 mg/L to >5.0 mg/L at the 20 monitoring stations during 2006. The current national one-day minimum DO criterion for adult life stages of fish is 3.0 mg/L (Chapman, 1986).

Individual line drawings showing hourly DO concentrations at each monitoring station are indicated in Figures 2 through 21.

Weekly DO summary statistics during 2006 are presented for each monitoring station in Appendix A, Tables A-1 through A-20.

DO Fluctuations

DO concentrations fluctuate seasonally and daily in the aquatic environment. Cold water holds more DO than warm water, a trend that can typically be seen in annual DO graphs where the colder months have higher mean DO concentrations than the warmer months. Daily fluctuations in DO can be caused by photosynthesis during daylight hours causing a surplus of DO, and, conversely, respiration by aquatic plants and algae during the night, resulting in a deficiency of DO. Other deficiencies of DO can occur when oxygen demanding materials are introduced into a waterway or by thermal discharges. Oxygen demanding materials enter the CWS most often through wastewater treatment effluents, stormwater run-off, and CSOs. Wastewater treatment effluents and CSOs contain organic materials that are decomposed by microorganisms which consume DO in the process. Stormwater run-off also can flush organic materials into the waterway either directly from the land adjacent to the CWS, or indirectly through the combined sewer system. This is most evident during heavy rain storms that result in CSO events containing untreated waste and stormwater. The District Web site (mwr.org) has information regarding CSO events which can be found in the Public Interest Section under the titles "CSO Event Synopsis Report" and "Combined Sewer Overflow." Most low DO excursions reported for the deep-draft sections of the CWS in this report are associated with the occurrence of a CSO event during 2006.

TABLE 1: DEEP-DRAFT CONTINUOUS DISSOLVED OXYGEN
MONITORING STATIONS

Monitoring Station	Waterway	Description of Monitoring Station
<u>Chicago River System</u>		
Main Street	North Shore Channel	3.5 miles below Wilmette Pumping Station, 0.8 mile above North Side WRP outfall, water quality monitor under Main Street bridge, center of channel, 6 inches above bottom.
Foster Avenue	North Shore Channel	3.2 miles below North Side WRP outfall, 1.5 miles below Devon Aeration Station, 0.1 mile above junction with North Branch Chicago River, water quality monitor on northwest side Foster Avenue bridge, 3 feet below water surface.
Addison Street	North Branch Chicago River	5.2 miles below North Side WRP outfall, water quality monitor on northwest side Addison Street bridge, 3 feet below water surface.
Fullerton Avenue	North Branch Chicago River	7.2 miles below North Side WRP outfall, 0.4 mile above Webster Aeration Station, water quality monitor on northwest side Fullerton Avenue bridge, 3 feet below water surface.
Kinzie Street	North Branch Chicago River	9.9 miles below North Side WRP outfall, 3.1 miles below Webster Aeration Station, 0.2 mile above junction with Chicago River, water quality monitor on northeast side Kinzie Street bridge, 3 feet below water surface.

TABLE 1 (Continued): DEEP-DRAFT CONTINUOUS DISSOLVED OXYGEN MONITORING STATIONS

Monitoring Station	Waterway	Description of Monitoring Station
<u>Chicago River System (Continued)</u>		
Loomis Street	South Branch Chicago River	3.6 miles below junction with Chicago River, water quality monitor on north-east side Loomis Street bridge, 3 feet below water surface.
36 th Street	Bubbly Creek	0.2 mile below Racine Avenue Pumping Station, 1.2 miles above junction with South Branch of the Chicago River, water quality monitor attached to concrete wall on west side of river, 3 feet below water surface.
Interstate Highway 55	Bubbly Creek	1.0 mile below Racine Avenue Pumping Station, 0.4 mile above junction with South Branch of the Chicago River, water quality monitor on north-east side I-55 bridge, 3 feet below water surface.
Cicero Avenue	Chicago Sanitary and Ship Canal	1.5 miles above Stickney WRP outfall, 1.1 miles below Crawford Generating Station cooling water discharge, water quality monitor on northeast side Cicero Avenue bridge, 3 feet below water surface.
B&O Central Railroad	Chicago Sanitary and Ship Canal	3.6 miles below Stickney WRP outfall, water quality monitor in center of canal, east side B&O Central RR bridge, 3 feet below water surface.
Route 83	Chicago Sanitary and Ship Canal	1.2 miles above junction with Calumet-Sag Channel, 1.1 miles above Canal Junction SEPA Station, water quality monitor 0.6 mile above Route 83 bridge, center of canal, 6 inches above bottom.

TABLE 1 (Continued): DEEP-DRAFT CONTINUOUS DISSOLVED OXYGEN
MONITORING STATIONS

Monitoring Station	Waterway	Description of Monitoring Station
<u>Chicago River System (Continued)</u>		
Lockport Powerhouse	Chicago Sanitary and Ship Canal	0.1 mile above Lockport Powerhouse, 1.1 miles above junction with Des Plaines River, water quality monitor on north side of canal, in forebay area on fender wall, 3 feet below water surface.
<u>Des Plaines River System</u>		
Jefferson Street	Des Plaines River	3.0 miles below Lockport Lock, 2.1 miles below junction with Chicago Sanitary and Ship Canal, water quality monitor on southeast side Jefferson Street bridge, 3 feet below water surface.
<u>Calumet River System</u>		
Torrence Avenue	Grand Calumet River	150 feet above junction with Calumet River, 100 feet below Torrence Avenue bridge, water quality monitor attached to bridge abutment on southeast side of river, 2 feet below water surface.
C&W Indiana Railroad	Little Calumet River	5.2 miles below SEPA 1, 1.5 miles above SEPA 2, 3.6 miles below Thomas J. O'Brien Lock and Dam, 1.3 miles above Calumet WRP outfall, water quality monitor attached to northeast side C&W Indiana RR bridge, 3 feet below water surface.
Halsted Street	Little Calumet River	7.7 miles below SEPA 1, 1.0 mile below SEPA 2, 1.2 miles below Calumet WRP, 0.5 mile above junction with Calumet-Sag Channel, water quality monitor attached to southeast side Halsted Street bridge, 3 feet below water surface.

TABLE 1 (Continued): DEEP-DRAFT CONTINUOUS DISSOLVED OXYGEN
MONITORING STATIONS

Monitoring Station	Waterway	Description of Monitoring Station
<u>Calumet River System (Continued)</u>		
Cicero Avenue	Calumet-Sag Channel	3.1 miles below SEPA 3, 3.3 miles above SEPA 4, water quality monitor attached to northwest side Cicero Avenue bridge, 3 feet below water surface.
104 th Avenue	Calumet-Sag Channel	4.6 miles below SEPA 4, 3.2 miles above Canal Junction SEPA Station, water quality monitor in center of channel, 6 inches above bottom.
Route 83	Calumet-Sag Channel	0.4 mile above junction with Chicago Sanitary and Ship Canal, 0.3 mile above Canal Junction SEPA Station, water quality monitor on southwest side Illinois Central-Gulf RR bridge, 3 feet below water surface.

TABLE 2: MINIMUM, MAXIMUM, AND MEAN HOURLY
DISSOLVED OXYGEN CONCENTRATIONS¹

Monitoring Station	Waterway	DO Concentration (mg/L)		
		Minimum	Maximum	Mean
<u>Chicago River System</u>				
Main Street	North Shore Channel	0.0	33.4	9.7
Foster Avenue	North Shore Channel	4.0	11.2	7.7
Addison Street	North Branch Chicago River	0.0	12.0	7.8
Fullerton Avenue	North Branch Chicago River	0.0	11.0	7.1
Kinzie Street	North Branch Chicago River	0.8	11.7	7.0
Clark Street	Chicago River	5.8	12.8	9.0
Loomis Street	South Branch Chicago River	2.2	12.5	7.6
36 th Street	Bubbly Creek	0.0	15.6	3.2
Interstate Highway 55	Bubbly Creek	0.0	12.0	5.4
Cicero Avenue	Chicago Sanitary and Ship Canal	0.0	10.8	6.3
B&O Central Railroad	Chicago Sanitary and Ship Canal	1.3	10.1	6.8
Route 83	Chicago Sanitary and Ship Canal	0.0	9.0	5.6
Lockport Powerhouse	Chicago Sanitary and Ship Canal	0.3	9.0	5.6
<u>Des Plaines River System</u>				
Jefferson Street	Des Plaines River	2.4	12.8	7.3
<u>Calumet River System</u>				
Torrence Avenue	Grand Calumet River	0.0	30.2	8.2
C&W Indiana Railroad	Little Calumet River	1.9	21.9	9.5
Halsted Street	Little Calumet River	3.5	12.9	6.9
Cicero Avenue	Calumet-Sag Channel	3.2	13.1	7.0
104 th Avenue	Calumet-Sag Channel	2.9	13.0	7.0
Route 83	Calumet-Sag Channel	2.7	13.9	6.8

¹Dissolved oxygen was measured hourly using a YSI Model 6920 or Model 6600 continuous water quality monitor.

TABLE 3: NUMBER AND PERCENT OF DISSOLVED OXYGEN VALUES NOT MEETING ACCEPTANCE CRITERIA¹

Monitoring Station	Waterway	Number of DO Values Rejected	Percent of DO Values Rejected
<u>Chicago River System</u>			
Main Street	North Shore Channel	627	7
Foster Avenue	North Shore Channel	336	4
Addison Street	North Branch Chicago River	165	2
Fullerton Avenue	North Branch Chicago River	338	4
Kinzie Street	North Branch Chicago River	2	0
Clark Street	Chicago River	361	4
Loomis Street	South Branch Chicago River	2	0
36 th Street	Bubbly Creek	352	4
Interstate Highway 55	Bubbly Creek	547	6
Cicero Avenue	Chicago Sanitary and Ship Canal	169	2
B&O Central Railroad	Chicago Sanitary and Ship Canal	4	0
Route 83	Chicago Sanitary and Ship Canal	1,861	21
Lockport Powerhouse	Chicago Sanitary and Ship Canal	344	4
<u>Des Plaines River System</u>			
Jefferson Street	Des Plaines River	171	2
<u>Calumet River System</u>			
Torrence Avenue	Grand Calumet River	485	6
C&W Indiana Railroad	Little Calumet River	174	2
Halsted Street	Little Calumet River	343	4
Cicero Avenue	Calumet-Sag Channel	173	2
104 th Avenue	Calumet-Sag Channel	1,575	18
Route 83	Calumet-Sag Channel	4	0

¹Dissolved oxygen was measured hourly using a YSI Model 6920 or Model 6600 continuous water quality monitor. DO values were rejected based on quality control check and/or operational problems with monitor.

TABLE 4: NUMBER AND PERCENT OF DISSOLVED OXYGEN VALUES MEASURED ABOVE THE ILLINOIS POLLUTION CONTROL BOARD'S WATER QUALITY STANDARD¹

Monitoring Station	Waterway	IPCB DO Standard	Number of DO Values	Number Above Standard	Percent Above Standard
<u>Chicago River System</u>					
Main Street	North Shore Channel	5	8,133	7,362	91
Foster Avenue	North Shore Channel	4	8,424	8,423	100
Addison Street	North Branch Chicago River	4	8,595	8,587	>99
Fullerton Avenue	North Branch Chicago River	4	8,422	8,362	>99
Kinzie Street	North Branch Chicago River	4	8,758	8,645	99
Clark Street	Chicago River	5	8,399	8,399	100
Loomis Street	South Branch Chicago River	4	8,758	8,732	>99
36 th Street	Bubbly Creek	4	8,408	2,338	28
Interstate Highway 55	Bubbly Creek	4	8,213	6,281	77
Cicero Avenue	Chicago Sanitary and Ship Canal	4	8,591	8,223	96
B&O Central Railroad	Chicago Sanitary and Ship Canal	4	8,756	8,612	98
Route 83	Chicago Sanitary and Ship Canal	4	6,899	5,874	85
Lockport Powerhouse	Chicago Sanitary and Ship Canal	4	8,416	6,766	80
<u>Des Plaines River System</u>					
Jefferson Street	Des Plaines River	4	8,589	8,148	95
<u>Calumet River System</u>					
Torrence Avenue	Grand Calumet River	4	8,275	6,197	75
C&W Indiana Railroad	Little Calumet River	4	8,586	8,448	98
Halsted Street	Little Calumet River	4	8,417	8,412	>99
Cicero Avenue	Calumet-Sag Channel	3	8,587	8,587	100
104 th Avenue	Calumet-Sag Channel	3	7,185	7,182	100
Route 83	Calumet-Sag Channel	3	8,756	8,729	>99

¹Dissolved oxygen was measured hourly using a YSI Model 6920 or Model 6600 continuous water quality monitor.

TABLE 5: PERCENT OF DISSOLVED OXYGEN VALUES IN SELECTED RANGES

Monitoring Station	Waterway	Percent of DO Values in Range (mg/L)					
		0-<1	1-<2	2-<3	3-<4	4-<5	≥5
<u>Chicago River System</u>							
Main Street	North Shore Channel	1	<1	<1	2	6	91
Foster Avenue	North Shore Channel	0	0	0	0	<1	>99
Addison Street	North Branch Chicago River	0	0	0	0	<1	>99
Fullerton Avenue	North Branch Chicago River	0	0	<1	<1	5	94
Kinzie Street	North Branch Chicago River	0	<1	<1	<1	6	93
Clark Street	Chicago River	0	0	0	0	0	100
Loomis Street	South Branch Chicago River	0	0	<1	<1	1	99
36 th Street	Bubbly Creek	33	18	13	7	4	24
Interstate Highway 55	Bubbly Creek	6	4	5	9	16	61
Cicero Avenue	Chicago Sanitary and Ship Canal	<1	<1	<1	3	18	78
B&O Central Railroad	Chicago Sanitary and Ship Canal	0	<1	<1	1	6	92
Route 83	Chicago Sanitary and Ship Canal	<1	<1	2	11	23	62
Lockport Powerhouse	Chicago Sanitary and Ship Canal	<1	1	4	15	16	65
<u>Des Plaines River System</u>							
Jefferson Street	Des Plaines River	0	0	<1	5	12	83
<u>Calumet River System</u>							
Torrence Avenue	Grand Calumet River	4	4	7	9	8	67
C&W Indiana Railroad	Little Calumet River	0	0	<1	1	5	93
Halsted Street	Little Calumet River	0	0	0	<1	1	99
Cicero Avenue	Calumet-Sag Channel	0	0	0	<1	7	92
104 th Avenue	Calumet-Sag Channel	0	0	0	1	10	89
Route 83	Calumet-Sag Channel	0	0	<1	2	15	83

FIGURE 1: CONTINUOUS DISSOLVED OXYGEN MONITORING AND AMBIENT WATER QUALITY MONITORING SAMPLE STATIONS

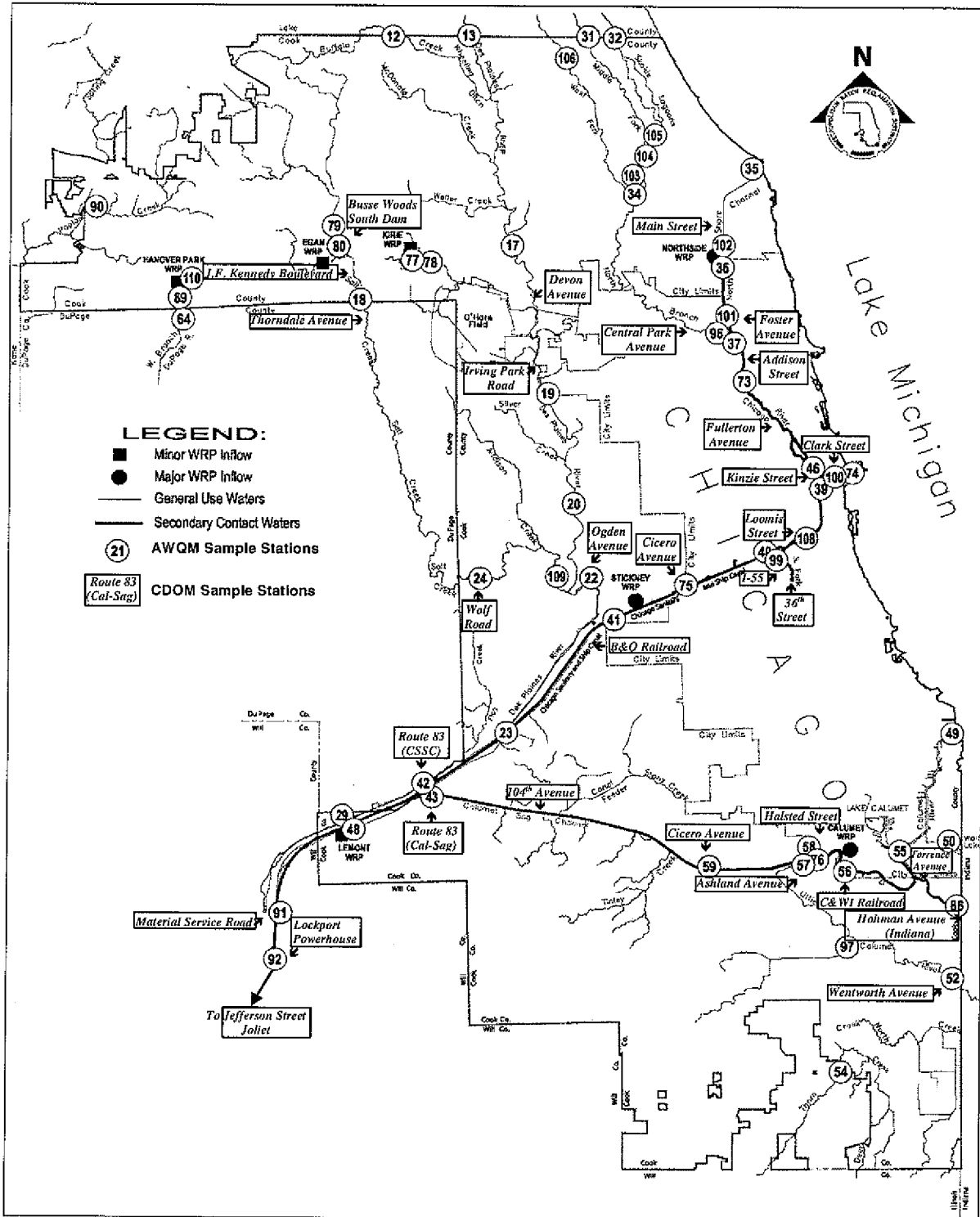


FIGURE 2: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT MAIN STREET ON THE NORTH SHORE CHANNEL FROM JANUARY 2006 THROUGH DECEMBER 2006

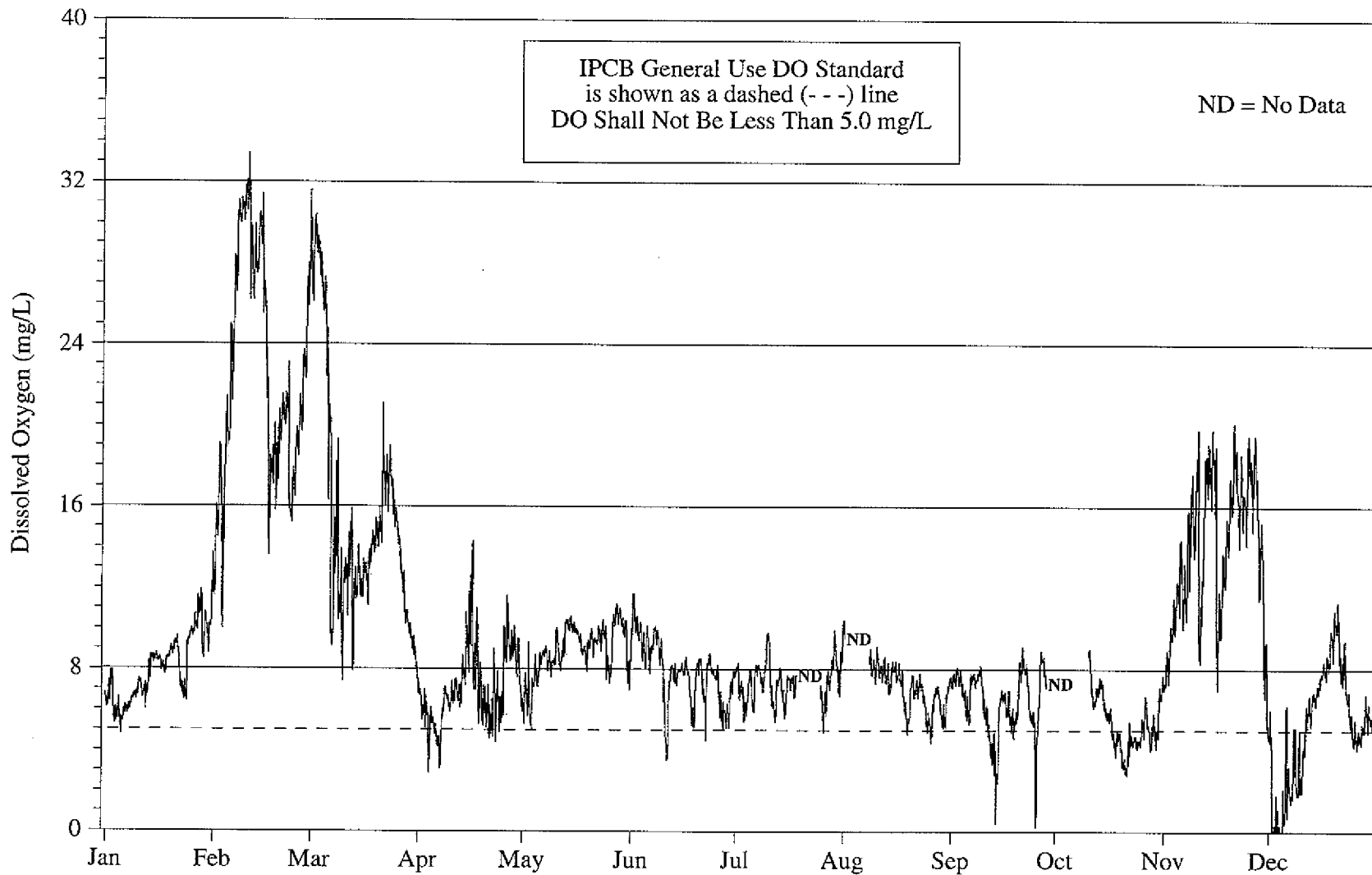


FIGURE 3: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT FOSTER AVENUE ON THE NORTH SHORE CHANNEL FROM JANUARY 2006 THROUGH DECEMBER 2006

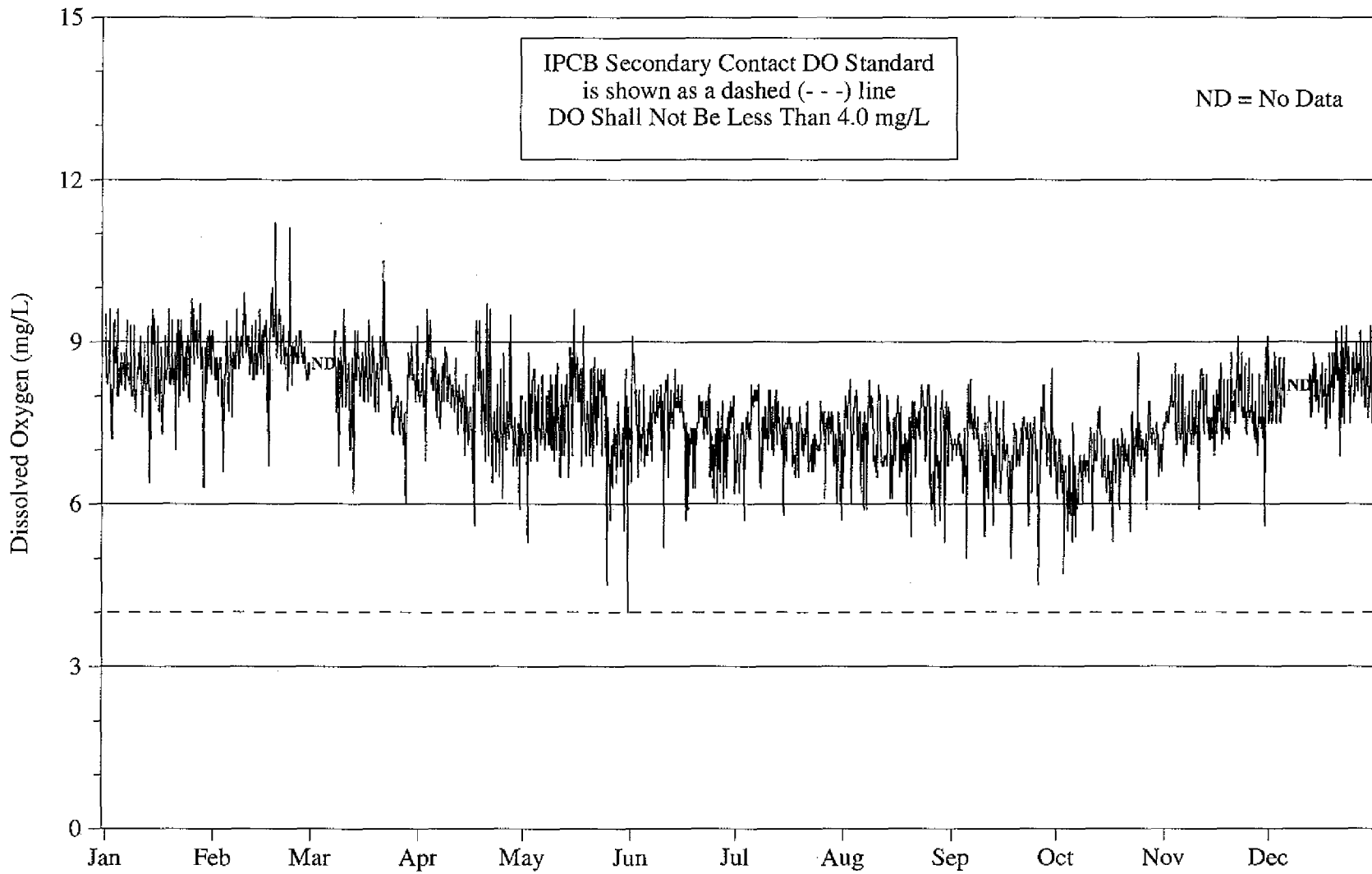


FIGURE 4: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT ADDISON STREET ON THE NORTH BRANCH CHICAGO RIVER FROM JANUARY 2006 THROUGH DECEMBER 2006

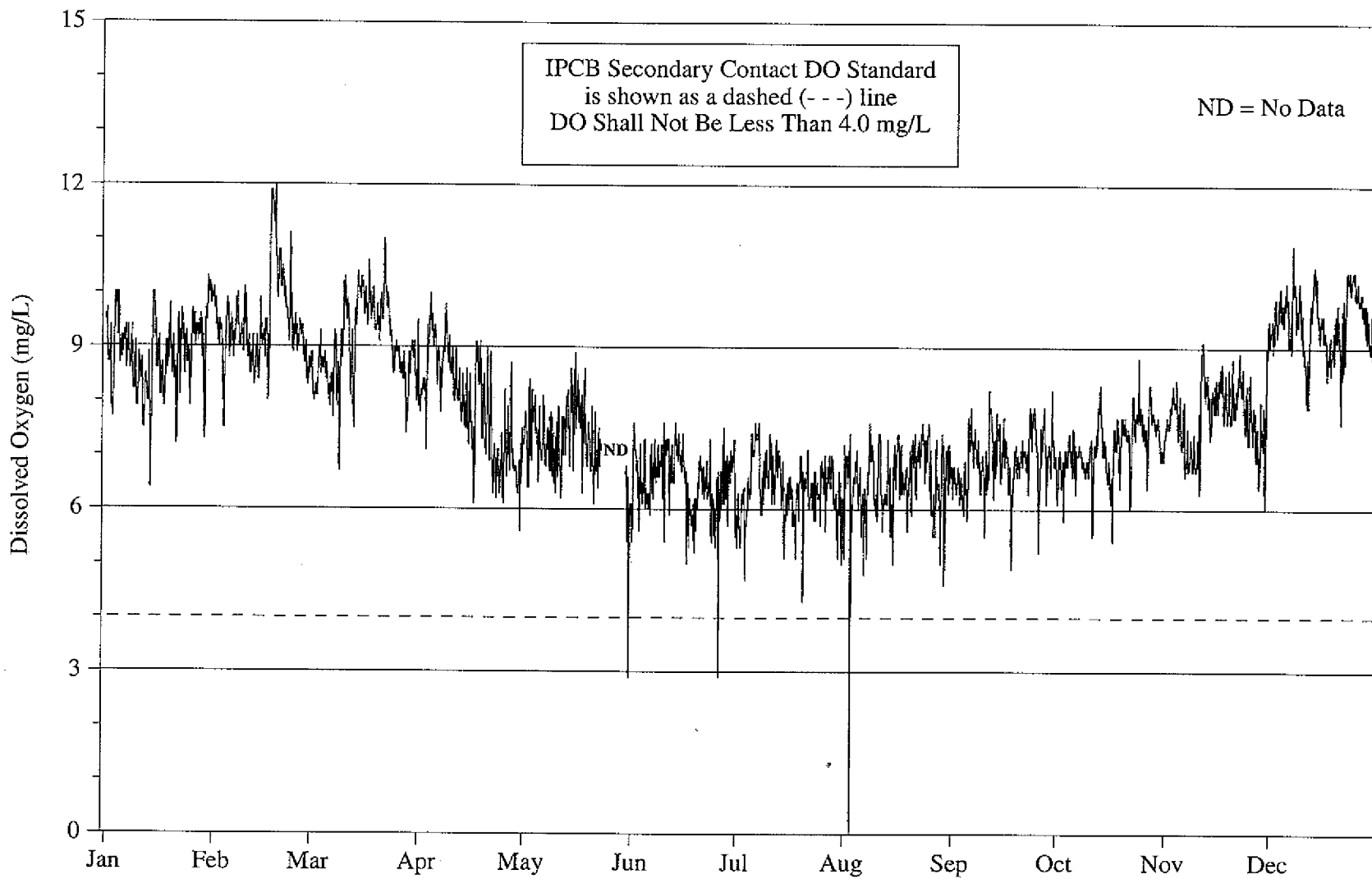


FIGURE 5: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT FULLERTON AVENUE ON THE NORTH BRANCH CHICAGO RIVER FROM JANUARY 2006 THROUGH DECEMBER 2006

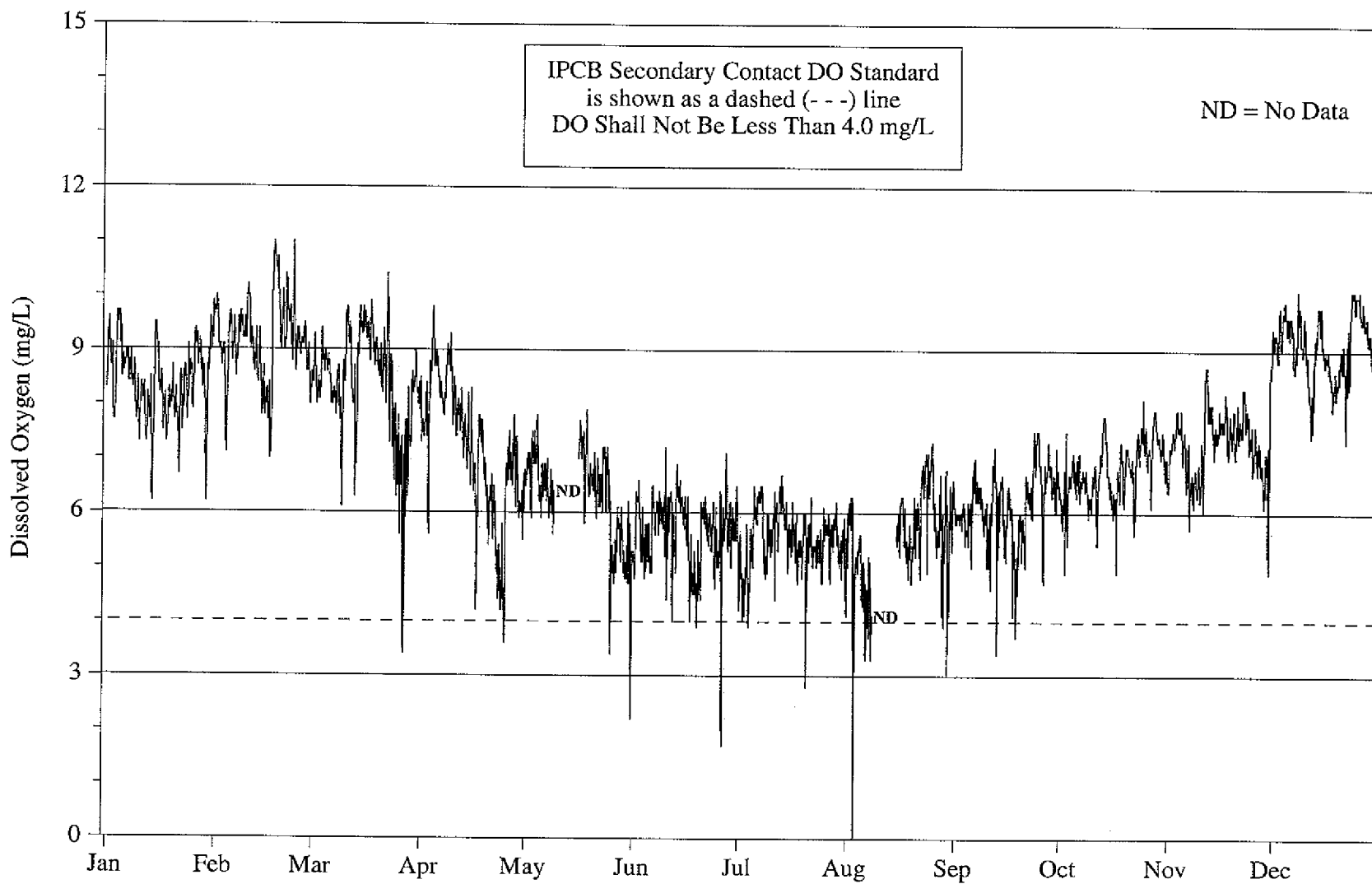


FIGURE 6: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT KINZIE STREET ON THE NORTH BRANCH CHICAGO RIVER FROM JANUARY 2006 THROUGH DECEMBER 2006

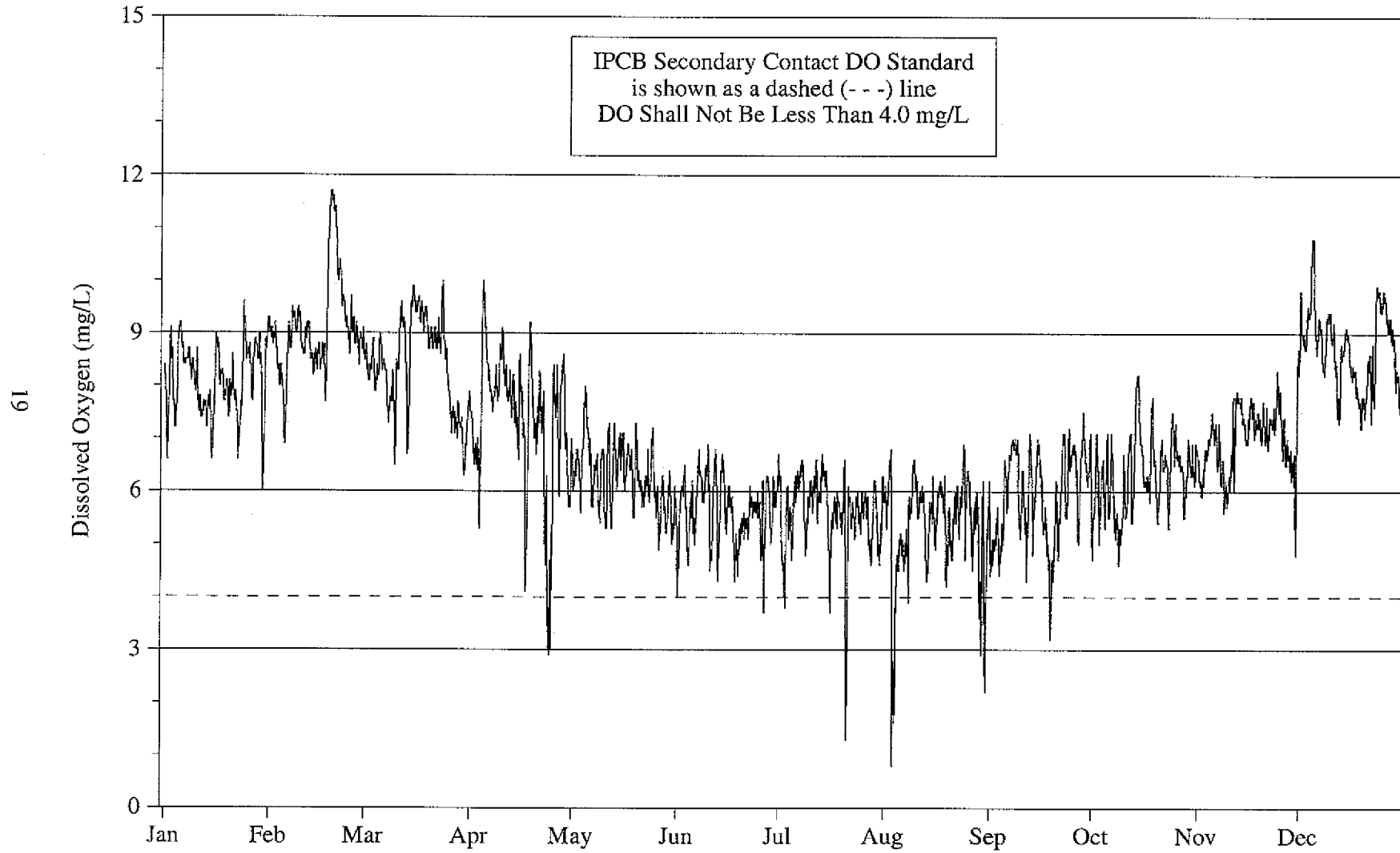


FIGURE 7: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT CLARK STREET ON THE CHICAGO RIVER FROM JANUARY 2006 THROUGH DECEMBER 2006

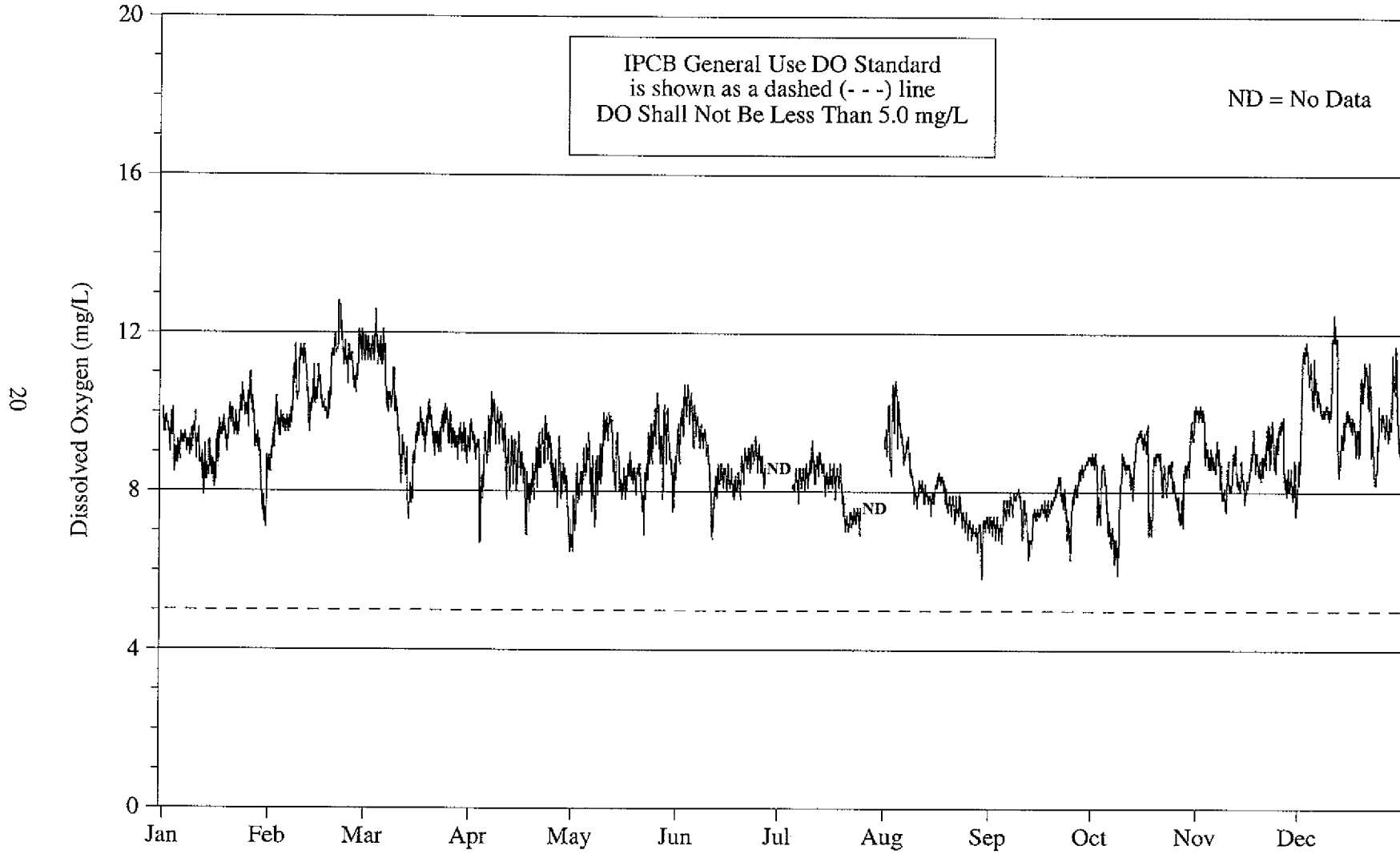


FIGURE 8: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT LOOMIS STREET ON THE SOUTH BRANCH CHICAGO RIVER FROM JANUARY 2006 THROUGH DECEMBER 2006

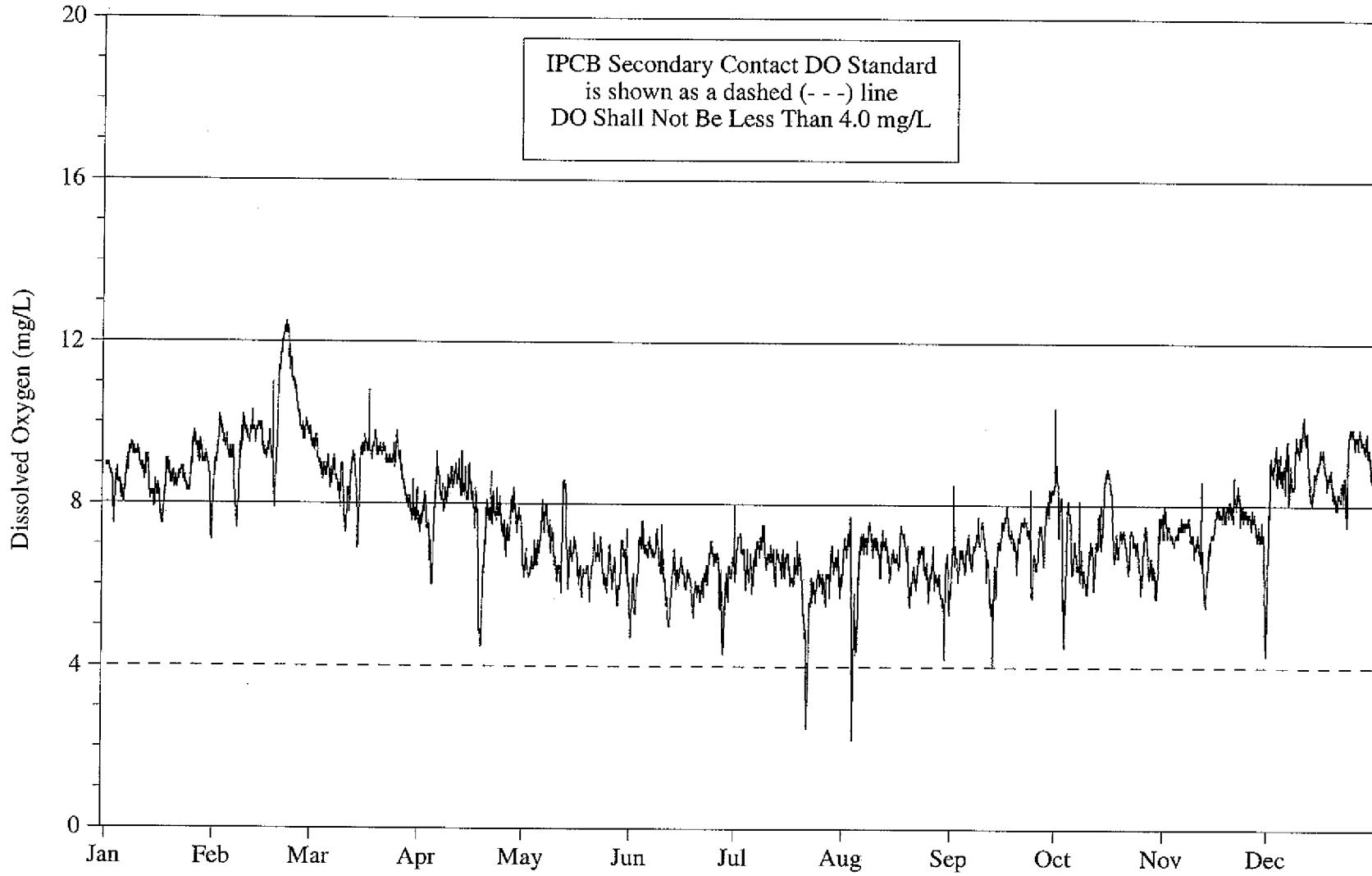


FIGURE 9: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT 36TH STREET ON BUBBLY CREEK FROM JANUARY 2006 THROUGH DECEMBER 2006

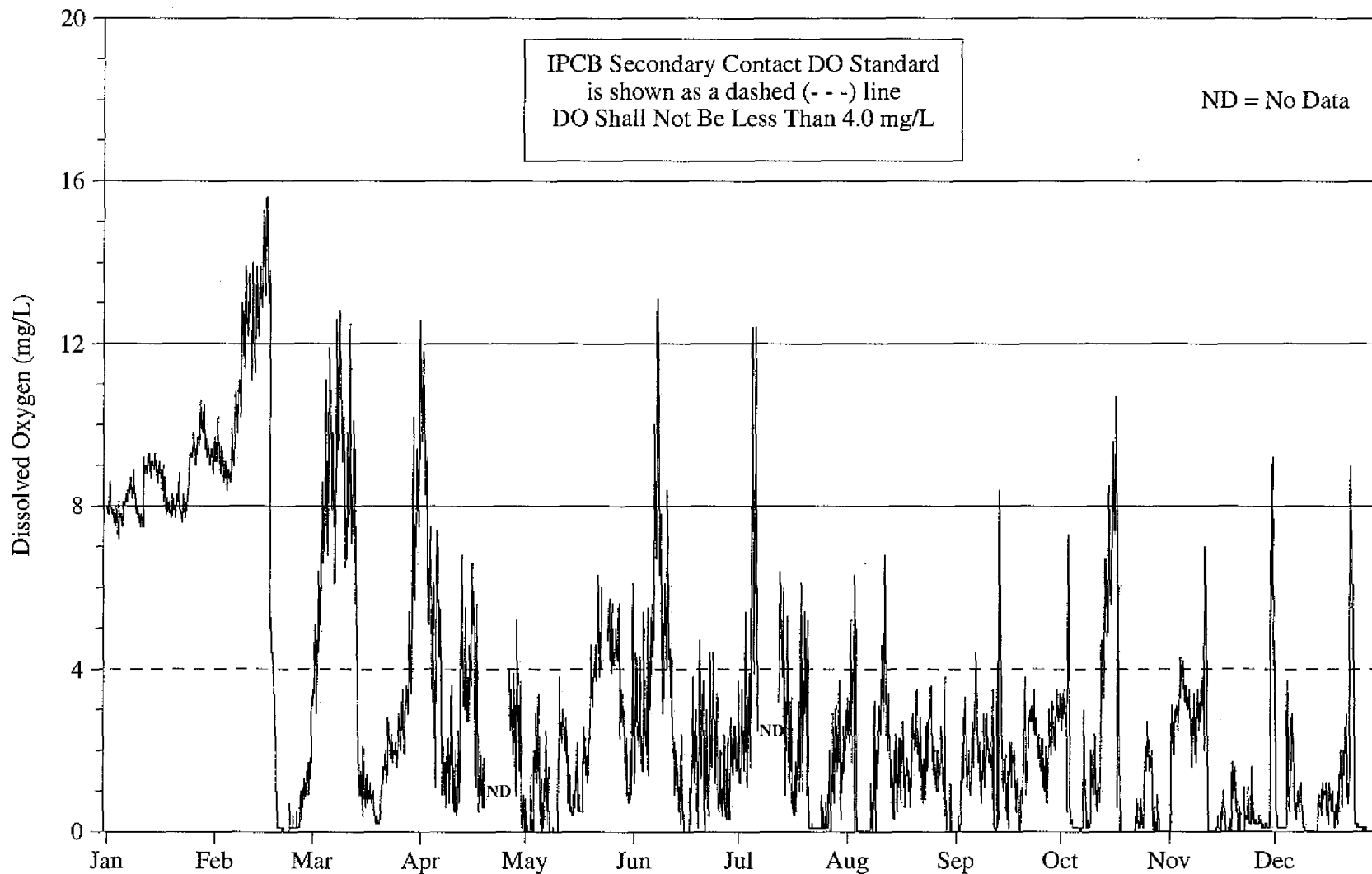


FIGURE 10: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT INTERSTATE HIGHWAY 55 ON BUBBLY CREEK FROM JANUARY 2006 THROUGH DECEMBER 2006

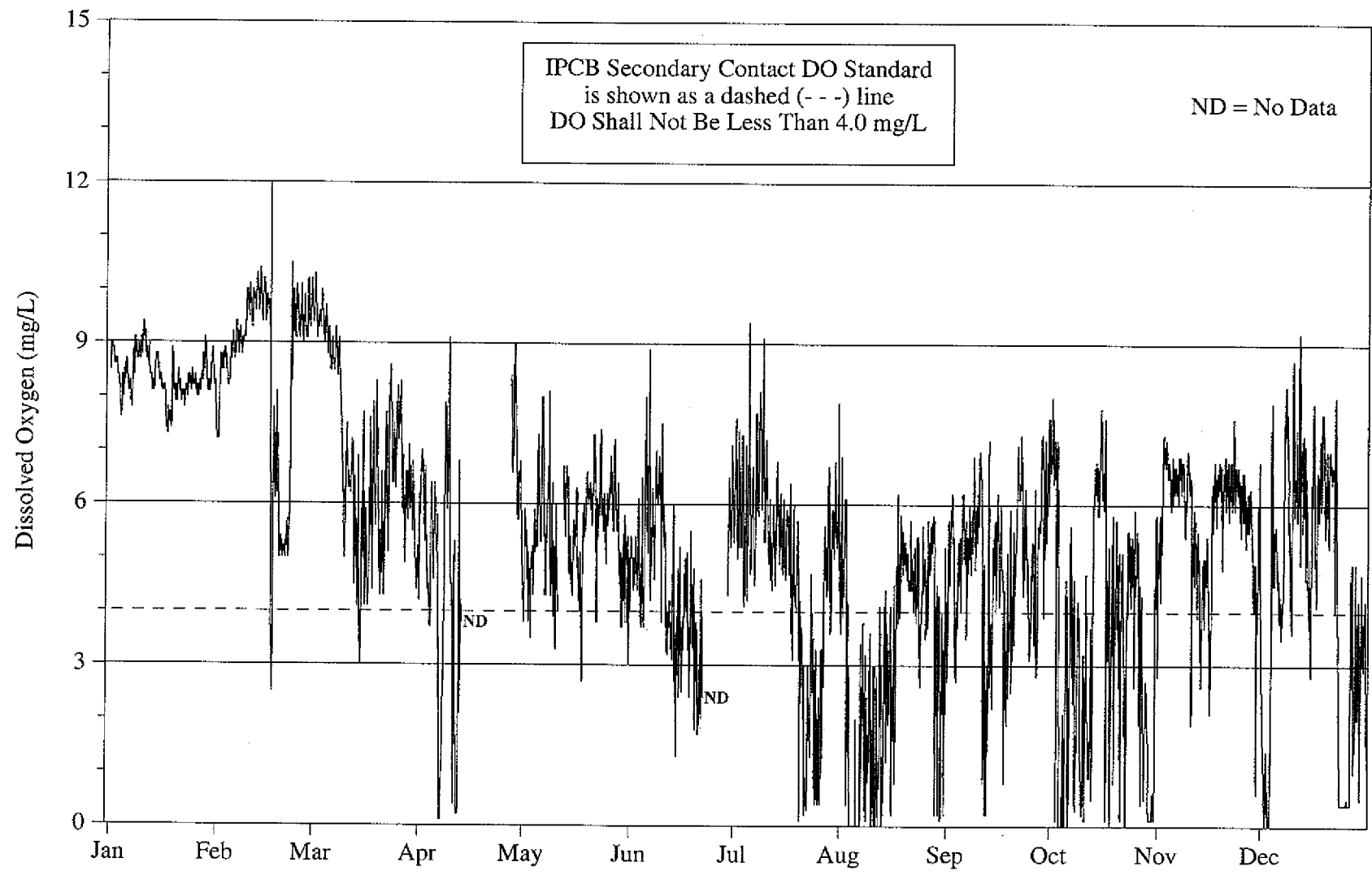


FIGURE 11: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT CICERO AVENUE ON THE CHICAGO SANITARY AND SHIP CANAL FROM JANUARY 2006 THROUGH DECEMBER 2006

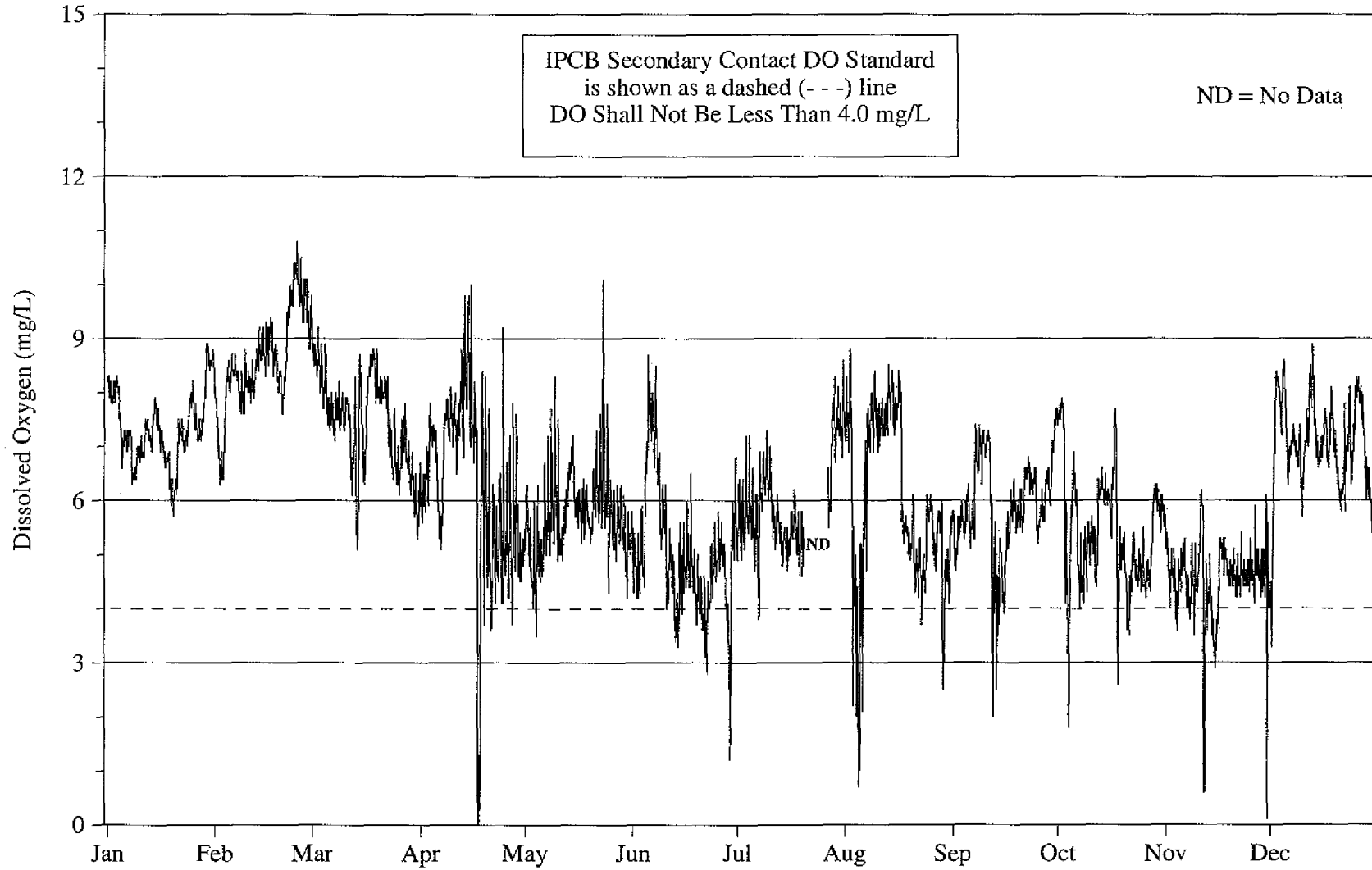


FIGURE 12: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT B&O CENTRAL RAILROAD ON THE CHICAGO SANITARY AND SHIP CANAL FROM JANUARY 2006 THROUGH DECEMBER 2006

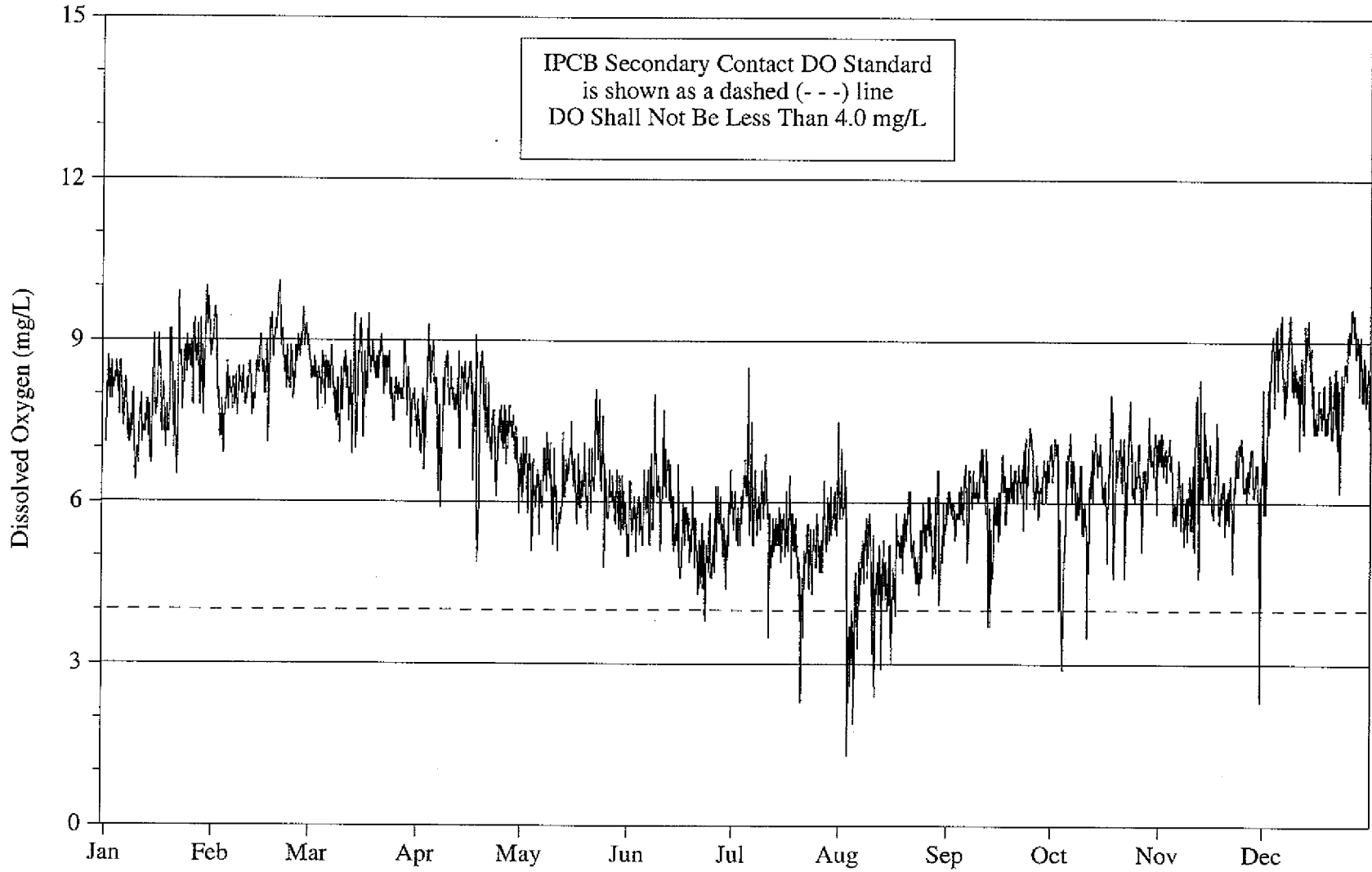


FIGURE 13: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT ROUTE 83 ON THE CHICAGO SANITARY AND SHIP CANAL FROM JANUARY 2006 THROUGH DECEMBER 2006

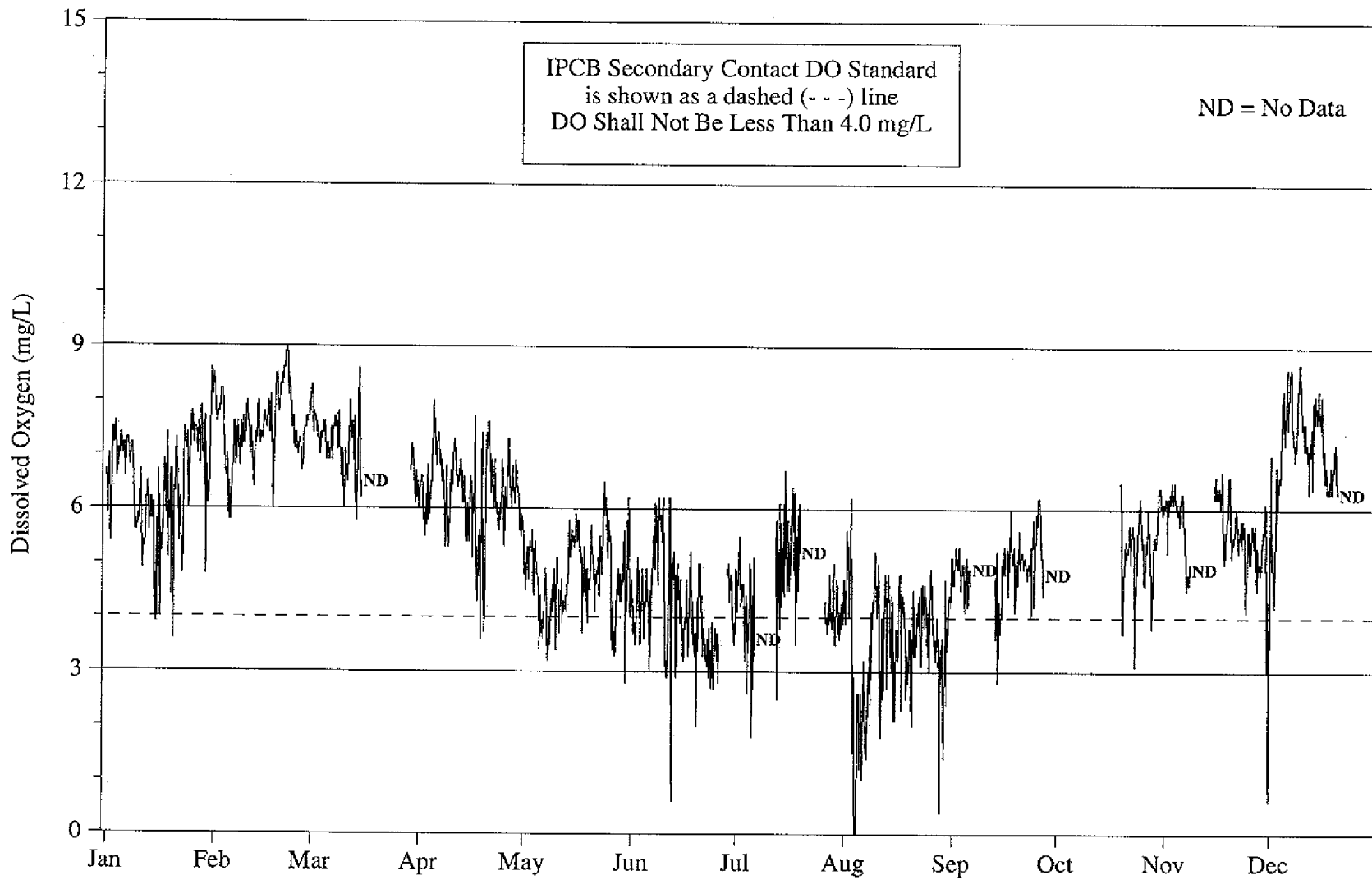


FIGURE 14: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT LOCKPORT POWERHOUSE ON THE CHICAGO SANITARY AND SHIP CANAL FROM JANUARY 2006 THROUGH DECEMBER 2006

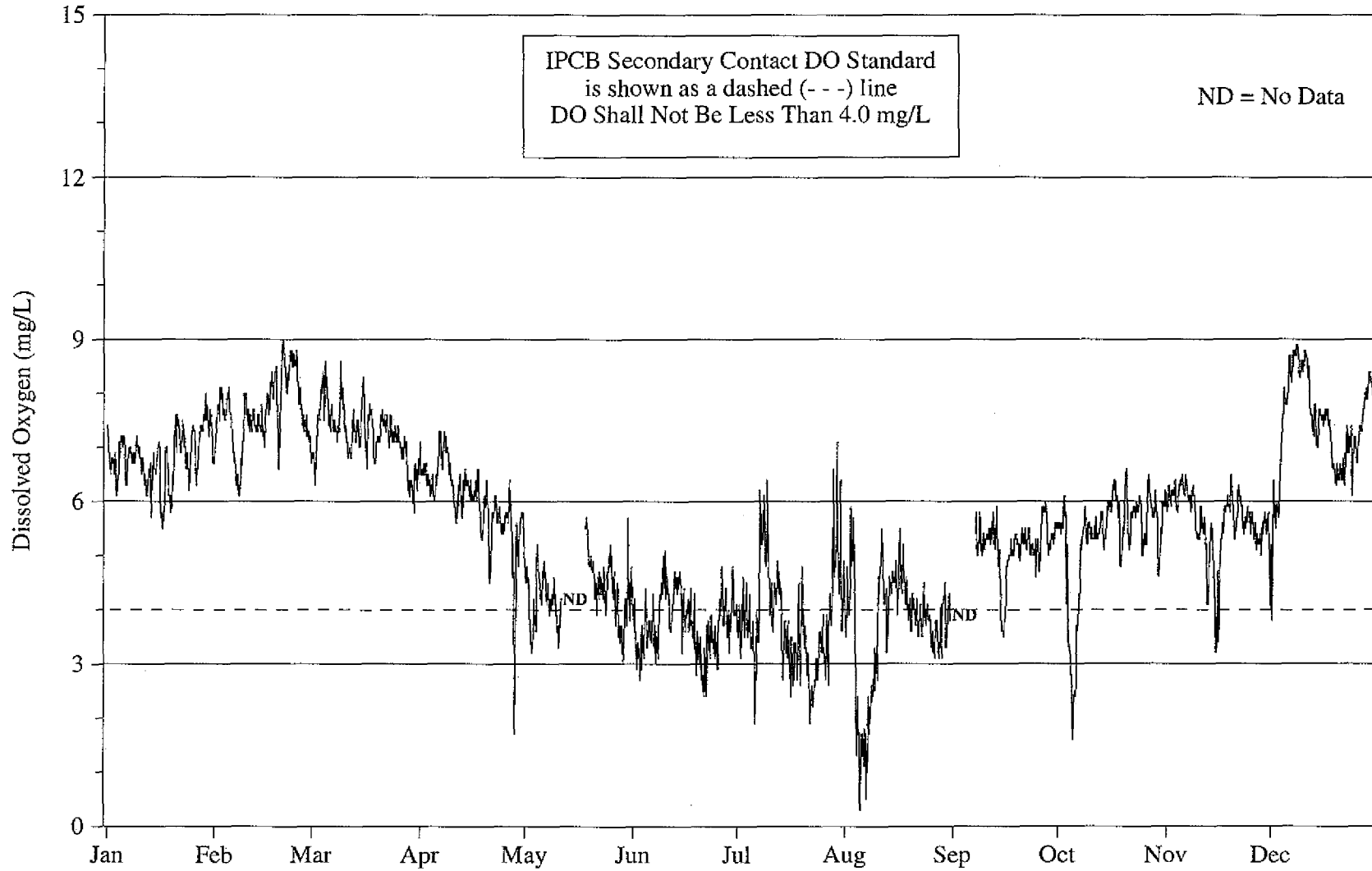


FIGURE 15: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT JEFFERSON STREET ON THE DES PLAINES RIVER FROM JANUARY 2006 THROUGH DECEMBER 2006

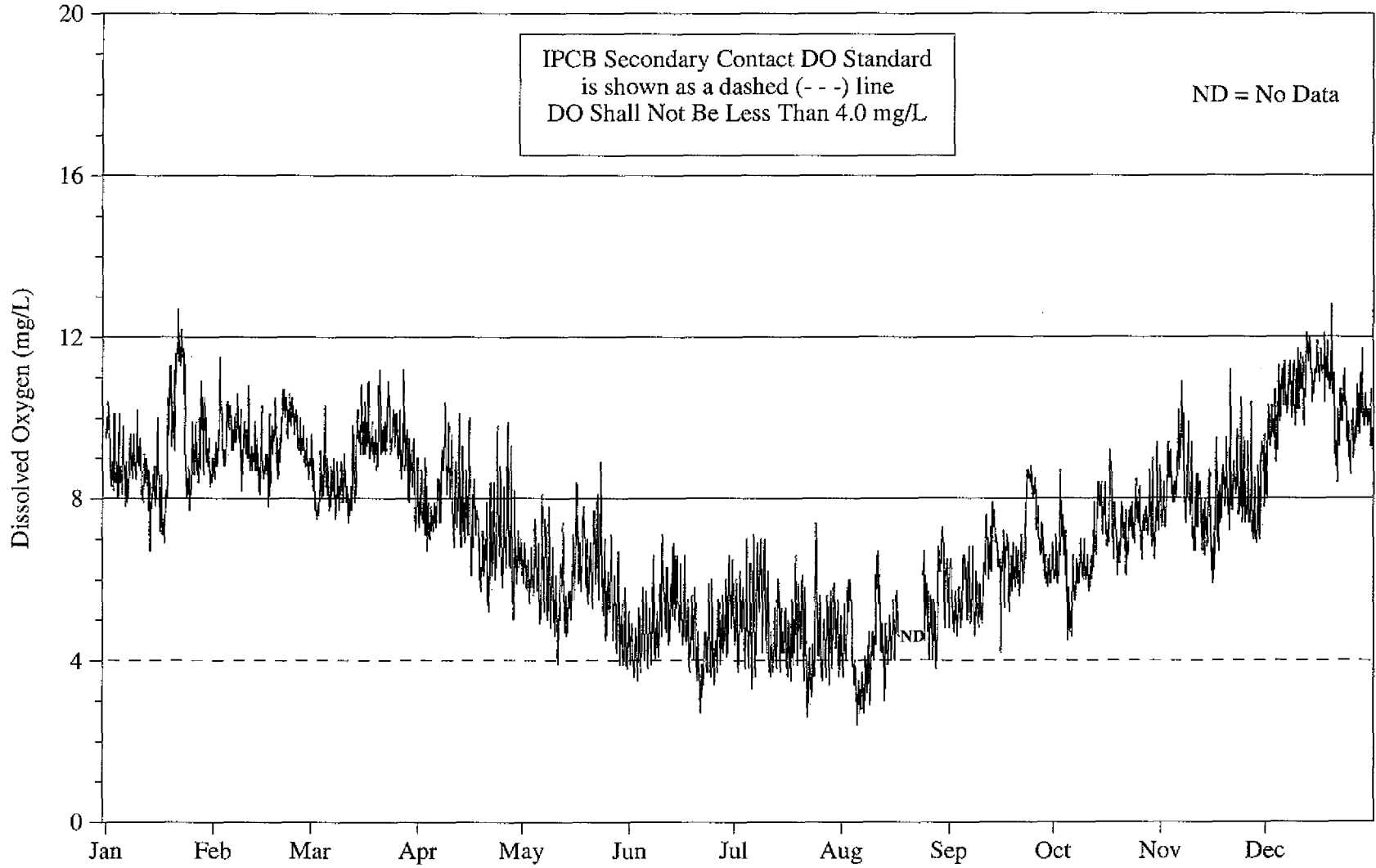


FIGURE 16: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT TORRENCE AVENUE ON THE GRAND CALUMET RIVER FROM JANUARY 2006 THROUGH DECEMBER 2006

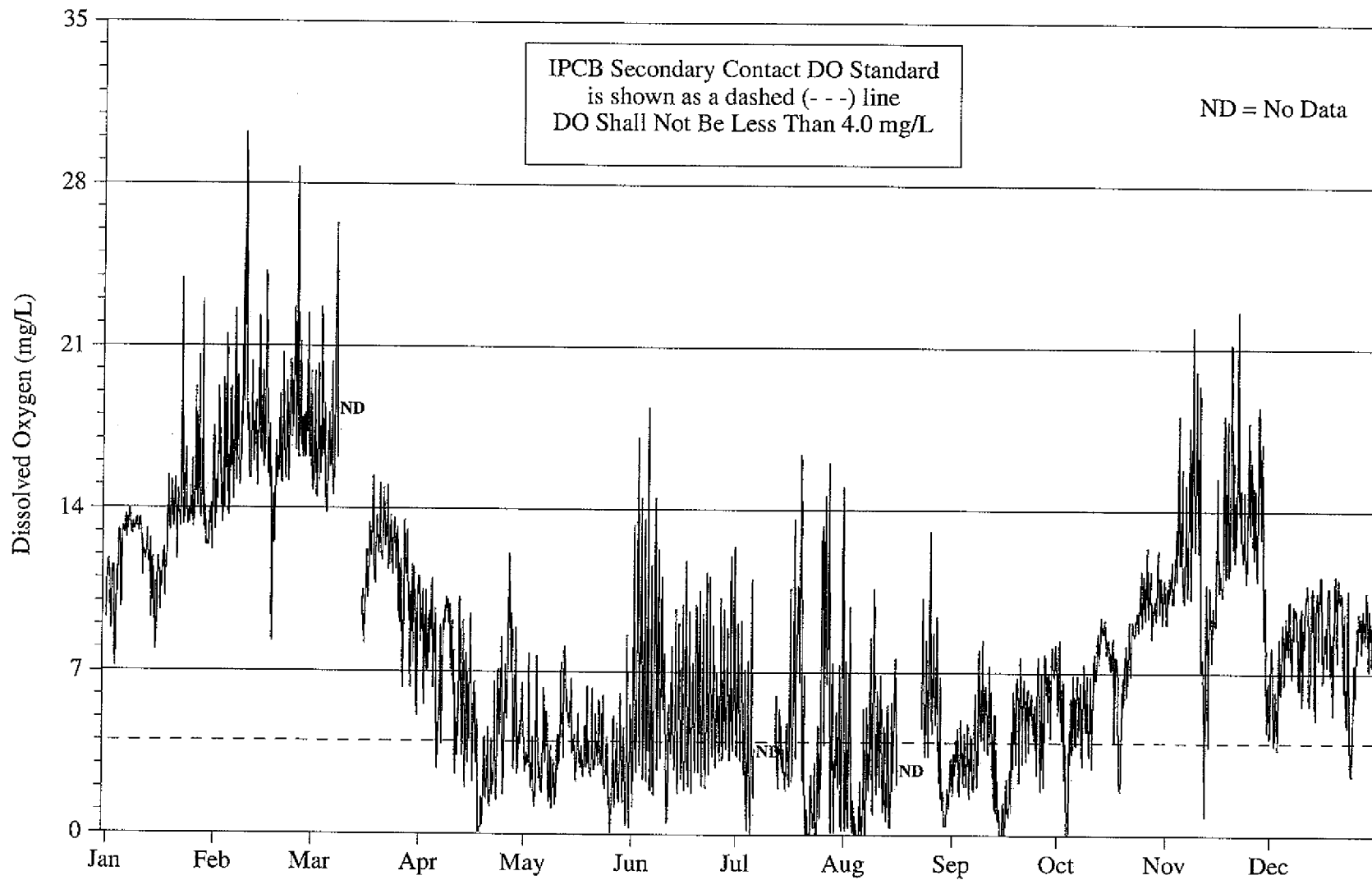


FIGURE 17: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT C&W INDIANA RAILROAD ON THE LITTLE CALUMET RIVER FROM JANUARY 2006 THROUGH DECEMBER 2006

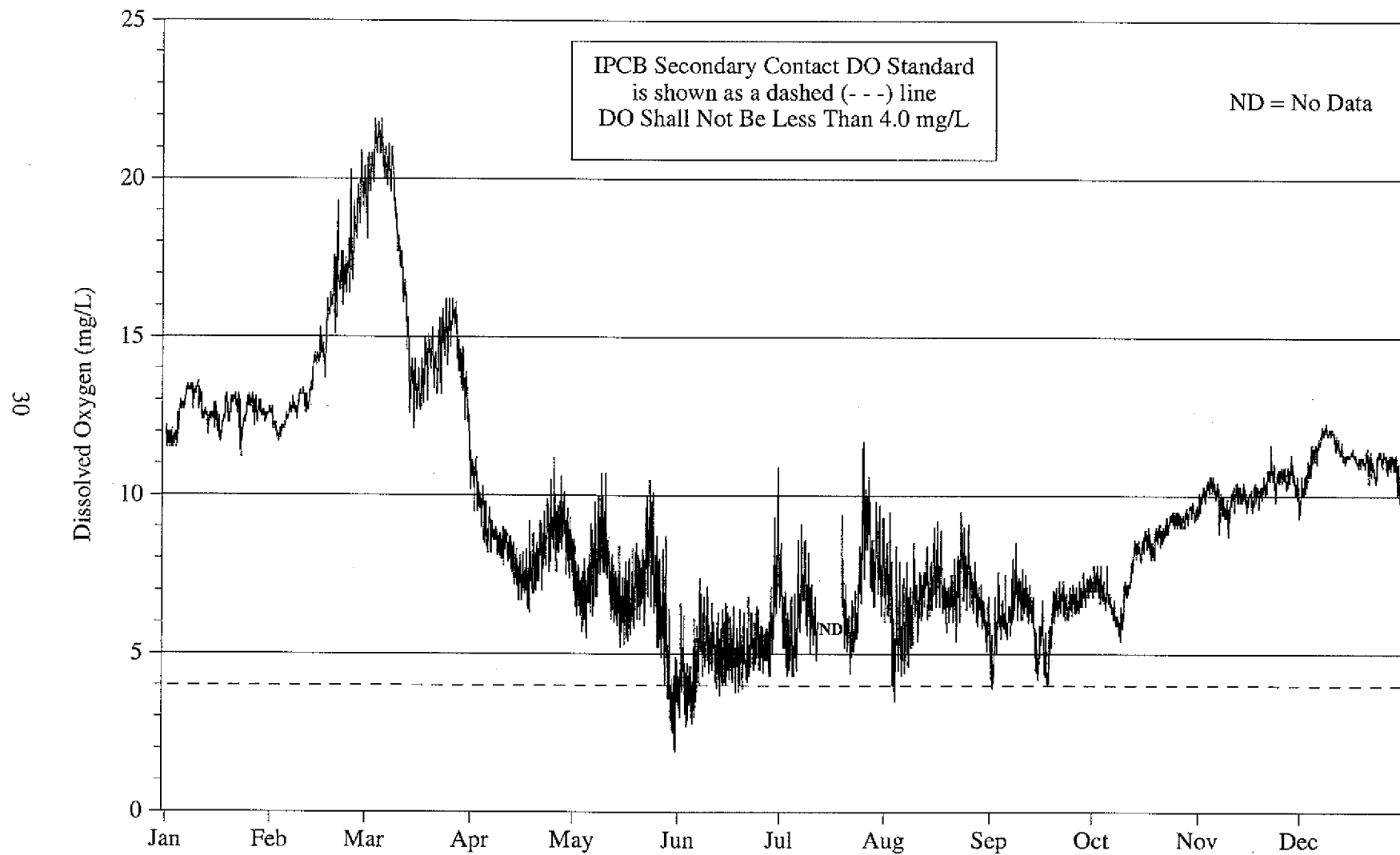


FIGURE 18: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT HALSTED STREET ON THE LITTLE CALUMET RIVER FROM JANUARY 2006 THROUGH DECEMBER 2006

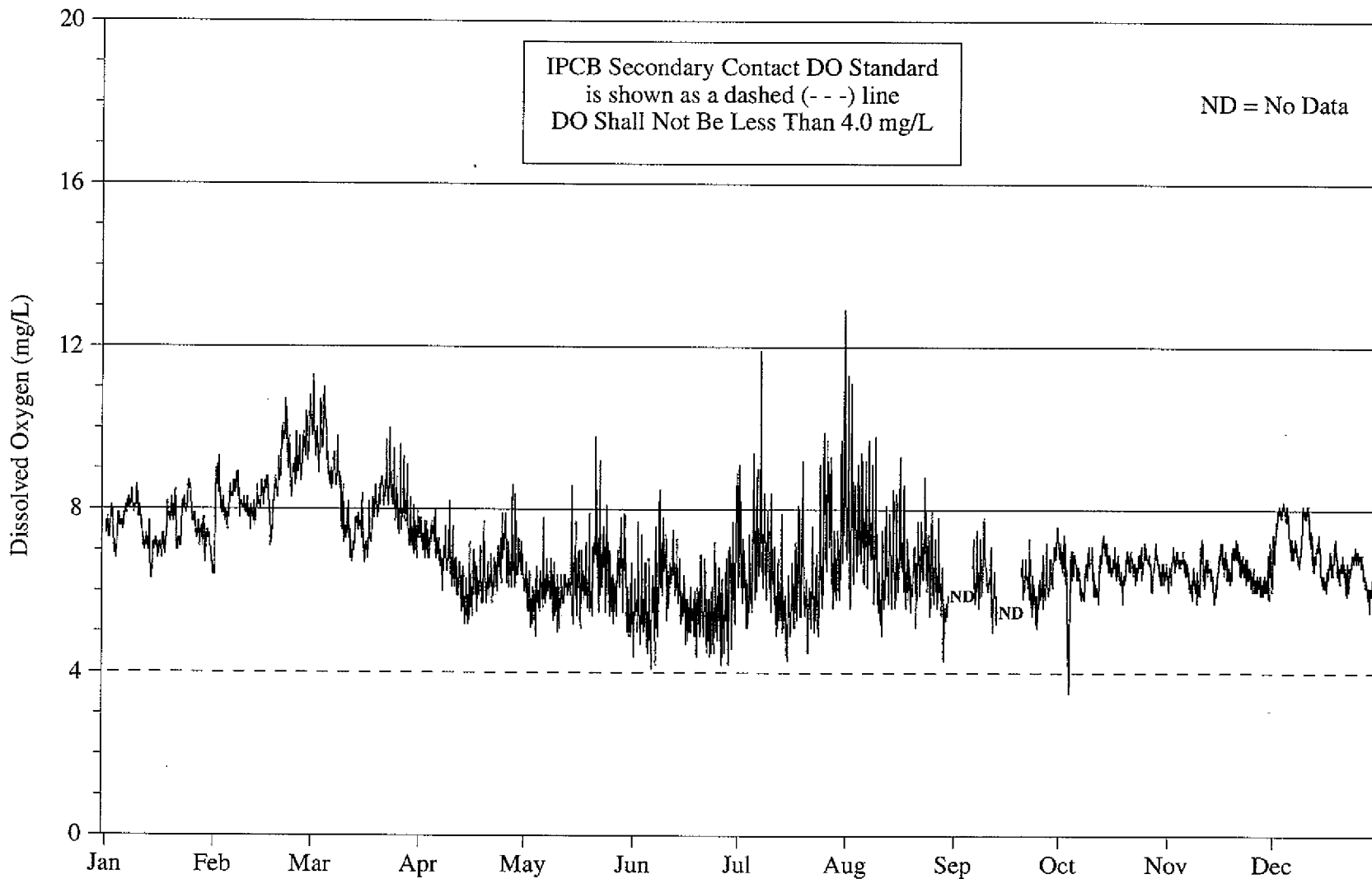


FIGURE 19: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT CICERO AVENUE ON THE CALUMET-SAG CHANNEL FROM JANUARY 2006 THROUGH DECEMBER 2006

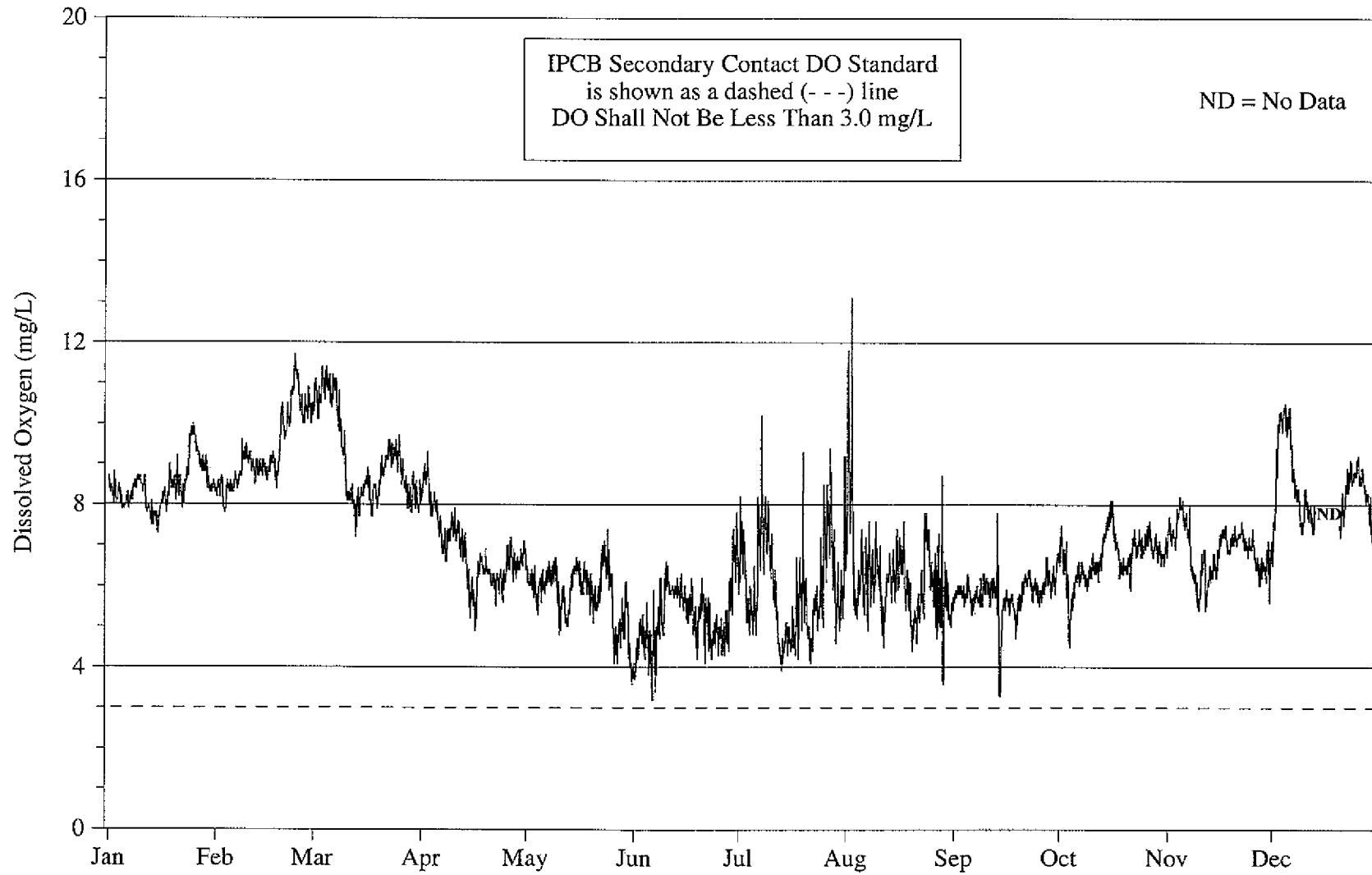


FIGURE 20: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT 104TH AVENUE ON THE CALUMET-SAG CHANNEL FROM JANUARY 2006 THROUGH DECEMBER 2006

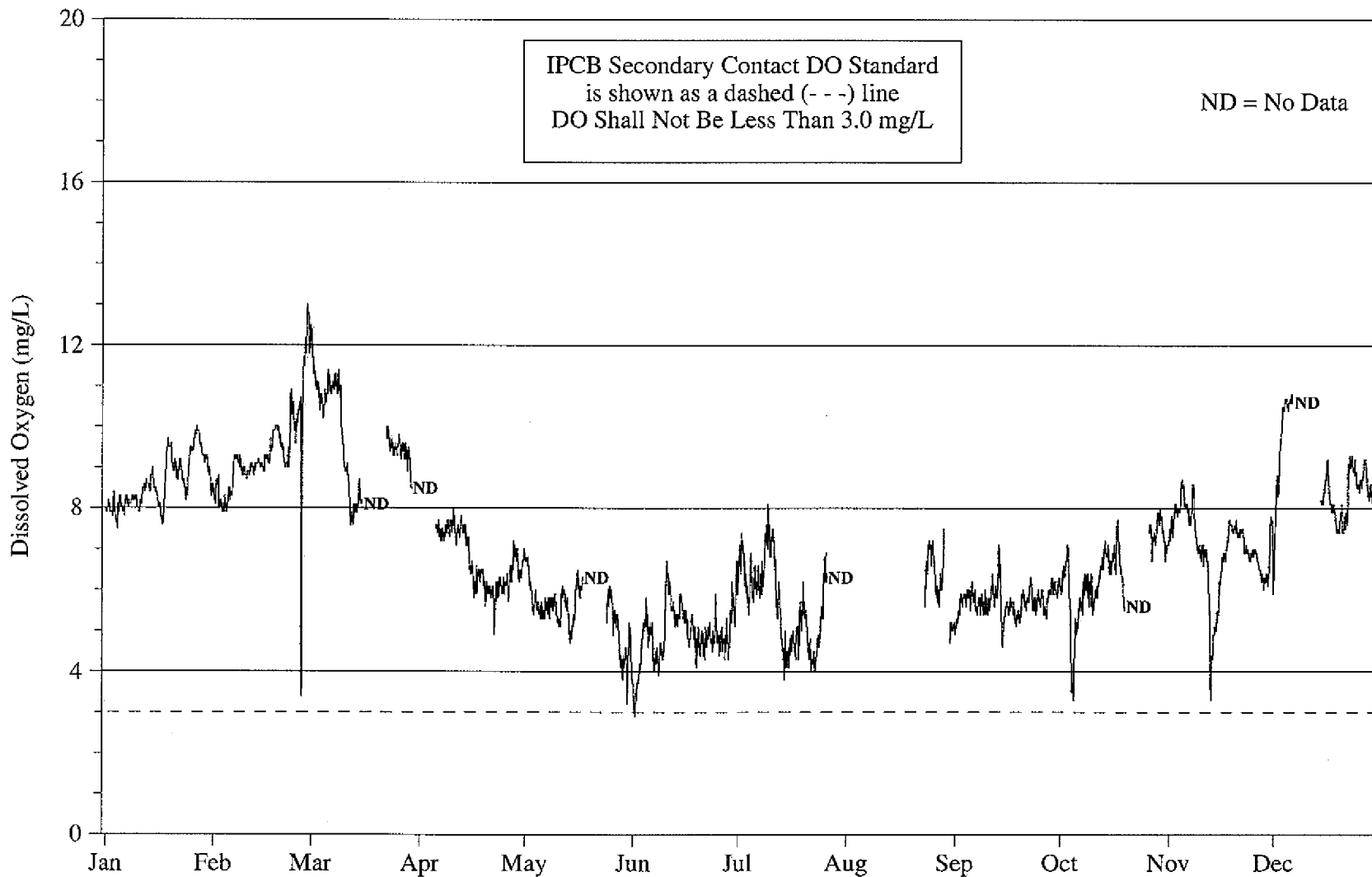
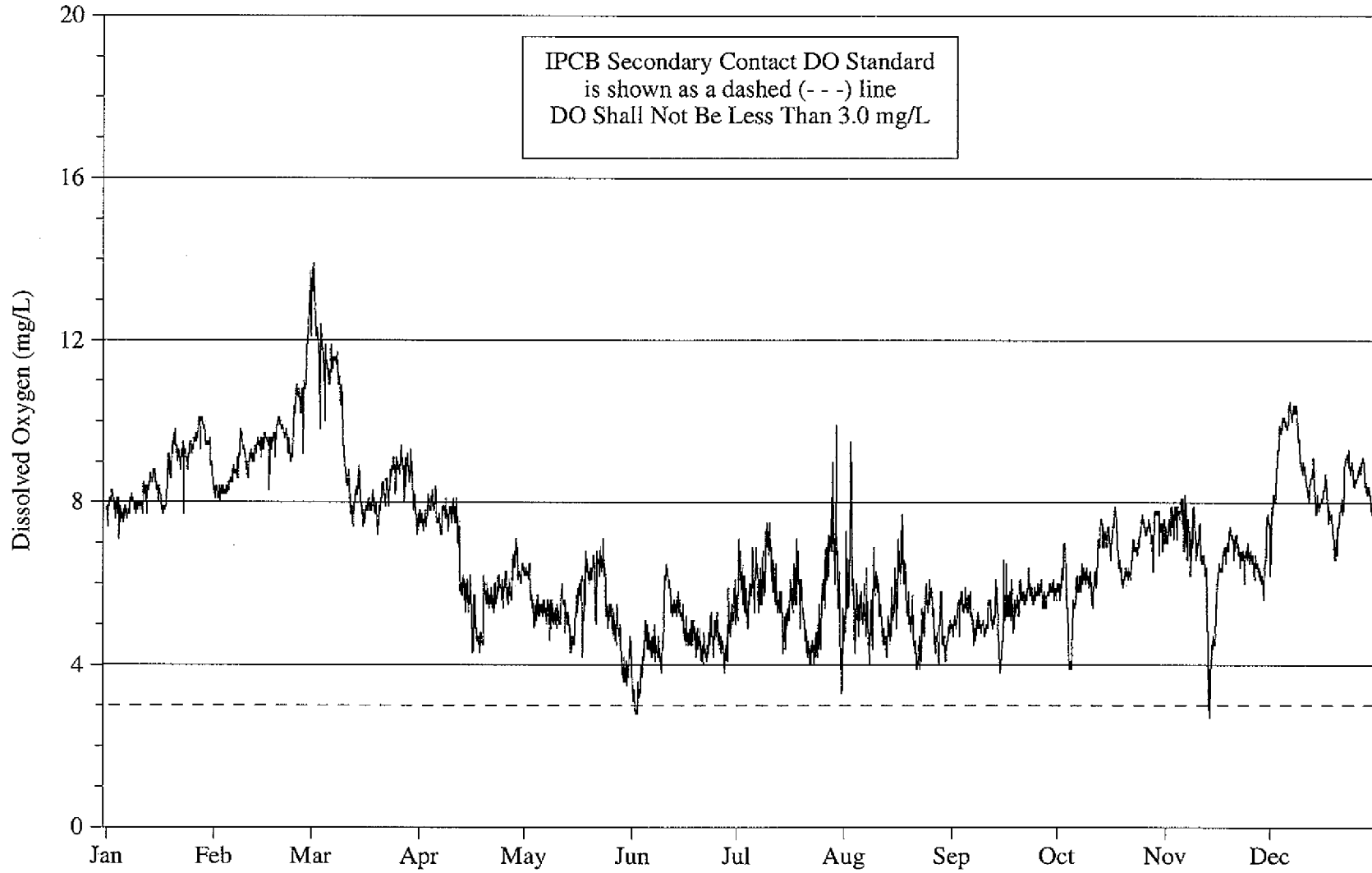


FIGURE 21: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT ROUTE 83 ON THE CALUMET-SAG CHANNEL FROM JANUARY 2006 THROUGH DECEMBER 2006



REFERENCES

Chapman, G., "Water Quality Criteria for Dissolved Oxygen," EPA 440/5-86-003, United States Environmental Protection Agency, Office of Water Regulations and Standards, Washington, D.C., 1986.

Lanyon, R., "Description of the Chicago Waterway System," Use Attainability Analysis Study Conducted by Illinois Environmental Protection Agency in Cooperation with Metropolitan Water Reclamation District of Greater Chicago, Illinois, May 2002.

APPENDIX A

WEEKLY DO SUMMARY STATISTICS AT ALL DEEP-DRAFT
MONITORING STATIONS DURING 2006

TABLE A-1: WEEKLY DO SUMMARY STATISTICS AT MAIN STREET
ON THE NORTH SHORE CHANNEL DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	6.1	6.8	6.4	100
01/02/06 - 01/08/06	168	4.8	7.9	6.2	98
01/09/06 - 01/15/06	168	6.0	8.8	7.5	100
01/16/06 - 01/22/06	168	7.0	9.6	8.5	100
01/23/06 - 01/29/06	168	6.4	11.9	9.4	100
01/30/06 - 02/05/06	167	8.8	25.0	15.3	100
02/06/06 - 02/12/06	168	21.2	33.4	29.0	100
02/13/06 - 02/19/06	168	13.6	31.4	22.7	100
02/20/06 - 02/26/06	168	15.2	23.7	19.5	100
02/27/06 - 03/05/06	168	16.3	31.6	26.7	100
03/06/06 - 03/12/06	168	7.4	21.0	13.3	100
03/13/06 - 03/19/06	168	7.9	15.4	12.7	100
03/20/06 - 03/26/06	168	13.3	21.1	16.1	100
03/27/06 - 04/02/06	167	5.5	13.1	9.1	100
04/03/06 - 04/09/06	167	2.9	7.1	5.4	64
04/10/06 - 04/16/06	168	5.9	14.3	8.0	100
04/17/06 - 04/23/06	168	4.4	11.0	6.7	94
04/24/06 - 04/30/06	168	4.9	11.6	8.2	99
05/01/06 - 05/07/06	168	5.0	9.3	7.5	100
05/08/06 - 05/14/06	167	7.6	10.6	9.1	100
05/15/06 - 05/21/06	168	7.9	10.3	9.4	100
05/22/06 - 05/28/06	168	7.3	11.2	9.6	100
05/29/06 - 06/04/06	168	7.0	11.7	9.7	100
06/05/06 - 06/11/06	168	3.5	10.1	8.2	88
06/12/06 - 06/18/06	168	5.2	8.6	7.6	100
06/19/06 - 06/25/06	169	4.5	8.8	7.6	99
06/26/06 - 07/02/06	168	5.0	8.3	6.7	100
07/03/06 - 07/09/06	168	5.4	9.1	7.2	100
07/10/06 - 07/16/06	168	5.4	9.8	7.3	100
07/17/06 - 07/23/06	37	6.6	7.7	7.3	100
07/24/06 - 07/30/06	131	4.9	9.9	7.4	99
07/31/06 - 08/06/06	37	6.7	10.4	8.9	100
08/07/06 - 08/13/06	130	7.3	9.1	8.1	100

TABLE A-1 (Continued): WEEKLY DO SUMMARY STATISTICS AT
MAIN STREET ON THE NORTH SHORE CHANNEL DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	4.8	8.4	7.1	98
08/21/06 - 08/27/06	168	4.4	7.8	6.4	93
08/28/06 - 09/03/06	168	5.1	8.1	6.9	100
09/04/06 - 09/10/06	168	5.3	8.2	7.0	100
09/11/06 - 09/17/06	168	0.4	7.0	5.2	58
09/18/06 - 09/24/06	168	4.6	9.1	6.6	97
09/25/06 - 10/01/06	85	0.2	8.9	6.6	75
10/02/06 - 10/08/06			NO DATA		
10/09/06 - 10/15/06	131	5.5	9.0	6.9	100
10/16/06 - 10/22/06	168	2.8	6.1	4.4	21
10/23/06 - 10/29/06	168	4.0	6.7	4.9	39
10/30/06 - 11/05/06	169	4.6	14.4	8.9	93
11/06/06 - 11/12/06	168	8.3	19.8	13.9	100
11/13/06 - 11/19/06	168	7.0	19.8	14.5	100
11/20/06 - 11/26/06	168	14.0	20.1	17.2	100
11/27/06 - 12/03/06	168	0.0	18.4	7.4	59
12/04/06 - 12/10/06	168	0.0	6.2	2.1	5
12/11/06 - 12/17/06	168	3.7	8.7	6.7	91
12/18/06 - 12/24/06	168	4.7	11.3	8.2	98
12/25/06 - 12/31/06	168	4.1	7.1	5.3	58

TABLE A-2: WEEKLY DO SUMMARY STATISTICS AT FOSTER AVENUE
ON THE NORTH SHORE CHANNEL DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	8.2	9.5	8.6	100
01/02/06 - 01/08/06	168	7.2	9.6	8.4	100
01/09/06 - 01/15/06	168	6.4	9.6	8.4	100
01/16/06 - 01/22/06	168	7.0	9.6	8.5	100
01/23/06 - 01/29/06	168	6.3	9.8	8.7	100
01/30/06 - 02/05/06	168	6.6	9.4	8.5	100
02/06/06 - 02/12/06	168	7.6	9.9	8.8	100
02/13/06 - 02/19/06	168	6.7	11.2	9.0	100
02/20/06 - 02/26/06	168	8.1	11.1	8.9	100
02/27/06 - 03/05/06	38	8.3	8.9	8.5	100
03/06/06 - 03/12/06	131	6.7	9.6	8.3	100
03/13/06 - 03/19/06	168	6.2	9.4	8.4	100
03/20/06 - 03/26/06	168	7.3	10.5	8.2	100
03/27/06 - 04/02/06	167	6.0	9.3	8.1	100
04/03/06 - 04/09/06	167	6.8	9.6	8.3	100
04/10/06 - 04/16/06	168	6.4	8.7	7.8	100
04/17/06 - 04/23/06	168	5.6	9.7	7.9	100
04/24/06 - 04/30/06	168	5.9	9.5	7.4	100
05/01/06 - 05/07/06	168	5.3	8.8	7.5	100
05/08/06 - 05/14/06	168	6.5	8.9	7.7	100
05/15/06 - 05/21/06	168	6.7	9.6	8.0	100
05/22/06 - 05/28/06	168	4.5	8.5	7.3	100
05/29/06 - 06/04/06	168	4.0	9.1	7.4	99
06/05/06 - 06/11/06	168	5.2	8.4	7.5	100
06/12/06 - 06/18/06	168	5.7	8.5	7.5	100
06/19/06 - 06/25/06	168	6.0	8.2	7.3	100
06/26/06 - 07/02/06	168	6.1	8.0	7.1	100
07/03/06 - 07/09/06	168	5.7	8.2	7.4	100
07/10/06 - 07/16/06	168	5.8	8.1	7.4	100
07/17/06 - 07/23/06	168	6.5	7.9	7.1	100
07/24/06 - 07/30/06	168	6.0	7.9	7.2	100
07/31/06 - 08/06/06	168	5.7	8.3	7.3	100
08/07/06 - 08/13/06	168	5.9	8.3	7.3	100

TABLE A-2 (Continued): WEEKLY DO SUMMARY STATISTICS AT
FOSTER AVENUE ON THE NORTH SHORE CHANNEL DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	5.4	8.0	7.1	100
08/21/06 - 08/27/06	168	5.6	8.2	7.3	100
08/28/06 - 09/03/06	168	5.3	8.1	7.1	100
09/04/06 - 09/10/06	167	5.0	8.3	7.1	100
09/11/06 - 09/17/06	168	5.6	8.0	6.9	100
09/18/06 - 09/24/06	168	5.0	7.6	7.0	100
09/25/06 - 10/01/06	168	4.5	8.5	7.0	100
10/02/06 - 10/08/06	168	4.7	7.5	6.4	100
10/09/06 - 10/15/06	168	5.5	7.8	6.9	100
10/16/06 - 10/22/06	168	5.3	7.7	6.7	100
10/23/06 - 10/29/06	168	5.9	8.8	7.2	100
10/30/06 - 11/05/06	169	6.5	8.6	7.4	100
11/06/06 - 11/12/06	168	5.9	8.5	7.5	100
11/13/06 - 11/19/06	168	6.9	8.6	7.6	100
11/20/06 - 11/26/06	168	7.2	9.1	7.9	100
11/27/06 - 12/03/06	168	5.6	9.1	7.8	100
12/04/06 - 12/10/06	37	7.5	8.7	8.1	100
12/11/06 - 12/17/06	132	7.4	8.8	8.1	100
12/18/06 - 12/24/06	168	6.9	9.3	8.4	100
12/25/06 - 12/31/06	168	6.6	9.3	8.2	100

TABLE A-3: WEEKLY DO SUMMARY STATISTICS AT ADDISON STREET
ON THE NORTH BRANCH CHICAGO RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	8.7	9.7	9.1	100
01/02/06 - 01/08/06	168	7.7	10.0	9.0	100
01/09/06 - 01/15/06	168	6.4	10.0	8.5	100
01/16/06 - 01/22/06	168	7.2	9.8	8.7	100
01/23/06 - 01/29/06	168	7.3	9.7	9.0	100
01/30/06 - 02/05/06	168	7.5	10.3	9.4	100
02/06/06 - 02/12/06	168	8.3	10.1	9.2	100
02/13/06 - 02/19/06	168	8.0	12.0	9.8	100
02/20/06 - 02/26/06	167	8.8	11.1	9.6	100
02/27/06 - 03/05/06	168	8.0	9.3	8.6	100
03/06/06 - 03/12/06	168	6.7	10.3	8.8	100
03/13/06 - 03/19/06	168	7.5	10.6	9.7	100
03/20/06 - 03/26/06	168	8.5	11.0	9.4	100
03/27/06 - 04/02/06	168	7.4	9.5	8.4	100
04/03/06 - 04/09/06	168	7.1	10.0	9.0	100
04/10/06 - 04/16/06	168	6.1	9.0	8.0	100
04/17/06 - 04/23/06	168	6.2	9.1	7.7	100
04/24/06 - 04/30/06	167	5.6	8.7	6.9	100
05/01/06 - 05/07/06	168	6.4	8.4	7.4	100
05/08/06 - 05/14/06	168	6.2	8.6	7.3	100
05/15/06 - 05/21/06	168	6.1	8.9	7.5	100
05/22/06 - 05/28/06	36	6.4	7.5	7.0	100
05/29/06 - 06/04/06	133	2.9	7.6	6.3	97
06/05/06 - 06/11/06	168	5.4	7.6	6.7	100
06/12/06 - 06/18/06	168	5.0	7.6	6.6	100
06/19/06 - 06/25/06	168	5.2	7.3	6.3	100
06/26/06 - 07/02/06	169	2.9	7.5	6.3	99
07/03/06 - 07/09/06	168	4.7	7.6	6.6	100
07/10/06 - 07/16/06	168	5.1	7.4	6.5	100
07/17/06 - 07/23/06	168	4.3	7.1	6.2	100
07/24/06 - 07/30/06	168	5.1	7.0	6.4	100
07/31/06 - 08/06/06	169	0.0	7.4	6.2	98
08/07/06 - 08/13/06	168	4.8	7.6	6.4	100

TABLE A-3 (Continued): WEEKLY DO SUMMARY STATISTICS AT
ADDISON STREET ON THE NORTH BRANCH CHICAGO RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	5.0	7.4	6.5	100
08/21/06 - 08/27/06	168	5.5	7.6	6.9	100
08/28/06 - 09/03/06	168	4.6	7.4	6.5	100
09/04/06 - 09/10/06	168	5.5	7.9	6.8	100
09/11/06 - 09/17/06	168	6.2	8.2	7.1	100
09/18/06 - 09/24/06	168	4.9	7.9	6.9	100
09/25/06 - 10/01/06	168	5.2	8.2	6.9	100
10/02/06 - 10/08/06	168	5.8	7.5	6.9	100
10/09/06 - 10/15/06	168	5.5	8.3	7.0	100
10/16/06 - 10/22/06	168	5.4	8.0	7.1	100
10/23/06 - 10/29/06	168	6.4	8.8	7.6	100
10/30/06 - 11/05/06	169	6.9	8.4	7.6	100
11/06/06 - 11/12/06	168	6.3	9.1	7.4	100
11/13/06 - 11/19/06	168	7.3	8.7	8.0	100
11/20/06 - 11/26/06	168	7.2	8.9	7.9	100
11/27/06 - 12/03/06	168	6.0	10.1	8.4	100
12/04/06 - 12/10/06	168	8.7	10.9	9.6	100
12/11/06 - 12/17/06	169	7.9	10.5	9.3	100
12/18/06 - 12/24/06	168	7.6	10.4	9.4	100
12/25/06 - 12/31/06	168	7.4	10.4	9.4	100

TABLE A-4: WEEKLY DO SUMMARY STATISTICS AT FULLERTON AVENUE
ON THE NORTH BRANCH CHICAGO RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	8.3	9.6	9.1	100
01/02/06 - 01/08/06	168	7.7	9.7	8.8	100
01/09/06 - 01/15/06	168	6.2	9.5	8.1	100
01/16/06 - 01/22/06	168	6.7	8.7	8.0	100
01/23/06 - 01/29/06	168	6.2	9.4	8.5	100
01/30/06 - 02/05/06	167	7.1	10.0	9.1	100
02/06/06 - 02/12/06	168	8.5	10.2	9.3	100
02/13/06 - 02/19/06	168	7.0	11.0	9.0	100
02/20/06 - 02/26/06	168	8.6	11.0	9.4	100
02/27/06 - 03/05/06	168	8.0	9.4	8.6	100
03/06/06 - 03/12/06	168	6.1	9.8	8.4	100
03/13/06 - 03/19/06	168	6.3	9.9	9.1	100
03/20/06 - 03/26/06	168	4.2	10.4	8.0	100
03/27/06 - 04/02/06	168	3.4	9.0	7.6	98
04/03/06 - 04/09/06	167	5.6	9.8	8.5	100
04/10/06 - 04/16/06	168	6.1	8.5	7.5	100
04/17/06 - 04/23/06	168	4.2	7.8	6.2	100
04/24/06 - 04/30/06	168	3.6	7.8	6.2	97
05/01/06 - 05/07/06	168	5.9	7.8	6.7	100
05/08/06 - 05/14/06	36	5.6	6.8	6.2	100
05/15/06 - 05/21/06	132	5.8	7.9	6.8	100
05/22/06 - 05/28/06	168	3.4	7.2	6.0	98
05/29/06 - 06/04/06	168	2.2	6.6	5.4	97
06/05/06 - 06/11/06	168	4.4	7.2	5.8	100
06/12/06 - 06/18/06	168	4.0	6.9	5.6	100
06/19/06 - 06/25/06	168	3.9	6.3	5.5	99
06/26/06 - 07/02/06	168	1.7	7.1	5.5	98
07/03/06 - 07/09/06	168	3.9	6.5	5.6	99
07/10/06 - 07/16/06	168	4.4	6.7	5.8	100
07/17/06 - 07/23/06	167	2.8	6.3	5.4	98
07/24/06 - 07/30/06	168	4.7	6.2	5.5	100
07/31/06 - 08/06/06	168	0.0	6.3	5.1	91
08/07/06 - 08/13/06	36	3.3	5.2	4.4	78

TABLE A-4 (Continued): WEEKLY DO SUMMARY STATISTICS AT
FULLERTON AVENUE ON THE NORTH BRANCH CHICAGO RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	132	4.7	6.3	5.6	100
08/21/06 - 08/27/06	168	4.8	7.3	6.2	100
08/28/06 - 09/03/06	168	3.0	6.8	5.8	98
09/04/06 - 09/10/06	167	5.0	7.0	6.0	100
09/11/06 - 09/17/06	168	3.4	7.2	6.0	99
09/18/06 - 09/24/06	168	3.7	7.5	6.0	98
09/25/06 - 10/01/06	168	4.7	7.5	6.5	100
10/02/06 - 10/08/06	168	4.9	7.5	6.5	100
10/09/06 - 10/15/06	168	5.4	7.8	6.7	100
10/16/06 - 10/22/06	168	4.9	7.3	6.5	100
10/23/06 - 10/29/06	168	6.1	8.1	7.3	100
10/30/06 - 11/05/06	169	6.4	7.9	7.2	100
11/06/06 - 11/12/06	168	5.7	8.7	7.0	100
11/13/06 - 11/19/06	168	7.0	8.2	7.6	100
11/20/06 - 11/26/06	168	6.7	8.3	7.4	100
11/27/06 - 12/03/06	168	4.9	9.8	8.0	100
12/04/06 - 12/10/06	168	8.4	10.1	9.3	100
12/11/06 - 12/17/06	169	7.4	9.8	8.8	100
12/18/06 - 12/24/06	168	7.3	10.1	8.9	100
12/25/06 - 12/31/06	168	7.5	10.1	9.1	100

TABLE A-5: WEEKLY DO SUMMARY STATISTICS AT KINZIE STREET
ON THE NORTH BRANCH CHICAGO RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	6.6	8.4	7.6	100
01/02/06 - 01/08/06	168	6.9	9.2	8.4	100
01/09/06 - 01/15/06	167	6.6	8.7	7.7	100
01/16/06 - 01/22/06	168	6.6	9.0	8.0	100
01/23/06 - 01/29/06	168	6.6	9.6	8.4	100
01/30/06 - 02/05/06	168	6.0	9.3	8.3	100
02/06/06 - 02/12/06	168	8.1	9.5	9.0	100
02/13/06 - 02/19/06	168	7.7	11.7	9.3	100
02/20/06 - 02/26/06	168	8.6	11.4	9.6	100
02/27/06 - 03/05/06	168	7.9	9.1	8.5	100
03/06/06 - 03/12/06	168	6.5	9.6	8.3	100
03/13/06 - 03/19/06	168	6.7	9.9	9.1	100
03/20/06 - 03/26/06	168	7.1	10.0	8.6	100
03/27/06 - 04/02/06	168	6.3	7.9	7.2	100
04/03/06 - 04/09/06	167	5.3	10.0	8.0	100
04/10/06 - 04/16/06	168	6.6	9.1	7.9	100
04/17/06 - 04/23/06	168	4.1	9.2	7.0	100
04/24/06 - 04/30/06	168	2.9	8.6	6.6	86
05/01/06 - 05/07/06	168	5.6	8.0	6.6	100
05/08/06 - 05/14/06	168	5.3	7.3	6.3	100
05/15/06 - 05/21/06	168	5.5	7.3	6.5	100
05/22/06 - 05/28/06	168	4.9	7.2	6.0	100
05/29/06 - 06/04/06	168	4.0	6.5	5.5	100
06/05/06 - 06/11/06	168	4.5	6.9	5.9	100
06/12/06 - 06/18/06	168	4.3	6.8	5.7	100
06/19/06 - 06/25/06	168	4.4	6.1	5.5	100
06/26/06 - 07/02/06	168	3.7	6.7	5.6	98
07/03/06 - 07/09/06	168	3.8	6.6	5.7	99
07/10/06 - 07/16/06	168	3.7	6.7	5.8	99
07/17/06 - 07/23/06	168	1.3	6.6	5.3	92
07/24/06 - 07/30/06	168	4.6	6.2	5.5	100
07/31/06 - 08/06/06	168	0.8	6.8	4.9	82
08/07/06 - 08/13/06	168	3.9	6.6	5.5	99

TABLE A-5 (Continued): WEEKLY DO SUMMARY STATISTICS AT
KINZIE STREET ON THE NORTH BRANCH CHICAGO RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	4.2	6.3	5.5	100
08/21/06 - 08/27/06	168	4.5	6.9	5.7	100
08/28/06 - 09/03/06	168	2.2	6.2	4.8	84
09/04/06 - 09/10/06	168	4.4	7.0	6.1	100
09/11/06 - 09/17/06	168	4.3	7.1	5.9	100
09/18/06 - 09/24/06	168	3.2	7.2	5.5	93
09/25/06 - 10/01/06	168	4.7	7.5	6.3	100
10/02/06 - 10/08/06	168	4.7	7.1	6.0	100
10/09/06 - 10/15/06	168	4.6	8.2	6.4	100
10/16/06 - 10/22/06	168	5.4	7.8	6.4	100
10/23/06 - 10/29/06	168	5.3	7.5	6.5	100
10/30/06 - 11/05/06	169	5.9	7.5	6.6	100
11/06/06 - 11/12/06	168	5.6	7.9	6.6	100
11/13/06 - 11/19/06	168	6.9	7.8	7.4	100
11/20/06 - 11/26/06	168	6.6	8.3	7.3	100
11/27/06 - 12/03/06	167	4.8	9.8	7.7	100
12/04/06 - 12/10/06	168	8.2	10.8	9.2	100
12/11/06 - 12/17/06	168	7.3	9.2	8.4	100
12/18/06 - 12/24/06	168	7.2	9.9	8.3	100
12/25/06 - 12/31/06	168	7.5	9.8	8.7	100

TABLE A-6: WEEKLY DO SUMMARY STATISTICS AT CLARK STREET
ON THE CHICAGO RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	9.5	10.1	9.8	100
01/02/06 - 01/08/06	168	8.5	10.1	9.3	100
01/09/06 - 01/15/06	168	7.9	10.0	8.9	100
01/16/06 - 01/22/06	168	8.1	10.2	9.5	100
01/23/06 - 01/29/06	168	8.1	11.0	9.9	100
01/30/06 - 02/05/06	168	7.1	10.4	9.0	100
02/06/06 - 02/12/06	168	9.5	11.7	10.6	100
02/13/06 - 02/19/06	168	9.5	11.6	10.4	100
02/20/06 - 02/26/06	168	10.5	12.8	11.5	100
02/27/06 - 03/05/06	168	10.8	12.6	11.6	100
03/06/06 - 03/12/06	168	8.2	12.1	10.3	100
03/13/06 - 03/19/06	168	7.3	10.1	9.0	100
03/20/06 - 03/26/06	168	8.9	10.3	9.6	100
03/27/06 - 04/02/06	168	8.7	9.8	9.3	100
04/03/06 - 04/09/06	167	6.7	10.5	9.2	100
04/10/06 - 04/16/06	168	7.8	10.0	9.0	100
04/17/06 - 04/23/06	168	6.9	9.9	8.6	100
04/24/06 - 04/30/06	168	6.5	9.5	8.4	100
05/01/06 - 05/07/06	168	6.5	9.5	8.1	100
05/08/06 - 05/14/06	168	7.1	10.0	8.9	100
05/15/06 - 05/21/06	168	7.8	9.5	8.4	100
05/22/06 - 05/28/06	168	6.9	10.5	9.0	100
05/29/06 - 06/04/06	168	7.5	10.7	9.3	100
06/05/06 - 06/11/06	168	6.8	10.5	9.3	100
06/12/06 - 06/18/06	168	7.1	8.7	8.2	100
06/19/06 - 06/25/06	168	7.8	9.4	8.7	100
06/26/06 - 07/02/06	35	8.1	8.9	8.5	100
07/03/06 - 07/09/06	109	7.7	8.7	8.3	100
07/10/06 - 07/16/06	168	7.9	9.3	8.6	100
07/17/06 - 07/23/06	168	7.0	8.7	7.8	100
07/24/06 - 07/30/06	35	6.9	7.6	7.4	100
07/31/06 - 08/06/06	134	8.4	10.8	9.6	100
08/07/06 - 08/13/06	167	7.6	9.4	8.3	100

TABLE A-6 (Continued): WEEKLY DO SUMMARY STATISTICS AT
CLARK STREET ON THE CHICAGO RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	167	7.4	8.5	8.0	100
08/21/06 - 08/27/06	168	6.8	8.0	7.4	100
08/28/06 - 09/03/06	168	5.8	7.4	7.1	100
09/04/06 - 09/10/06	168	6.7	8.1	7.6	100
09/11/06 - 09/17/06	168	6.3	7.8	7.3	100
09/18/06 - 09/24/06	168	6.7	8.4	7.7	100
09/25/06 - 10/01/06	168	6.3	9.0	8.3	100
10/02/06 - 10/08/06	168	6.2	9.0	7.6	100
10/09/06 - 10/15/06	168	5.9	9.6	8.5	100
10/16/06 - 10/22/06	168	6.9	9.7	8.6	100
10/23/06 - 10/29/06	168	7.1	8.8	8.1	100
10/30/06 - 11/05/06	169	8.4	10.2	9.5	100
11/06/06 - 11/12/06	168	7.5	9.3	8.5	100
11/13/06 - 11/19/06	168	7.7	9.6	8.5	100
11/20/06 - 11/26/06	168	8.3	9.9	9.2	100
11/27/06 - 12/03/06	168	7.4	11.8	9.2	100
12/04/06 - 12/10/06	168	9.8	11.9	10.4	100
12/11/06 - 12/17/06	168	8.4	12.5	10.0	100
12/18/06 - 12/24/06	168	8.2	11.3	9.8	100
12/25/06 - 12/31/06	168	8.9	11.7	9.9	100

TABLE A-7: WEEKLY DO SUMMARY STATISTICS AT LOOMIS STREET
ON THE SOUTH BRANCH CHICAGO RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	8.9	9.0	8.9	100
01/02/06 - 01/08/06	168	7.5	9.5	8.7	100
01/09/06 - 01/15/06	168	7.9	9.4	8.8	100
01/16/06 - 01/22/06	168	7.5	9.1	8.5	100
01/23/06 - 01/29/06	168	8.3	9.8	9.0	100
01/30/06 - 02/05/06	168	7.1	10.2	9.1	100
02/06/06 - 02/12/06	168	7.4	10.3	9.3	100
02/13/06 - 02/19/06	168	7.9	11.4	9.6	100
02/20/06 - 02/26/06	168	9.6	12.5	11.2	100
02/27/06 - 03/05/06	168	8.6	10.1	9.3	100
03/06/06 - 03/12/06	168	7.3	9.2	8.5	100
03/13/06 - 03/19/06	168	6.9	10.8	9.1	100
03/20/06 - 03/26/06	168	8.9	9.8	9.2	100
03/27/06 - 04/02/06	168	7.3	9.0	8.0	100
04/03/06 - 04/09/06	167	6.0	9.3	7.9	100
04/10/06 - 04/16/06	168	7.9	9.3	8.5	100
04/17/06 - 04/23/06	168	4.5	8.8	7.2	100
04/24/06 - 04/30/06	168	6.7	8.4	7.6	100
05/01/06 - 05/07/06	168	6.2	8.1	6.9	100
05/08/06 - 05/14/06	168	5.8	8.6	7.0	100
05/15/06 - 05/21/06	168	5.6	7.3	6.5	100
05/22/06 - 05/28/06	168	5.5	7.2	6.4	100
05/29/06 - 06/04/06	168	4.7	7.6	6.4	100
06/05/06 - 06/11/06	167	5.4	7.5	6.7	100
06/12/06 - 06/18/06	168	5.0	6.9	6.1	100
06/19/06 - 06/25/06	168	5.2	7.1	6.2	100
06/26/06 - 07/02/06	168	4.3	8.0	6.2	100
07/03/06 - 07/09/06	168	5.8	7.5	6.7	100
07/10/06 - 07/16/06	168	6.0	7.0	6.6	100
07/17/06 - 07/23/06	168	2.5	7.1	5.7	91
07/24/06 - 07/30/06	168	5.5	7.0	6.3	100
07/31/06 - 08/06/06	168	2.2	7.7	6.1	94
08/07/06 - 08/13/06	168	6.2	7.6	7.0	100

TABLE A-7 (Continued): WEEKLY DO SUMMARY STATISTICS AT
LOOMIS STREET ON THE SOUTH BRANCH CHICAGO RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	5.5	7.5	6.7	100
08/21/06 - 08/27/06	168	5.6	7.0	6.4	100
08/28/06 - 09/03/06	168	4.2	8.5	6.2	100
09/04/06 - 09/10/06	168	6.3	7.7	7.0	100
09/11/06 - 09/17/06	168	4.0	8.0	6.7	99
09/18/06 - 09/24/06	168	5.7	8.4	7.1	100
09/25/06 - 10/01/06	168	6.4	10.4	7.7	100
10/02/06 - 10/08/06	168	4.5	8.2	6.8	100
10/09/06 - 10/15/06	168	5.8	8.9	7.0	100
10/16/06 - 10/22/06	168	6.3	8.9	7.3	100
10/23/06 - 10/29/06	168	5.7	7.5	6.7	100
10/30/06 - 11/05/06	169	5.7	8.0	7.3	100
11/06/06 - 11/12/06	168	5.9	8.6	7.2	100
11/13/06 - 11/19/06	168	5.5	8.0	7.3	100
11/20/06 - 11/26/06	168	7.4	8.7	7.9	100
11/27/06 - 12/03/06	168	4.3	9.5	7.5	100
12/04/06 - 12/10/06	167	8.0	9.9	9.0	100
12/11/06 - 12/17/06	168	8.0	10.2	9.0	100
12/18/06 - 12/24/06	168	7.5	9.9	8.5	100
12/25/06 - 12/31/06	168	8.6	9.9	9.4	100

TABLE A-8: WEEKLY DO SUMMARY STATISTICS AT 36TH STREET
ON BUBBLY CREEK DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	7.8	8.6	8.1	100
01/02/06 - 01/08/06	168	7.2	8.9	8.0	100
01/09/06 - 01/15/06	168	7.5	9.3	8.6	100
01/16/06 - 01/22/06	168	7.6	9.0	8.1	100
01/23/06 - 01/29/06	168	7.7	10.6	9.3	100
01/30/06 - 02/05/06	168	8.4	10.2	9.1	100
02/06/06 - 02/12/06	168	9.0	14.0	11.7	100
02/13/06 - 02/19/06	168	0.1	15.6	8.5	66
02/20/06 - 02/26/06	168	0.0	1.3	0.3	0
02/27/06 - 03/05/06	168	0.9	11.9	5.3	63
03/06/06 - 03/12/06	168	6.1	12.8	9.2	100
03/13/06 - 03/19/06	168	0.2	9.4	1.5	11
03/20/06 - 03/26/06	168	0.2	3.5	1.9	0
03/27/06 - 04/02/06	168	1.9	12.6	7.0	76
04/03/06 - 04/09/06	167	0.6	7.5	3.6	45
04/10/06 - 04/16/06	168	0.4	6.8	3.1	30
04/17/06 - 04/23/06	58	0.5	5.6	1.7	9
04/24/06 - 04/30/06	110	0.0	5.2	2.2	4
05/01/06 - 05/07/06	168	0.0	3.4	0.9	0
05/08/06 - 05/14/06	168	0.0	3.8	1.2	0
05/15/06 - 05/21/06	168	0.5	6.3	2.4	18
05/22/06 - 05/28/06	127	2.3	6.0	4.3	75
05/29/06 - 06/04/06	168	0.7	6.1	2.4	14
06/05/06 - 06/11/06	168	1.4	13.1	5.7	75
06/12/06 - 06/18/06	168	0.0	3.8	1.1	0
06/19/06 - 06/25/06	168	0.0	4.7	1.9	5
06/26/06 - 07/02/06	168	0.3	5.4	1.8	3
07/03/06 - 07/09/06	82	1.1	12.4	5.4	54
07/10/06 - 07/16/06	111	0.4	6.4	3.0	32
07/17/06 - 07/23/06	168	0.1	6.1	1.6	13
07/24/06 - 07/30/06	168	0.0	3.7	1.1	0
07/31/06 - 08/06/06	168	0.0	6.3	1.6	10
08/07/06 - 08/13/06	168	0.0	6.8	2.1	11

TABLE A-8 (Continued): WEEKLY DO SUMMARY STATISTICS AT
36TH STREET ON BUBBLY CREEK DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	0.3	3.5	1.7	0
08/21/06 - 08/27/06	168	0.7	3.6	1.8	0
08/28/06 - 09/03/06	168	0.0	3.8	0.8	0
09/04/06 - 09/10/06	168	0.7	4.4	2.0	3
09/11/06 - 09/17/06	168	0.0	8.4	1.8	9
09/18/06 - 09/24/06	168	0.0	3.8	1.9	0
09/25/06 - 10/01/06	168	0.7	3.5	2.3	0
10/02/06 - 10/08/06	168	0.0	7.3	1.2	8
10/09/06 - 10/15/06	168	0.1	9.6	3.4	39
10/16/06 - 10/22/06	168	0.0	10.7	1.9	22
10/23/06 - 10/29/06	168	0.0	2.7	0.8	0
10/30/06 - 11/05/06	169	0.0	4.3	2.0	6
11/06/06 - 11/12/06	168	0.0	7.0	2.7	11
11/13/06 - 11/19/06	168	0.0	1.7	0.4	0
11/20/06 - 11/26/06	168	0.0	1.6	0.3	0
11/27/06 - 12/03/06	168	0.1	9.2	1.4	17
12/04/06 - 12/10/06	168	0.0	3.7	0.9	0
12/11/06 - 12/17/06	168	0.0	1.2	0.5	0
12/18/06 - 12/24/06	168	0.1	9.0	2.0	16
12/25/06 - 12/31/06	168	0.0	0.1	0.0	0

TABLE A-9: WEEKLY DO SUMMARY STATISTICS AT INTERSTATE HIGHWAY 55
ON BUBBLY CREEK DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	8.5	9.0	8.8	100
01/02/06 - 01/08/06	168	7.6	9.1	8.4	100
01/09/06 - 01/15/06	168	8.1	9.4	8.7	100
01/16/06 - 01/22/06	168	7.3	8.9	8.0	100
01/23/06 - 01/29/06	168	8.0	9.1	8.3	100
01/30/06 - 02/05/06	168	7.2	9.2	8.4	100
02/06/06 - 02/12/06	168	8.7	10.3	9.4	100
02/13/06 - 02/19/06	168	2.5	12.0	8.0	92
02/20/06 - 02/26/06	169	5.0	10.5	8.0	100
02/27/06 - 03/05/06	168	8.8	10.3	9.5	100
03/06/06 - 03/12/06	168	5.0	9.3	7.6	100
03/13/06 - 03/19/06	168	3.0	8.3	5.6	92
03/20/06 - 03/26/06	168	4.3	8.6	6.6	100
03/27/06 - 04/02/06	168	4.2	7.1	5.9	100
04/03/06 - 04/09/06	167	0.1	9.1	4.7	70
04/10/06 - 04/16/06	83	0.2	8.0	2.9	41
04/17/06 - 04/23/06			NO DATA		
04/24/06 - 04/30/06	79	4.9	9.0	6.9	100
05/01/06 - 05/07/06	168	3.5	8.0	5.3	95
05/08/06 - 05/14/06	132	3.3	8.1	5.5	95
05/15/06 - 05/21/06	168	2.7	7.3	5.5	93
05/22/06 - 05/28/06	168	3.8	7.4	6.0	98
05/29/06 - 06/04/06	168	3.0	6.5	4.8	90
06/05/06 - 06/11/06	168	3.2	8.9	5.8	90
06/12/06 - 06/18/06	168	1.3	6.0	3.8	43
06/19/06 - 06/25/06	82	1.7	4.8	3.1	13
06/26/06 - 07/02/06	86	4.3	7.6	6.0	100
07/03/06 - 07/09/06	168	4.1	9.4	6.2	100
07/10/06 - 07/16/06	168	4.4	7.2	5.5	100
07/17/06 - 07/23/06	168	0.1	6.4	3.4	46
07/24/06 - 07/30/06	167	0.4	6.8	3.6	49
07/31/06 - 08/06/06	168	0.0	7.9	2.6	42
08/07/06 - 08/13/06	168	0.0	4.1	1.5	1

TABLE A-9 (Continued): WEEKLY DO SUMMARY STATISTICS AT INTERSTATE HIGHWAY 55 ON BUBBLY CREEK DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	0.2	6.2	3.7	52
08/21/06 - 08/27/06	168	2.6	5.7	4.5	79
08/28/06 - 09/03/06	168	0.1	6.2	3.8	45
09/04/06 - 09/10/06	168	3.5	7.0	5.3	92
09/11/06 - 09/17/06	168	0.2	7.2	4.0	60
09/18/06 - 09/24/06	168	1.9	7.3	4.9	74
09/25/06 - 10/01/06	168	2.8	8.0	5.5	78
10/02/06 - 10/08/06	168	0.0	7.5	3.1	38
10/09/06 - 10/15/06	168	0.1	7.8	3.6	39
10/16/06 - 10/22/06	168	0.0	7.6	4.0	55
10/23/06 - 10/29/06	168	0.0	5.9	3.3	47
10/30/06 - 11/05/06	169	0.1	7.3	4.9	77
11/06/06 - 11/12/06	168	1.9	7.0	6.0	97
11/13/06 - 11/19/06	168	2.1	6.8	5.1	79
11/20/06 - 11/26/06	168	5.2	7.6	6.3	100
11/27/06 - 12/03/06	167	0.0	7.4	3.3	49
12/04/06 - 12/10/06	168	3.5	8.7	5.5	88
12/11/06 - 12/17/06	168	2.8	9.2	6.0	90
12/18/06 - 12/24/06	168	0.4	8.0	5.1	74
12/25/06 - 12/31/06	168	0.4	4.9	2.3	10

TABLE A-10: WEEKLY DO SUMMARY STATISTICS AT CICERO AVENUE
ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	7.9	8.3	8.1	100
01/02/06 - 01/08/06	168	6.3	8.3	7.3	100
01/09/06 - 01/15/06	168	6.4	7.9	7.2	100
01/16/06 - 01/22/06	168	5.7	7.5	6.7	100
01/23/06 - 01/29/06	168	6.9	8.9	7.6	100
01/30/06 - 02/05/06	168	6.3	8.9	7.8	100
02/06/06 - 02/12/06	168	7.6	8.8	8.2	100
02/13/06 - 02/19/06	168	8.0	9.4	8.7	100
02/20/06 - 02/26/06	168	7.6	10.8	9.5	100
02/27/06 - 03/05/06	168	7.3	10.1	8.6	100
03/06/06 - 03/12/06	168	6.1	8.2	7.5	100
03/13/06 - 03/19/06	168	5.1	8.8	7.7	100
03/20/06 - 03/26/06	168	6.1	8.3	7.3	100
03/27/06 - 04/02/06	168	5.3	7.8	6.4	100
04/03/06 - 04/09/06	167	5.1	8.1	6.9	100
04/10/06 - 04/16/06	168	6.5	10.0	7.9	100
04/17/06 - 04/23/06	168	0.0	8.4	5.1	83
04/24/06 - 04/30/06	168	3.7	9.2	5.4	99
05/01/06 - 05/07/06	168	3.5	7.2	5.2	98
05/08/06 - 05/14/06	168	4.9	8.3	6.0	100
05/15/06 - 05/21/06	168	5.2	7.3	5.9	100
05/22/06 - 05/28/06	168	4.3	10.1	6.0	100
05/29/06 - 06/04/06	169	4.2	6.9	5.1	100
06/05/06 - 06/11/06	167	4.0	8.7	6.4	99
06/12/06 - 06/18/06	168	3.3	6.5	4.6	81
06/19/06 - 06/25/06	168	2.8	5.8	4.3	72
06/26/06 - 07/02/06	168	1.2	6.8	4.9	82
07/03/06 - 07/09/06	168	3.8	7.3	5.9	98
07/10/06 - 07/16/06	168	4.7	7.0	5.5	100
07/17/06 - 07/23/06	81	4.6	6.2	5.3	100
07/24/06 - 07/30/06	86	5.5	8.3	7.1	100
07/31/06 - 08/06/06	168	0.7	8.8	5.7	79
08/07/06 - 08/13/06	168	4.7	8.5	7.4	100

TABLE A-10 (Continued): WEEKLY DO SUMMARY STATISTICS AT
CICERO AVENUE ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	4.9	8.4	6.6	100
08/21/06 - 08/27/06	168	3.7	6.1	5.1	99
08/28/06 - 09/03/06	168	2.5	6.0	5.1	92
09/04/06 - 09/10/06	168	5.1	7.4	6.3	100
09/11/06 - 09/17/06	168	2.0	7.3	5.1	84
09/18/06 - 09/24/06	168	5.4	6.8	6.1	100
09/25/06 - 10/01/06	168	5.2	7.8	6.5	100
10/02/06 - 10/08/06	168	1.8	7.9	5.4	90
10/09/06 - 10/15/06	168	4.3	6.6	5.6	100
10/16/06 - 10/22/06	168	2.6	7.7	5.1	85
10/23/06 - 10/29/06	168	4.2	6.3	5.0	100
10/30/06 - 11/05/06	169	3.6	6.1	5.0	93
11/06/06 - 11/12/06	168	0.6	6.2	4.5	81
11/13/06 - 11/19/06	168	2.9	5.3	4.4	70
11/20/06 - 11/26/06	168	4.1	5.9	4.7	100
11/27/06 - 12/03/06	168	0.1	8.4	5.5	94
12/04/06 - 12/10/06	168	5.7	8.6	7.1	100
12/11/06 - 12/17/06	168	6.6	8.9	7.3	100
12/18/06 - 12/24/06	168	5.8	8.1	6.8	100
12/25/06 - 12/31/06	168	4.9	8.3	6.8	100

TABLE A-11: WEEKLY DO SUMMARY STATISTICS AT B&O CENTRAL RAILROAD
ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	7.1	8.7	8.2	100
01/02/06 - 01/08/06	168	7.1	8.6	8.0	100
01/09/06 - 01/15/06	168	6.4	9.1	7.5	100
01/16/06 - 01/22/06	168	6.5	9.9	8.0	100
01/23/06 - 01/29/06	168	7.6	9.4	8.6	100
01/30/06 - 02/05/06	168	6.9	10.0	8.5	100
02/06/06 - 02/12/06	168	7.6	8.6	8.1	100
02/13/06 - 02/19/06	167	7.1	9.7	8.7	100
02/20/06 - 02/26/06	168	7.9	10.1	8.8	100
02/27/06 - 03/05/06	168	7.7	9.6	8.6	100
03/06/06 - 03/12/06	168	7.1	8.9	8.2	100
03/13/06 - 03/19/06	168	6.9	9.5	8.4	100
03/20/06 - 03/26/06	168	7.5	9.1	8.3	100
03/27/06 - 04/02/06	168	6.9	9.0	7.8	100
04/03/06 - 04/09/06	167	5.9	9.3	8.0	100
04/10/06 - 04/16/06	168	7.0	8.8	8.1	100
04/17/06 - 04/23/06	168	4.9	9.1	7.4	100
04/24/06 - 04/30/06	167	5.8	7.8	7.2	100
05/01/06 - 05/07/06	168	5.1	7.2	6.4	100
05/08/06 - 05/14/06	168	5.1	7.3	6.3	100
05/15/06 - 05/21/06	168	5.5	7.5	6.4	100
05/22/06 - 05/28/06	168	4.8	8.1	6.5	100
05/29/06 - 06/04/06	168	5.0	6.5	5.8	100
06/05/06 - 06/11/06	168	5.1	8.0	6.2	100
06/12/06 - 06/18/06	168	4.6	6.8	5.7	100
06/19/06 - 06/25/06	168	3.8	6.3	5.0	97
06/26/06 - 07/02/06	168	4.4	6.6	5.6	100
07/03/06 - 07/09/06	168	5.2	8.5	6.1	100
07/10/06 - 07/16/06	168	3.5	6.9	5.6	99
07/17/06 - 07/23/06	168	2.3	6.5	5.0	92
07/24/06 - 07/30/06	168	4.3	6.4	5.4	100
07/31/06 - 08/06/06	168	1.3	7.5	4.7	61
08/07/06 - 08/13/06	168	2.4	5.8	4.7	90

TABLE A-11 (Continued): WEEKLY DO SUMMARY STATISTICS AT B&O CENTRAL RAILROAD ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	3.0	6.0	4.9	89
08/21/06 - 08/27/06	167	4.3	6.2	5.3	100
08/28/06 - 09/03/06	168	4.1	6.6	5.5	100
09/04/06 - 09/10/06	168	4.9	6.8	6.1	100
09/11/06 - 09/17/06	168	3.7	7.0	5.9	98
09/18/06 - 09/24/06	168	5.5	7.4	6.4	100
09/25/06 - 10/01/06	168	5.7	7.3	6.5	100
10/02/06 - 10/08/06	168	2.9	7.3	5.9	90
10/09/06 - 10/15/06	168	3.5	7.3	6.2	98
10/16/06 - 10/22/06	168	4.6	8.0	6.4	100
10/23/06 - 10/29/06	168	5.1	7.9	6.6	100
10/30/06 - 11/05/06	169	5.6	7.3	6.7	100
11/06/06 - 11/12/06	168	4.6	8.3	6.1	100
11/13/06 - 11/19/06	168	5.6	7.7	6.4	100
11/20/06 - 11/26/06	168	4.7	7.2	6.3	100
11/27/06 - 12/03/06	168	2.3	9.1	6.9	98
12/04/06 - 12/10/06	168	7.6	9.5	8.5	100
12/11/06 - 12/17/06	167	7.0	9.4	8.1	100
12/18/06 - 12/24/06	168	6.2	8.6	7.8	100
12/25/06 - 12/31/06	168	7.4	9.6	8.7	100

TABLE A-12: WEEKLY DO SUMMARY STATISTICS AT ROUTE 83
ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	5.9	7.0	6.6	100
01/02/06 - 01/08/06	168	5.4	7.6	7.0	100
01/09/06 - 01/15/06	168	3.9	6.7	5.6	99
01/16/06 - 01/22/06	168	3.6	7.4	6.0	99
01/23/06 - 01/29/06	168	4.8	7.9	7.1	100
01/30/06 - 02/05/06	168	5.8	8.6	7.3	100
02/06/06 - 02/12/06	168	6.4	8.0	7.3	100
02/13/06 - 02/19/06	168	6.0	8.5	7.6	100
02/20/06 - 02/26/06	168	6.7	9.0	7.8	100
02/27/06 - 03/05/06	168	6.9	8.3	7.5	100
03/06/06 - 03/12/06	168	6.0	8.0	7.2	100
03/13/06 - 03/19/06	59	5.8	8.6	6.9	100
03/20/06 - 03/26/06			NO DATA		
03/27/06 - 04/02/06	107	5.5	7.2	6.4	100
04/03/06 - 04/09/06	167	5.3	8.0	6.6	100
04/10/06 - 04/16/06	168	5.1	7.3	6.4	100
04/17/06 - 04/23/06	168	3.6	7.7	6.0	95
04/24/06 - 04/30/06	168	5.3	7.3	6.2	100
05/01/06 - 05/07/06	168	3.3	5.6	4.7	85
05/08/06 - 05/14/06	168	3.2	5.8	4.4	81
05/15/06 - 05/21/06	168	3.7	5.9	5.1	99
05/22/06 - 05/28/06	168	3.3	6.5	4.9	85
05/29/06 - 06/04/06	168	2.8	6.2	4.5	79
06/05/06 - 06/11/06	168	2.9	6.2	4.8	80
06/12/06 - 06/18/06	168	0.6	6.2	4.2	59
06/19/06 - 06/25/06	168	2.0	5.0	3.6	17
06/26/06 - 07/02/06	115	2.8	5.5	4.4	81
07/03/06 - 07/09/06	82	1.8	5.1	4.0	55
07/10/06 - 07/16/06	110	2.5	6.7	5.0	96
07/17/06 - 07/23/06	58	3.5	6.4	5.4	91
07/24/06 - 07/30/06	107	3.5	5.0	4.1	51
07/31/06 - 08/06/06	167	0.0	6.2	3.1	43
08/07/06 - 08/13/06	168	1.4	5.2	3.6	48

TABLE A-12 (Continued): WEEKLY DO SUMMARY STATISTICS AT
ROUTE 83 ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	2.0	4.8	3.6	31
08/21/06 - 08/27/06	168	3.0	4.9	3.9	40
08/28/06 - 09/03/06	168	0.4	5.3	4.1	60
09/04/06 - 09/10/06	58	4.1	5.1	4.7	100
09/11/06 - 09/17/06	98	2.8	6.0	4.6	78
09/18/06 - 09/24/06	168	4.0	5.8	5.0	100
09/25/06 - 10/01/06	58	4.4	6.2	5.5	100
10/02/06 - 10/08/06			NO DATA		
10/09/06 - 10/15/06			NO DATA		
10/16/06 - 10/22/06	86	3.7	6.5	5.1	90
10/23/06 - 10/29/06	168	3.1	6.2	5.2	93
10/30/06 - 11/05/06	169	5.2	6.5	6.1	100
11/06/06 - 11/12/06	58	4.5	6.3	5.2	100
11/13/06 - 11/19/06	110	5.0	6.7	6.0	100
11/20/06 - 11/26/06	168	4.1	6.0	5.4	100
11/27/06 - 12/03/06	168	0.6	7.0	5.0	89
12/04/06 - 12/10/06	167	6.5	8.7	7.7	100
12/11/06 - 12/17/06	168	6.3	8.2	7.2	100
12/18/06 - 12/24/06	59	6.3	7.2	6.6	100

TABLE A-13: WEEKLY DO SUMMARY STATISTICS AT LOCKPORT POWERHOUSE
ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	6.5	7.4	6.9	100
01/02/06 - 01/08/06	167	6.1	7.2	6.8	100
01/09/06 - 01/15/06	168	5.7	7.2	6.6	100
01/16/06 - 01/22/06	168	5.5	7.6	6.6	100
01/23/06 - 01/29/06	168	6.2	8.0	7.1	100
01/30/06 - 02/05/06	168	6.7	8.1	7.6	100
02/06/06 - 02/12/06	168	6.1	8.0	7.1	100
02/13/06 - 02/19/06	168	6.6	8.5	7.7	100
02/20/06 - 02/26/06	168	7.3	9.0	8.3	100
02/27/06 - 03/05/06	168	6.3	8.6	7.5	100
03/06/06 - 03/12/06	168	6.8	8.6	7.4	100
03/13/06 - 03/19/06	168	6.6	8.3	7.3	100
03/20/06 - 03/26/06	168	6.8	7.7	7.3	100
03/27/06 - 04/02/06	168	5.8	7.2	6.6	100
04/03/06 - 04/09/06	167	6.0	7.3	6.6	100
04/10/06 - 04/16/06	167	5.6	6.6	6.2	100
04/17/06 - 04/23/06	168	4.5	6.6	5.8	100
04/24/06 - 04/30/06	168	1.7	6.4	5.3	91
05/01/06 - 05/07/06	168	3.2	5.2	4.3	72
05/08/06 - 05/14/06	83	3.3	4.6	4.0	57
05/15/06 - 05/21/06	85	3.9	5.7	4.8	99
05/22/06 - 05/28/06	168	3.4	5.2	4.3	78
05/29/06 - 06/04/06	167	2.7	5.7	3.7	32
06/05/06 - 06/11/06	168	3.0	5.1	4.0	47
06/12/06 - 06/18/06	168	3.2	4.7	4.1	57
06/19/06 - 06/25/06	168	2.4	3.9	3.2	0
06/26/06 - 07/02/06	168	3.1	4.8	4.0	40
07/03/06 - 07/09/06	168	1.9	6.4	4.2	46
07/10/06 - 07/16/06	168	2.4	5.2	3.8	48
07/17/06 - 07/23/06	168	1.9	4.8	3.1	8
07/24/06 - 07/30/06	168	2.6	7.1	4.1	42
07/31/06 - 08/06/06	168	0.3	5.9	3.2	39
08/07/06 - 08/13/06	168	0.5	5.5	3.3	41

TABLE A-13 (Continued): WEEKLY DO SUMMARY STATISTICS AT LOCKPORT POWERHOUSE ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	3.6	5.5	4.4	88
08/21/06 - 08/27/06	167	3.1	4.5	3.7	17
08/28/06 - 09/03/06	78	3.1	4.5	3.8	35
09/04/06 - 09/10/06	85	5.0	5.8	5.3	100
09/11/06 - 09/17/06	168	3.5	5.9	4.9	82
09/18/06 - 09/24/06	168	4.6	5.5	5.2	100
09/25/06 - 10/01/06	169	4.7	6.0	5.4	100
10/02/06 - 10/08/06	168	1.6	6.1	4.2	57
10/09/06 - 10/15/06	168	5.1	6.0	5.5	100
10/16/06 - 10/22/06	168	4.8	6.6	5.8	100
10/23/06 - 10/29/06	168	4.6	6.5	5.7	100
10/30/06 - 11/05/06	169	4.7	6.5	6.0	100
11/06/06 - 11/12/06	168	4.1	6.5	5.7	100
11/13/06 - 11/19/06	168	3.2	6.5	5.1	87
11/20/06 - 11/26/06	168	5.1	6.3	5.7	100
11/27/06 - 12/03/06	168	3.8	7.0	5.5	99
12/04/06 - 12/10/06	168	7.1	8.9	8.3	100
12/11/06 - 12/17/06	168	7.0	8.7	7.7	100
12/18/06 - 12/24/06	168	6.1	7.4	6.7	100
12/25/06 - 12/31/06	168	6.7	8.4	7.7	100

TABLE A-14: WEEKLY DO SUMMARY STATISTICS AT JEFFERSON STREET
ON THE DES PLAINES RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	9.5	10.4	9.9	100
01/02/06 - 01/08/06	168	7.8	10.1	8.8	100
01/09/06 - 01/15/06	167	6.7	10.2	8.5	100
01/16/06 - 01/22/06	168	6.9	12.7	9.7	100
01/23/06 - 01/29/06	168	7.7	11.7	9.4	100
01/30/06 - 02/05/06	168	8.3	11.5	9.4	100
02/06/06 - 02/12/06	168	8.2	10.8	9.5	100
02/13/06 - 02/19/06	168	7.8	10.5	9.1	100
02/20/06 - 02/26/06	168	8.9	10.7	9.9	100
02/27/06 - 03/05/06	168	7.5	10.3	8.6	100
03/06/06 - 03/12/06	168	7.4	9.1	8.2	100
03/13/06 - 03/19/06	168	7.7	10.9	9.4	100
03/20/06 - 03/26/06	168	8.7	11.2	9.7	100
03/27/06 - 04/02/06	168	7.1	11.2	8.6	100
04/03/06 - 04/09/06	167	6.7	10.4	8.1	100
04/10/06 - 04/16/06	168	6.1	10.1	8.0	100
04/17/06 - 04/23/06	168	5.2	9.8	7.0	100
04/24/06 - 04/30/06	167	5.0	9.9	7.0	100
05/01/06 - 05/07/06	168	4.9	8.1	6.2	100
05/08/06 - 05/14/06	168	3.9	7.8	5.5	99
05/15/06 - 05/21/06	168	5.0	8.4	6.5	100
05/22/06 - 05/28/06	168	4.2	8.9	6.0	100
05/29/06 - 06/04/06	167	3.5	6.1	4.5	77
06/05/06 - 06/11/06	168	3.8	7.1	5.0	95
06/12/06 - 06/18/06	168	3.7	6.9	5.2	99
06/19/06 - 06/25/06	168	2.7	6.0	4.2	58
06/26/06 - 07/02/06	168	3.7	6.6	5.0	96
07/03/06 - 07/09/06	168	3.3	7.1	5.3	89
07/10/06 - 07/16/06	168	3.6	6.3	4.6	79
07/17/06 - 07/23/06	168	2.6	6.6	4.4	66
07/24/06 - 07/30/06	168	3.4	7.4	4.7	76
07/31/06 - 08/06/06	168	2.4	6.0	4.2	50
08/07/06 - 08/13/06	168	2.7	6.7	4.3	61

TABLE A-14 (Continued): WEEKLY DO SUMMARY STATISTICS AT
JEFFERSON STREET ON THE DES PLAINES RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	83	3.9	5.7	4.6	88
08/21/06 - 08/27/06	85	4.0	6.7	5.2	99
08/28/06 - 09/03/06	168	3.8	7.3	5.7	98
09/04/06 - 09/10/06	168	4.6	6.8	5.6	100
09/11/06 - 09/17/06	168	4.2	7.9	6.7	100
09/18/06 - 09/24/06	168	5.2	8.8	6.9	100
09/25/06 - 10/01/06	168	5.8	8.5	6.8	100
10/02/06 - 10/08/06	168	4.5	8.7	6.2	100
10/09/06 - 10/15/06	168	5.7	8.4	6.9	100
10/16/06 - 10/22/06	168	6.1	9.2	7.3	100
10/23/06 - 10/29/06	168	6.5	9.0	7.5	100
10/30/06 - 11/05/06	169	6.5	9.4	8.1	100
11/06/06 - 11/12/06	168	6.7	10.9	8.4	100
11/13/06 - 11/19/06	168	5.9	9.5	7.7	100
11/20/06 - 11/26/06	168	7.2	11.2	8.3	100
11/27/06 - 12/03/06	168	6.9	10.7	8.7	100
12/04/06 - 12/10/06	168	8.9	11.7	10.6	100
12/11/06 - 12/17/06	168	9.8	12.1	11.2	100
12/18/06 - 12/24/06	168	8.4	12.8	10.4	100
12/25/06 - 12/31/06	168	8.6	11.7	9.9	100

TABLE A-15: WEEKLY DO SUMMARY STATISTICS AT TORRENCE AVENUE
ON THE GRAND CALUMET RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	9.3	11.8	11.2	100
01/02/06 - 01/08/06	167	7.2	14.0	12.0	100
01/09/06 - 01/15/06	168	7.9	13.6	11.8	100
01/16/06 - 01/22/06	168	9.6	23.9	13.3	100
01/23/06 - 01/29/06	168	12.4	23.0	14.8	100
01/30/06 - 02/05/06	168	12.2	21.5	15.5	100
02/06/06 - 02/12/06	167	14.4	30.2	18.2	100
02/13/06 - 02/19/06	168	8.3	24.2	16.5	100
02/20/06 - 02/26/06	168	15.1	28.7	18.3	100
02/27/06 - 03/05/06	168	13.8	22.7	16.9	100
03/06/06 - 03/12/06	58	14.6	26.3	18.4	100
03/13/06 - 03/19/06	109	8.2	15.4	11.6	100
03/20/06 - 03/26/06	168	8.7	15.1	12.4	100
03/27/06 - 04/02/06	168	5.1	13.5	9.7	100
04/03/06 - 04/09/06	167	2.8	11.0	7.9	95
04/10/06 - 04/16/06	168	2.0	10.2	5.9	79
04/17/06 - 04/23/06	168	0.1	7.1	2.7	23
04/24/06 - 04/30/06	168	1.7	12.1	5.9	79
05/01/06 - 05/07/06	168	1.2	7.8	3.6	29
05/08/06 - 05/14/06	168	1.1	8.1	4.1	50
05/15/06 - 05/21/06	168	2.3	6.4	3.5	23
05/22/06 - 05/28/06	168	0.1	6.1	2.9	20
05/29/06 - 06/04/06	168	0.3	17.1	5.4	52
06/05/06 - 06/11/06	168	0.5	18.4	6.2	70
06/12/06 - 06/18/06	168	1.8	11.8	5.2	61
06/19/06 - 06/25/06	168	2.0	11.3	5.7	64
06/26/06 - 07/02/06	168	3.2	12.4	6.2	77
07/03/06 - 07/09/06	83	0.0	11.0	3.4	30
07/10/06 - 07/16/06	110	1.9	10.6	3.9	35
07/17/06 - 07/23/06	168	0.0	16.4	4.4	39
07/24/06 - 07/30/06	168	0.0	16.0	5.3	55
07/31/06 - 08/06/06	168	0.0	15.0	2.5	23
08/07/06 - 08/13/06	168	0.0	10.6	3.8	44

TABLE A-15 (Continued): WEEKLY DO SUMMARY STATISTICS AT
TORRENCE AVENUE ON THE GRAND CALUMET RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	59	0.3	7.6	3.6	44
08/21/06 - 08/27/06	110	3.4	13.1	6.7	92
08/28/06 - 09/03/06	168	0.4	6.8	2.5	14
09/04/06 - 09/10/06	168	1.6	8.4	4.2	50
09/11/06 - 09/17/06	167	0.0	7.3	2.3	20
09/18/06 - 09/24/06	168	1.0	7.7	5.1	85
09/25/06 - 10/01/06	165	1.9	8.4	6.1	87
10/02/06 - 10/08/06	168	0.0	7.4	4.4	65
10/09/06 - 10/15/06	168	2.9	9.4	7.1	94
10/16/06 - 10/22/06	168	1.9	9.2	6.6	88
10/23/06 - 10/29/06	168	8.5	12.4	9.9	100
10/30/06 - 11/05/06	169	9.1	18.1	11.2	100
11/06/06 - 11/12/06	168	0.8	21.9	12.1	95
11/13/06 - 11/19/06	168	3.8	21.2	11.8	98
11/20/06 - 11/26/06	168	10.9	22.6	14.0	100
11/27/06 - 12/03/06	168	3.7	18.5	8.8	98
12/04/06 - 12/10/06	168	5.6	10.1	8.3	100
12/11/06 - 12/17/06	168	5.0	11.2	9.0	100
12/18/06 - 12/24/06	168	2.6	11.2	7.6	88
12/25/06 - 12/31/06	168	4.9	10.5	8.2	100

TABLE A-16: WEEKLY DO SUMMARY STATISTICS AT C&W INDIANA RAILROAD
ON THE LITTLE CALUMET RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	11.5	12.2	11.8	100
01/02/06 - 01/08/06	168	11.5	13.5	12.6	100
01/09/06 - 01/15/06	168	11.9	13.6	12.8	100
01/16/06 - 01/22/06	168	11.4	13.2	12.6	100
01/23/06 - 01/29/06	168	11.2	13.2	12.6	100
01/30/06 - 02/05/06	168	11.7	12.8	12.3	100
02/06/06 - 02/12/06	168	12.4	13.4	12.9	100
02/13/06 - 02/19/06	168	13.3	17.6	15.0	100
02/20/06 - 02/26/06	168	15.6	20.3	17.6	100
02/27/06 - 03/05/06	168	18.1	21.9	20.4	100
03/06/06 - 03/12/06	168	16.1	21.1	18.9	100
03/13/06 - 03/19/06	168	12.1	16.2	13.9	100
03/20/06 - 03/26/06	168	13.2	16.2	14.9	100
03/27/06 - 04/02/06	168	9.5	16.1	13.0	100
04/03/06 - 04/09/06	167	8.1	10.4	9.1	100
04/10/06 - 04/16/06	168	6.7	9.0	7.9	100
04/17/06 - 04/23/06	168	6.3	9.9	8.0	100
04/24/06 - 04/30/06	167	7.4	11.2	8.9	100
05/01/06 - 05/07/06	168	5.5	9.8	7.3	100
05/08/06 - 05/14/06	168	5.6	10.7	7.9	100
05/15/06 - 05/21/06	168	5.2	8.5	6.8	100
05/22/06 - 05/28/06	168	4.0	10.5	7.3	100
05/29/06 - 06/04/06	168	1.9	6.6	3.9	40
06/05/06 - 06/11/06	168	2.8	7.4	5.0	87
06/12/06 - 06/18/06	167	3.7	6.6	4.9	97
06/19/06 - 06/25/06	168	3.8	6.8	5.2	98
06/26/06 - 07/02/06	168	4.3	10.9	6.3	100
07/03/06 - 07/09/06	168	4.3	9.1	6.2	100
07/10/06 - 07/16/06	60	4.8	7.2	6.0	100
07/17/06 - 07/23/06	106	4.4	9.4	6.0	100
07/24/06 - 07/30/06	168	5.5	11.7	8.3	100
07/31/06 - 08/06/06	168	3.5	9.5	6.6	99
08/07/06 - 08/13/06	168	4.4	8.5	6.6	100

TABLE A-16 (Continued): WEEKLY DO SUMMARY STATISTICS AT
C&W INDIANA RAILROAD ON THE LITTLE CALUMET RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	5.7	9.2	7.1	100
08/21/06 - 08/27/06	168	5.4	9.5	7.3	100
08/28/06 - 09/03/06	168	3.9	7.6	5.9	99
09/04/06 - 09/10/06	167	5.5	8.5	6.5	100
09/11/06 - 09/17/06	169	4.1	7.5	5.8	100
09/18/06 - 09/24/06	168	4.0	7.3	6.3	98
09/25/06 - 10/01/06	168	6.2	7.8	6.9	100
10/02/06 - 10/08/06	168	5.6	7.8	6.7	100
10/09/06 - 10/15/06	168	5.4	8.6	7.4	100
10/16/06 - 10/22/06	168	8.0	9.3	8.6	100
10/23/06 - 10/29/06	167	8.8	9.7	9.3	100
10/30/06 - 11/05/06	169	9.2	10.6	9.9	100
11/06/06 - 11/12/06	167	8.7	10.4	9.8	100
11/13/06 - 11/19/06	168	9.5	10.4	10.0	100
11/20/06 - 11/26/06	168	9.8	11.6	10.6	100
11/27/06 - 12/03/06	168	9.3	11.3	10.4	100
12/04/06 - 12/10/06	168	10.6	12.3	11.7	100
12/11/06 - 12/17/06	168	11.0	12.0	11.4	100
12/18/06 - 12/24/06	168	10.4	11.5	11.0	100
12/25/06 - 12/31/06	168	9.8	11.6	11.0	100

TABLE A-17: WEEKLY DO SUMMARY STATISTICS AT HALSTED STREET
ON THE LITTLE CALUMET RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	7.3	7.8	7.5	100
01/02/06 - 01/08/06	167	6.8	8.5	7.8	100
01/09/06 - 01/15/06	168	6.3	8.6	7.4	100
01/16/06 - 01/22/06	167	6.8	8.5	7.5	100
01/23/06 - 01/29/06	168	6.7	8.7	7.8	100
01/30/06 - 02/05/06	168	6.4	9.3	7.8	100
02/06/06 - 02/12/06	168	7.5	8.9	8.2	100
02/13/06 - 02/19/06	168	7.1	9.3	8.3	100
02/20/06 - 02/26/06	168	8.3	10.7	9.4	100
02/27/06 - 03/05/06	168	8.9	11.3	9.9	100
03/06/06 - 03/12/06	168	6.7	9.8	8.2	100
03/13/06 - 03/19/06	168	6.7	8.6	7.6	100
03/20/06 - 03/26/06	168	7.4	10.0	8.4	100
03/27/06 - 04/02/06	168	6.8	9.3	7.6	100
04/03/06 - 04/09/06	167	6.0	8.2	7.1	100
04/10/06 - 04/16/06	167	5.2	7.6	6.2	100
04/17/06 - 04/23/06	168	5.5	7.7	6.3	100
04/24/06 - 04/30/06	168	6.1	8.6	6.8	100
05/01/06 - 05/07/06	168	4.9	7.8	6.0	100
05/08/06 - 05/14/06	168	5.0	8.6	6.1	100
05/15/06 - 05/21/06	168	5.1	9.8	6.4	100
05/22/06 - 05/28/06	168	5.2	9.2	6.5	100
05/29/06 - 06/04/06	168	4.4	7.9	5.8	100
06/05/06 - 06/11/06	168	4.1	8.5	6.1	100
06/12/06 - 06/18/06	168	4.7	7.5	5.9	100
06/19/06 - 06/25/06	168	4.4	7.2	5.5	100
06/26/06 - 07/02/06	168	4.2	9.1	6.3	100
07/03/06 - 07/09/06	168	5.1	11.9	6.9	100
07/10/06 - 07/16/06	168	4.3	8.4	5.9	100
07/17/06 - 07/23/06	168	4.5	9.2	6.1	100
07/24/06 - 07/30/06	167	4.9	9.9	7.2	100
07/31/06 - 08/06/06	168	5.6	12.9	7.9	100
08/07/06 - 08/13/06	168	4.9	9.8	6.8	100

TABLE A-17 (Continued): WEEKLY DO SUMMARY STATISTICS AT
 HALSTED STREET ON THE LITTLE CALUMET RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	5.5	9.3	6.7	100
08/21/06 - 08/27/06	168	5.1	8.8	6.7	100
08/28/06 - 09/03/06	59	4.3	6.6	5.6	100
09/04/06 - 09/10/06	108	5.6	7.8	6.5	100
09/11/06 - 09/17/06	60	5.0	7.1	6.0	100
09/18/06 - 09/24/06	108	5.1	7.3	6.1	100
09/25/06 - 10/01/06	168	5.3	7.6	6.5	100
10/02/06 - 10/08/06	168	3.5	7.4	6.2	97
10/09/06 - 10/15/06	168	5.7	7.4	6.6	100
10/16/06 - 10/22/06	167	5.7	7.1	6.6	100
10/23/06 - 10/29/06	168	6.0	7.2	6.7	100
10/30/06 - 11/05/06	169	6.0	7.1	6.6	100
11/06/06 - 11/12/06	168	5.7	7.3	6.4	100
11/13/06 - 11/19/06	167	5.7	7.2	6.5	100
11/20/06 - 11/26/06	168	6.0	7.3	6.6	100
11/27/06 - 12/03/06	168	5.8	8.2	6.9	100
12/04/06 - 12/10/06	168	6.6	8.1	7.4	100
12/11/06 - 12/17/06	168	6.0	8.1	6.8	100
12/18/06 - 12/24/06	168	5.9	7.3	6.6	100
12/25/06 - 12/31/06	168	5.5	7.0	6.3	100

TABLE A-18: WEEKLY DO SUMMARY STATISTICS AT CICERO AVENUE
ON THE CALUMET-SAG CHANNEL DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	8.3	8.7	8.5	100
01/02/06 - 01/08/06	168	7.9	8.8	8.2	100
01/09/06 - 01/15/06	168	7.3	8.7	8.0	100
01/16/06 - 01/22/06	168	7.8	9.2	8.3	100
01/23/06 - 01/29/06	168	8.4	10.0	9.2	100
01/30/06 - 02/05/06	168	7.8	8.7	8.4	100
02/06/06 - 02/12/06	168	8.3	9.6	8.9	100
02/13/06 - 02/19/06	168	8.4	10.4	9.0	100
02/20/06 - 02/26/06	168	9.6	11.7	10.5	100
02/27/06 - 03/05/06	168	10.0	11.4	10.7	100
03/06/06 - 03/12/06	168	7.7	11.2	9.4	100
03/13/06 - 03/19/06	168	7.2	8.9	8.2	100
03/20/06 - 03/26/06	168	8.5	9.7	9.1	100
03/27/06 - 04/02/06	168	7.8	9.3	8.4	100
04/03/06 - 04/09/06	167	6.6	8.9	7.6	100
04/10/06 - 04/16/06	168	4.9	7.9	6.6	100
04/17/06 - 04/23/06	168	5.5	6.9	6.3	100
04/24/06 - 04/30/06	168	5.6	7.2	6.5	100
05/01/06 - 05/07/06	168	5.3	6.8	6.1	100
05/08/06 - 05/14/06	168	4.8	6.7	5.8	100
05/15/06 - 05/21/06	168	5.1	6.7	6.0	100
05/22/06 - 05/28/06	168	4.1	7.4	5.7	100
05/29/06 - 06/04/06	168	3.6	6.1	4.7	100
06/05/06 - 06/11/06	167	3.2	6.6	5.2	100
06/12/06 - 06/18/06	167	4.6	6.3	5.6	100
06/19/06 - 06/25/06	168	4.1	6.2	5.0	100
06/26/06 - 07/02/06	168	4.3	8.2	5.9	100
07/03/06 - 07/09/06	168	4.8	10.2	6.4	100
07/10/06 - 07/16/06	168	3.9	7.4	5.2	100
07/17/06 - 07/23/06	168	4.1	9.3	5.3	100
07/24/06 - 07/30/06	168	4.6	9.4	6.4	100
07/31/06 - 08/06/06	168	5.2	13.1	7.0	100
08/07/06 - 08/13/06	168	4.5	7.6	6.1	100

TABLE A-18 (Continued): WEEKLY DO SUMMARY STATISTICS AT
CICERO AVENUE ON THE CALUMET-SAG CHANNEL DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	4.4	7.6	6.1	100
08/21/06 - 08/27/06	168	4.6	7.8	6.1	100
08/28/06 - 09/03/06	168	3.6	8.7	5.6	100
09/04/06 - 09/10/06	168	5.3	6.3	5.8	100
09/11/06 - 09/17/06	168	3.3	7.8	5.5	100
09/18/06 - 09/24/06	167	4.7	6.4	5.8	100
09/25/06 - 10/01/06	168	5.5	7.5	6.2	100
10/02/06 - 10/08/06	168	4.5	7.1	6.1	100
10/09/06 - 10/15/06	168	5.9	8.1	6.8	100
10/16/06 - 10/22/06	168	5.9	8.1	6.8	100
10/23/06 - 10/29/06	168	6.6	7.6	7.0	100
10/30/06 - 11/05/06	169	6.5	8.2	7.3	100
11/06/06 - 11/12/06	168	5.4	8.0	6.5	100
11/13/06 - 11/19/06	168	6.0	7.5	6.8	100
11/20/06 - 11/26/06	168	6.4	7.6	7.0	100
11/27/06 - 12/03/06	168	5.6	10.3	7.4	100
12/04/06 - 12/10/06	168	7.3	10.5	8.9	100
12/11/06 - 12/17/06	59	7.3	8.1	7.8	100
12/18/06 - 12/24/06	107	7.2	9.1	8.3	100
12/25/06 - 12/31/06	168	7.0	9.2	8.1	100

TABLE A-19: WEEKLY DO SUMMARY STATISTICS AT 104TH AVENUE
ON THE CALUMET-SAG CHANNEL DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	7.9	8.2	8.0	100
01/02/06 - 01/08/06	168	7.5	8.4	8.0	100
01/09/06 - 01/15/06	168	7.9	9.0	8.4	100
01/16/06 - 01/22/06	168	7.6	9.7	8.8	100
01/23/06 - 01/29/06	168	8.2	10.0	9.3	100
01/30/06 - 02/05/06	168	7.9	9.3	8.4	100
02/06/06 - 02/12/06	168	8.3	9.3	9.0	100
02/13/06 - 02/19/06	168	8.9	10.0	9.4	100
02/20/06 - 02/26/06	168	3.4	11.7	9.7	100
02/27/06 - 03/05/06	167	10.2	13.0	11.4	100
03/06/06 - 03/12/06	168	7.6	11.4	9.8	100
03/13/06 - 03/19/06	59	7.8	8.7	8.1	100
03/20/06 - 03/26/06	109	9.2	10.0	9.6	100
03/27/06 - 04/02/06	60	8.5	9.6	9.3	100
04/03/06 - 04/09/06	107	7.2	7.7	7.5	100
04/10/06 - 04/16/06	168	5.8	8.0	7.2	100
04/17/06 - 04/23/06	166	4.9	6.6	6.1	100
04/24/06 - 04/30/06	168	5.7	7.2	6.4	100
05/01/06 - 05/07/06	168	5.3	6.9	5.8	100
05/08/06 - 05/14/06	167	4.7	6.1	5.5	100
05/15/06 - 05/21/06	61	5.2	6.5	6.0	100
05/22/06 - 05/28/06	109	4.1	6.1	5.3	100
05/29/06 - 06/04/06	168	2.9	5.8	4.2	98
06/05/06 - 06/11/06	168	3.9	6.7	5.0	100
06/12/06 - 06/18/06	168	4.6	5.9	5.3	100
06/19/06 - 06/25/06	168	4.1	5.9	4.8	100
06/26/06 - 07/02/06	168	4.3	7.4	5.6	100
07/03/06 - 07/09/06	168	5.4	8.1	6.4	100
07/10/06 - 07/16/06	168	3.8	7.6	5.5	100
07/17/06 - 07/23/06	168	4.0	6.2	4.8	100
07/24/06 - 07/30/06	60	4.6	6.9	5.6	100
07/31/06 - 08/06/06			NO DATA		
08/07/06 - 08/13/06			NO DATA		

TABLE A-19 (Continued): WEEKLY DO SUMMARY STATISTICS AT
104TH AVENUE ON THE CALUMET-SAG CHANNEL DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06			NO DATA		
08/21/06 - 08/27/06	108	5.6	7.2	6.5	100
08/28/06 - 09/03/06	133	4.7	7.5	5.6	100
09/04/06 - 09/10/06	168	5.4	6.2	5.7	100
09/11/06 - 09/17/06	168	4.6	7.1	5.7	100
09/18/06 - 09/24/06	168	5.1	6.3	5.7	100
09/25/06 - 10/01/06	168	5.3	6.5	5.9	100
10/02/06 - 10/08/06	168	3.3	7.1	5.6	100
10/09/06 - 10/15/06	168	5.4	7.2	6.3	100
10/16/06 - 10/22/06	83	5.5	7.7	6.7	100
10/23/06 - 10/29/06	84	6.7	8.0	7.5	100
10/30/06 - 11/05/06	169	6.7	8.7	7.7	100
11/06/06 - 11/12/06	167	4.5	8.6	7.2	100
11/13/06 - 11/19/06	168	3.3	7.7	6.3	100
11/20/06 - 11/26/06	168	6.5	7.7	7.1	100
11/27/06 - 12/03/06	168	5.9	10.5	7.5	100
12/04/06 - 12/10/06	59	10.4	10.8	10.6	100
12/11/06 - 12/17/06	84	7.9	9.2	8.4	100
12/18/06 - 12/24/06	169	7.4	9.3	8.2	100
12/25/06 - 12/31/06	168	7.0	9.2	8.2	100

TABLE A-20: WEEKLY DO SUMMARY STATISTICS AT ROUTE 83
ON THE CALUMET-SAG CHANNEL DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	7.4	8.1	7.9	100
01/02/06 - 01/08/06	168	7.1	8.3	7.9	100
01/09/06 - 01/15/06	168	7.7	8.8	8.3	100
01/16/06 - 01/22/06	168	7.7	9.8	8.8	100
01/23/06 - 01/29/06	168	7.7	10.1	9.5	100
01/30/06 - 02/05/06	168	8.0	9.6	8.5	100
02/06/06 - 02/12/06	168	8.5	9.8	9.1	100
02/13/06 - 02/19/06	168	8.3	10.1	9.6	100
02/20/06 - 02/26/06	168	9.0	11.0	10.0	100
02/27/06 - 03/05/06	168	9.8	13.9	12.0	100
03/06/06 - 03/12/06	168	7.5	11.9	10.1	100
03/13/06 - 03/19/06	168	7.4	8.9	8.0	100
03/20/06 - 03/26/06	168	7.2	9.4	8.5	100
03/27/06 - 04/02/06	168	7.2	9.3	8.2	100
04/03/06 - 04/09/06	167	7.2	8.4	7.8	100
04/10/06 - 04/16/06	168	4.3	8.1	6.4	100
04/17/06 - 04/23/06	168	4.3	6.2	5.4	100
04/24/06 - 04/30/06	168	5.4	7.1	6.1	100
05/01/06 - 05/07/06	168	4.9	6.5	5.6	100
05/08/06 - 05/14/06	167	4.3	6.0	5.2	100
05/15/06 - 05/21/06	168	4.2	6.8	5.8	100
05/22/06 - 05/28/06	168	4.1	7.1	5.5	100
05/29/06 - 06/04/06	168	2.8	5.1	3.7	89
06/05/06 - 06/11/06	168	3.8	6.5	4.9	100
06/12/06 - 06/18/06	168	4.5	5.8	5.1	100
06/19/06 - 06/25/06	168	4.0	5.3	4.6	100
06/26/06 - 07/02/06	168	3.8	7.1	5.1	100
07/03/06 - 07/09/06	168	4.9	7.5	6.0	100
07/10/06 - 07/16/06	168	4.3	7.5	5.7	100
07/17/06 - 07/23/06	167	4.0	7.1	5.2	100
07/24/06 - 07/30/06	168	4.2	9.9	6.1	100
07/31/06 - 08/06/06	168	3.3	9.5	5.6	100
08/07/06 - 08/13/06	168	4.0	6.9	5.2	100

TABLE A-20 (Continued): WEEKLY DO SUMMARY STATISTICS AT
ROUTE 83 ON THE CALUMET-SAG CHANNEL DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	4.6	7.7	5.7	100
08/21/06 - 08/27/06	168	3.9	6.1	4.9	100
08/28/06 - 09/03/06	168	4.0	5.8	5.0	100
09/04/06 - 09/10/06	168	4.5	5.9	5.2	100
09/11/06 - 09/17/06	168	3.8	6.6	5.1	100
09/18/06 - 09/24/06	167	4.8	6.4	5.6	100
09/25/06 - 10/01/06	168	5.4	6.1	5.8	100
10/02/06 - 10/08/06	168	3.9	7.0	5.7	100
10/09/06 - 10/15/06	168	5.4	7.6	6.6	100
10/16/06 - 10/22/06	168	5.9	7.9	6.7	100
10/23/06 - 10/29/06	168	6.3	7.8	7.3	100
10/30/06 - 11/05/06	169	6.7	8.1	7.5	100
11/06/06 - 11/12/06	168	5.5	8.2	7.0	100
11/13/06 - 11/19/06	168	2.7	7.4	5.7	95
11/20/06 - 11/26/06	167	6.0	7.2	6.8	100
11/27/06 - 12/03/06	168	5.6	9.9	7.3	100
12/04/06 - 12/10/06	168	8.7	10.5	9.8	100
12/11/06 - 12/17/06	168	7.5	9.1	8.3	100
12/18/06 - 12/24/06	168	6.6	9.3	8.0	100
12/25/06 - 12/31/06	168	7.5	9.1	8.3	100

Attachment 2

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 1

SUMMARY OF PERCENT COMPLIANCE FROM 2005 THROUGH 2007
WITH 10/26/07 DRAFT DISSOLVED OXYGEN (DO) STANDARDS FOR CAWS
AQUATIC LIFE USE A

DO Station	Year	Anytime (Mar-July)			Anytime (Aug-Feb)		
		5.0 mg/L			3.5 mg/L		
		N*	V*	C*	N*	V*	C*
Main Street	2005	3503	224	93.6	4636	484	89.6
	2006	3502	93	97.3	4631	249	94.6
	2007	2954	359	87.8	3748	183	95.1
Foster Avenue	2005	3504	87	97.5	4885	2	100.0
	2006	3513	6	99.8	4911	0	100.0
	2007	3666	11	99.7	4920	0	100.0
Addison Street	2005	3525	380	89.2	4920	50	99.0
	2006	3505	14	99.6	5090	3	99.9
	2007	3502	106	97.0	5089	0	100.0
Fullerton Avenue	2005	2940	1039	64.7	4930	115	97.7
	2006	3502	317	90.9	4920	13	99.7
	2007	3671	745	79.7	5089	5	99.9
Torrence Avenue	2005	2326	883	62.0	4221	416	90.1
	2006	3359	1652	50.8	4916	654	86.7
	2007	3502	1830	47.7	4587	661	85.6
C&W Indiana RR	2005	3059	287	90.6	4807	0	100.0
	2006	3499	487	86.1	5086	0	100.0
	2007	3165	342	89.2	5088	17	99.7
Halsted Street	2005	3420	372	89.1	4834	0	100.0
	2006	3669	92	97.5	4748	0	100.0
	2007	3670	630	82.8	4303	35	99.2
Cicero Avenue (Cal-Sag)	2005	3671	604	83.5	5086	26	99.5
	2006	3669	575	84.3	4918	7	99.9
	2007	3001	831	72.3	4583	24	99.5
104th Avenue	2005	2913	633	78.3	3825	27	99.3
	2006	3033	723	76.2	4152	9	99.8
	2007	2546	599	76.5	3065	332	89.2
Route 83 (Cal-Sag)	2005	3309	1197	63.8	5088	39	99.2
	2006	3669	931	74.6	5087	13	99.7
	2007	3334	1015	69.6	5086	48	99.1

*N=Total Observations, V=Total Violations, C=Percent Compliance

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 1 (Continued)

SUMMARY OF PERCENT COMPLIANCE FROM 2005 THROUGH 2007
WITH 10/26/07 DRAFT DISSOLVED OXYGEN (DO) STANDARDS FOR CAWS
AQUATIC LIFE USE A

DO Station	Year	7-Day Average (Aug-Feb) ^a			7-Day Average (Aug-Feb) ^b		
		4.0 mg/L			4.0 mg/L		
		N*	V*	C*	N*	V*	C*
Main Street	2005	29	4	86.2	194	28	85.6
	2006	30	1	96.7	201	16	92.0
	2007	26	3	88.5	169	20	88.2
Foster Avenue	2005	31	0	100.0	206	0	100.0
	2006	31	0	100.0	206	0	100.0
	2007	31	0	100.0	206	0	100.0
Addison Street	2005	31	1	96.8	206	8	96.1
	2006	31	0	100.0	206	0	100.0
	2007	31	0	100.0	206	0	100.0
Fullerton Avenue	2005	30	1	96.7	200	7	96.5
	2006	31	1	96.8	206	8	96.1
	2007	31	0	100.0	206	2	99.0
Torrence Avenue	2005	28	9	67.9	185	59	68.1
	2006	31	9	71.0	206	63	69.4
	2007	30	9	70.0	199	60	69.8
C&W Indiana RR	2005	31	0	100.0	202	0	100.0
	2006	31	0	100.0	206	0	100.0
	2007	31	1	96.8	206	6	97.1
Halsted Street	2005	31	0	100.0	202	0	100.0
	2006	31	0	100.0	206	0	100.0
	2007	28	1	96.4	186	7	96.2
Cicero Avenue (Cal-Sag)	2005	31	0	100.0	206	0	100.0
	2006	31	0	100.0	206	0	100.0
	2007	29	0	100.0	192	6	96.9
104th Avenue	2005	28	1	96.4	181	5	97.2
	2006	29	0	100.0	189	0	100.0
	2007	22	3	86.4	143	13	90.9
Route 83 (Cal-Sag)	2005	31	1	96.8	206	5	97.6
	2006	31	0	100.0	206	0	100.0
	2007	31	2	93.5	206	8	96.1

^a7-Day average of daily minima is based on weekly mean

^b7-Day average of daily minima is based on continuous weekly mean

*N=Total Observations, V=Total Violations, C=Percent Compliance

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2

SUMMARY OF PERCENT COMPLIANCE FROM 2005 THROUGH 2007
WITH 10/26/07 DRAFT DISSOLVED OXYGEN (DO) STANDARDS FOR CAWS
AQUATIC LIFE USE B

DO Station	Year	Anytime 3.5 mg /L			7-Day Average ^a 4.0 mg/L			7-Day Average ^b 4.0 mg/L		
		N*	V*	C*	N*	V*	C*	N*	V*	C*
Kinzie Street	2005	8728	143	98.4	53	4	92.5	359	25	93.0
	2006	8758	66	99.2	53	2	96.2	359	10	97.2
	2007	8424	97	98.8	53	3	94.3	359	19	94.7
Clark Street	2005	8652	0	100.0	53	0	100.0	359	0	100.0
	2006	8399	0	100.0	53	0	100.0	358	0	100.0
	2007	8256	27	99.7	52	0	100.0	352	0	100.0
Loomis Street	2005	8757	2	100.0	53	0	100.0	359	0	100.0
	2006	8758	19	99.8	53	0	100.0	359	0	100.0
	2007	7745	24	99.7	50	1	98.0	338	7	97.9
36th Street	2005	7670	2498	67.4	49	24	51.0	331	172	48.0
	2006	8408	5826	30.7	53	44	17.0	359	297	17.3
	2007	8217	3924	52.2	53	38	28.3	358	253	29.3
Interstate Highway 55	2005	7963	625	92.2	51	8	84.3	347	69	80.1
	2006	8213	1503	81.7	52	24	53.8	352	156	55.7
	2007	8758	1467	83.2	53	19	64.2	359	130	63.8
Cicero Avenue (CSSC)	2005	6209	293	95.3	43	10	76.7	288	73	74.7
	2006	8591	166	98.1	53	7	86.8	359	46	87.2
	2007	8594	882	89.7	53	14	73.6	359	97	73.0
B&O Central Railroad	2005	8107	10	99.9	51	0	100.0	345	1	99.7
	2006	8756	64	99.3	53	2	96.2	359	14	96.1
	2007	8255	91	98.9	52	3	94.2	352	16	95.5
Route 83 (CSSC)	2005	7026	587	91.6	50	16	68.0	334	113	66.2
	2006	6899	518	92.5	48	15	68.8	332	103	69.0
	2007	5492	379	93.1	40	9	77.5	274	71	74.1
Lockport Powerhouse	2005	8313	752	91.0	53	14	73.6	358	99	72.3
	2006	8416	863	89.7	53	16	69.8	359	115	68.0
	2007	7917	700	91.2	52	14	73.1	352	98	72.2
Torrence Avenue	2005	6547	963	85.3	43	18	58.1	289	127	56.1
	2006	8275	1689	79.6	53	25	52.8	359	176	51.0
	2007	8089	1860	77.0	52	26	50.0	352	177	49.7

^a7-Day average of daily minima is based on weekly mean

^b7-Day average of daily minima is based on continuous weekly mean

*N=Total Observations, V=Total Violations, C=Percent Compliance

Attachment 3

FIGURE 1: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT ADDISON STREET ON THE NORTH BRANCH CHICAGO RIVER
FROM AUGUST 2, 2006 THROUGH AUGUST 8, 2006

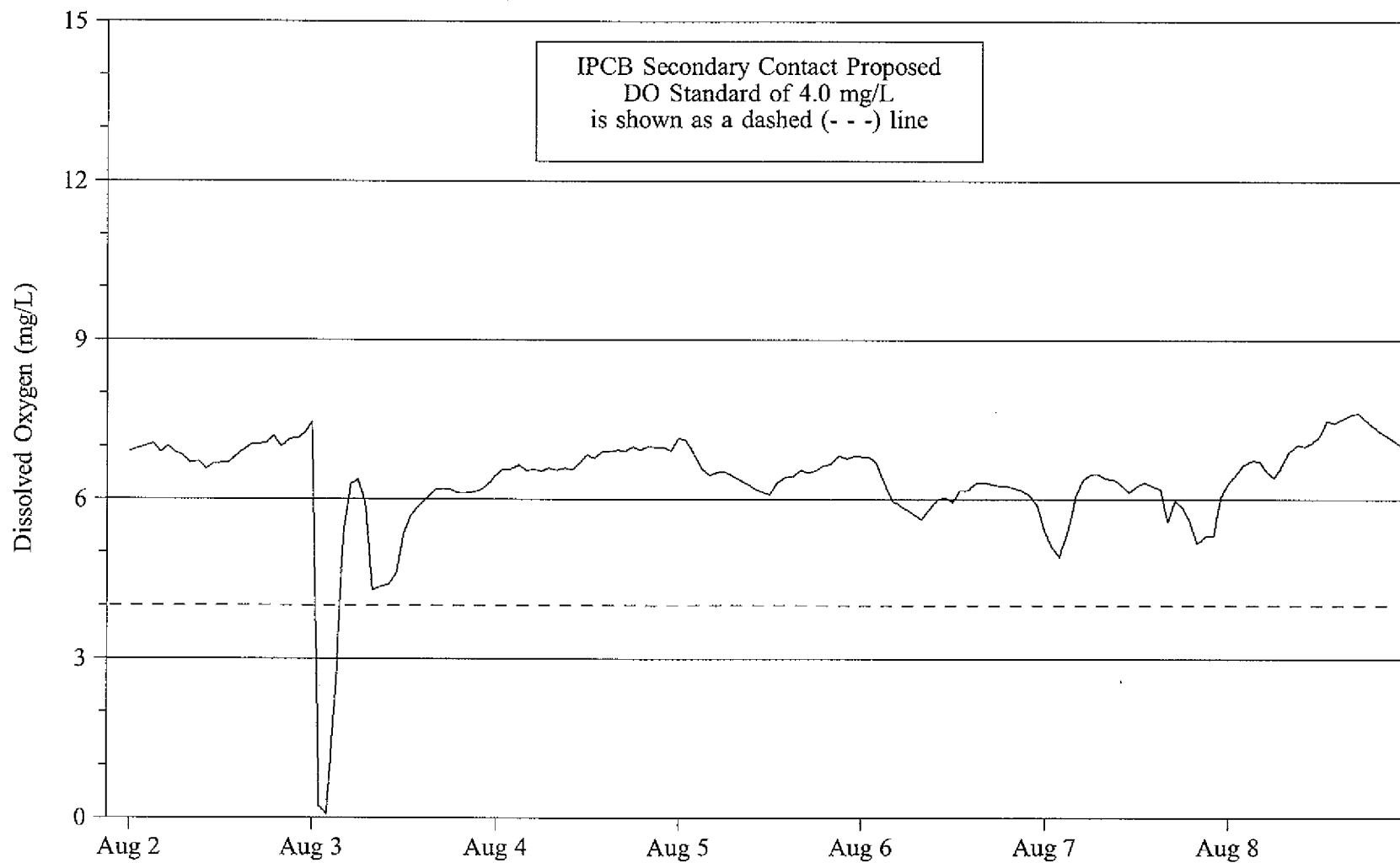


FIGURE 2: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT FULLERTON AVENUE ON THE NORTH BRANCH CHICAGO RIVER
FROM AUGUST 2, 2006 THROUGH AUGUST 8, 2006

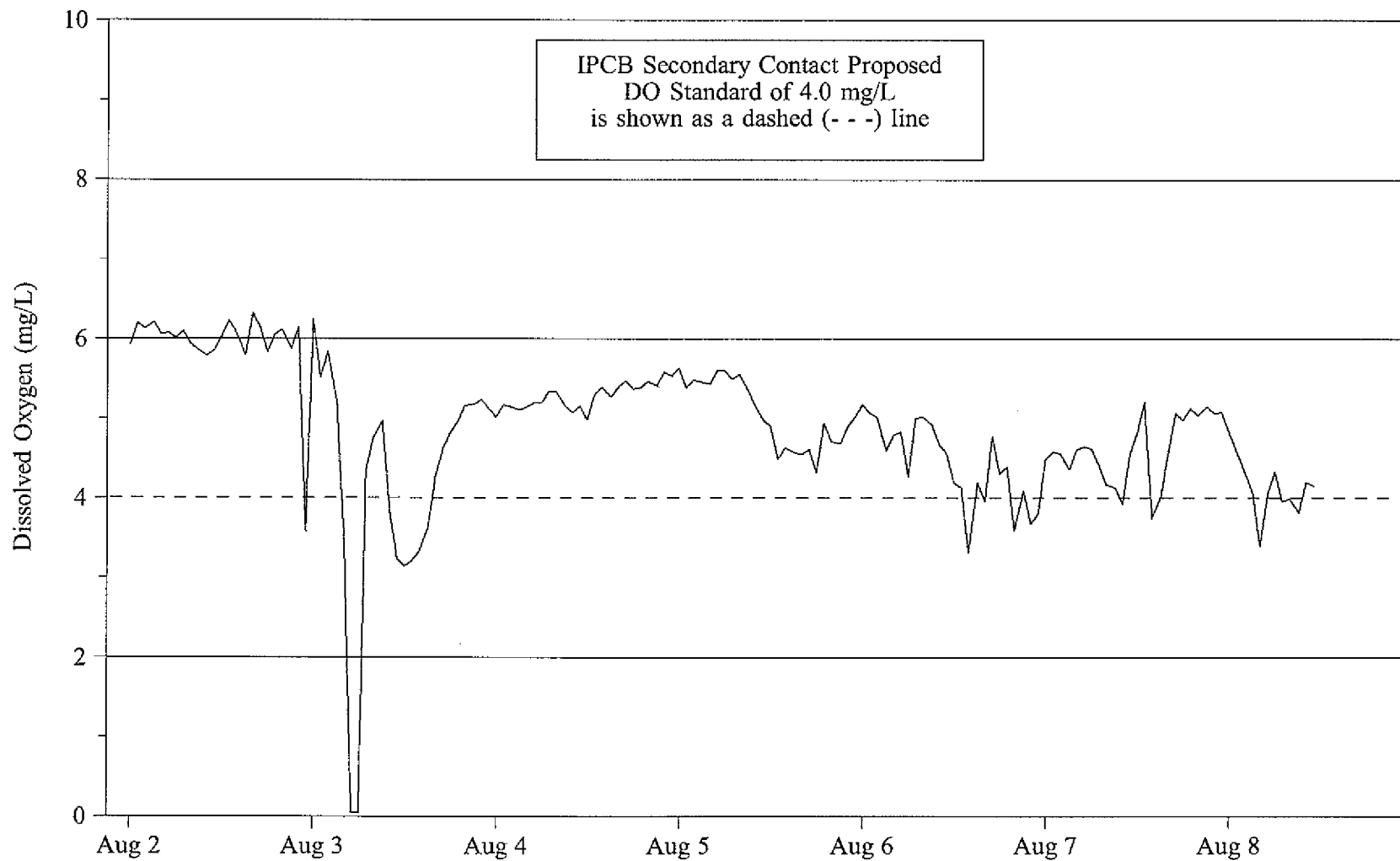


FIGURE 3: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT KINZIE STREET ON THE NORTH BRANCH CHICAGO RIVER
FROM AUGUST 2, 2006 THROUGH AUGUST 8, 2006

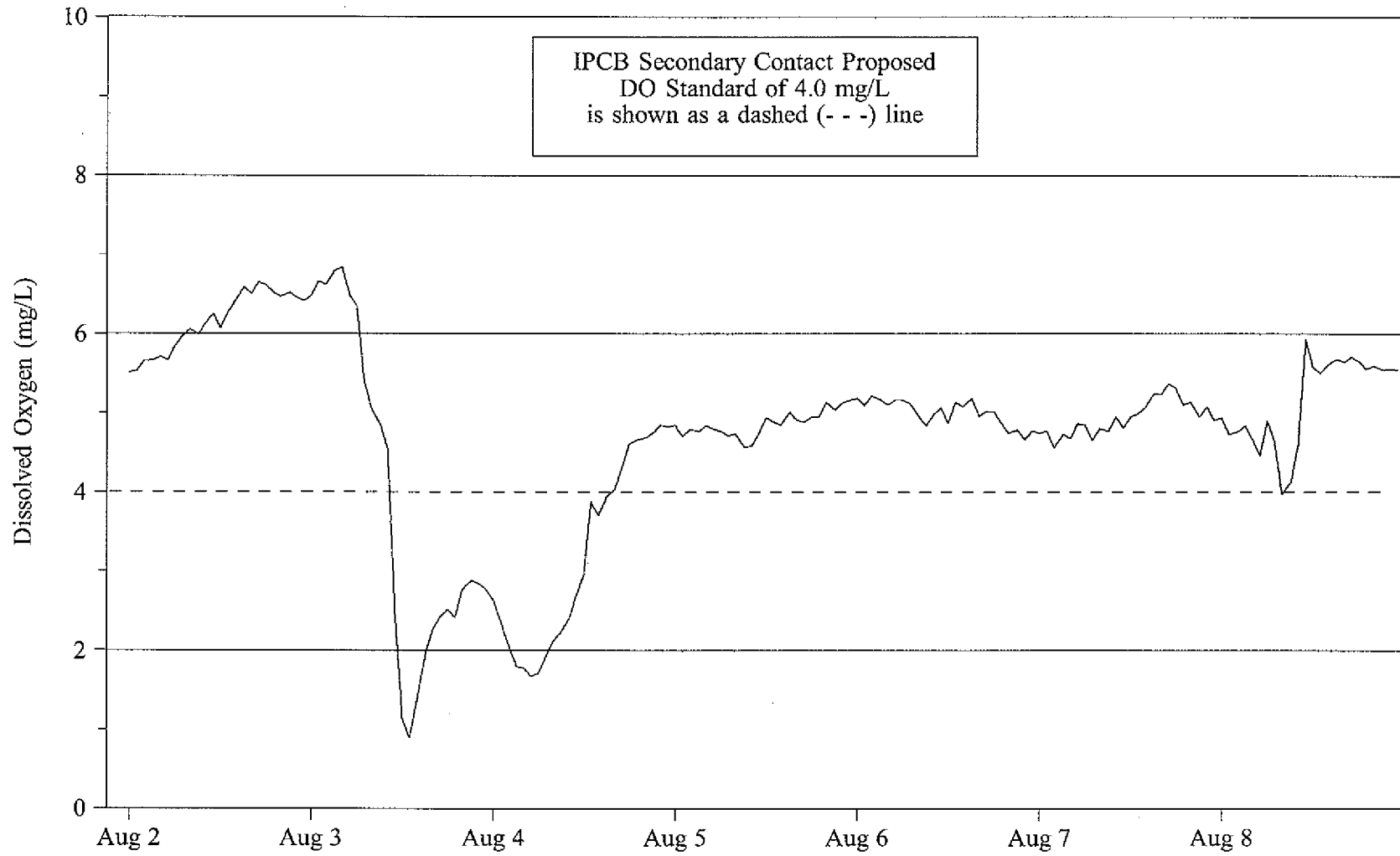


FIGURE 4: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT LOOMIS STREET ON THE SOUTH BRANCH CHICAGO RIVER
FROM AUGUST 2, 2006 THROUGH AUGUST 8, 2006

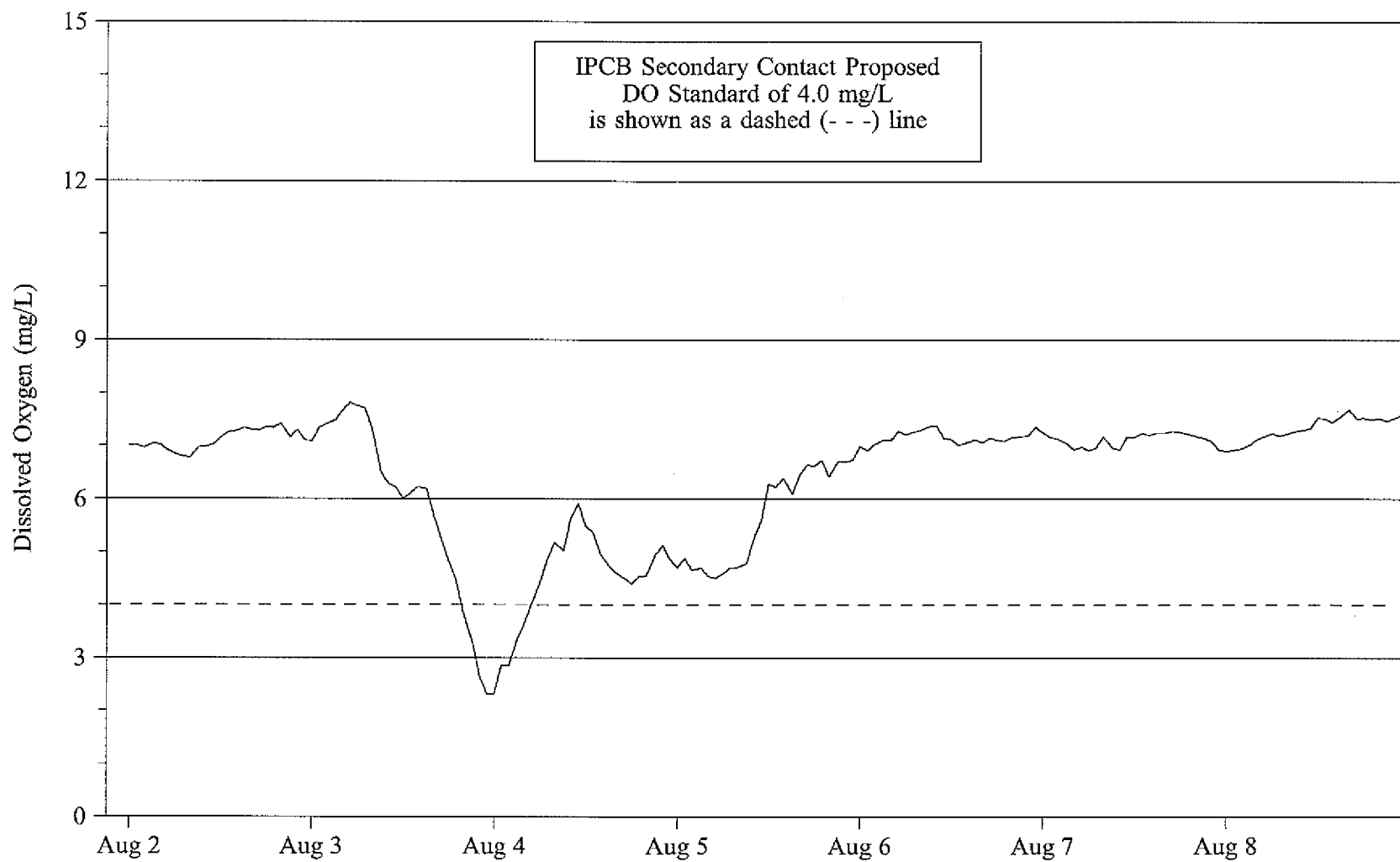


FIGURE 5: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT 36TH STREET ON BUBBLY CREEK
FROM AUGUST 2, 2006 THROUGH AUGUST 8, 2006

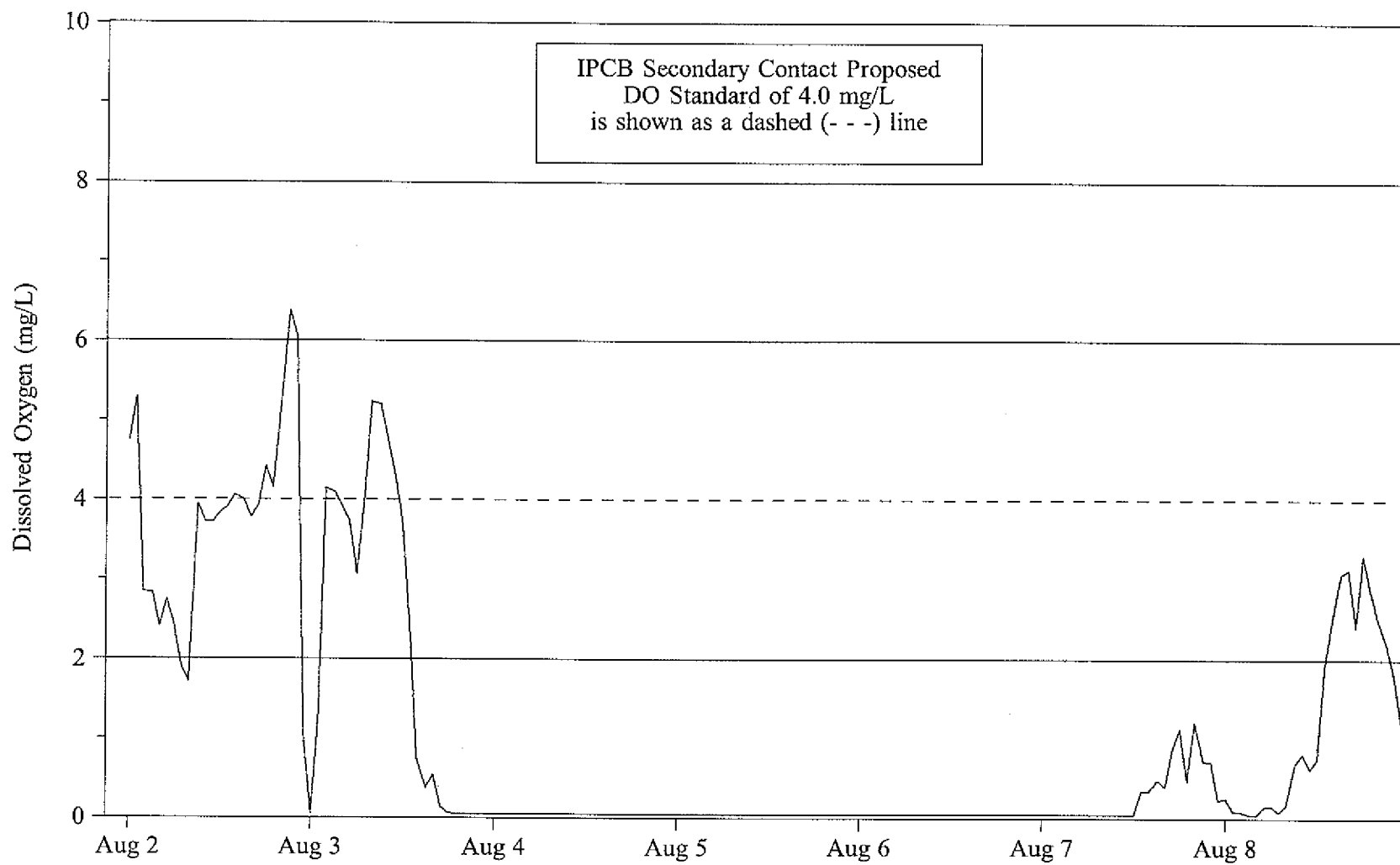


FIGURE 6: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT INTERSTATE HIGHWAY 55 ON BUBBLY CREEK
FROM AUGUST 2, 2006 THROUGH AUGUST 8, 2006

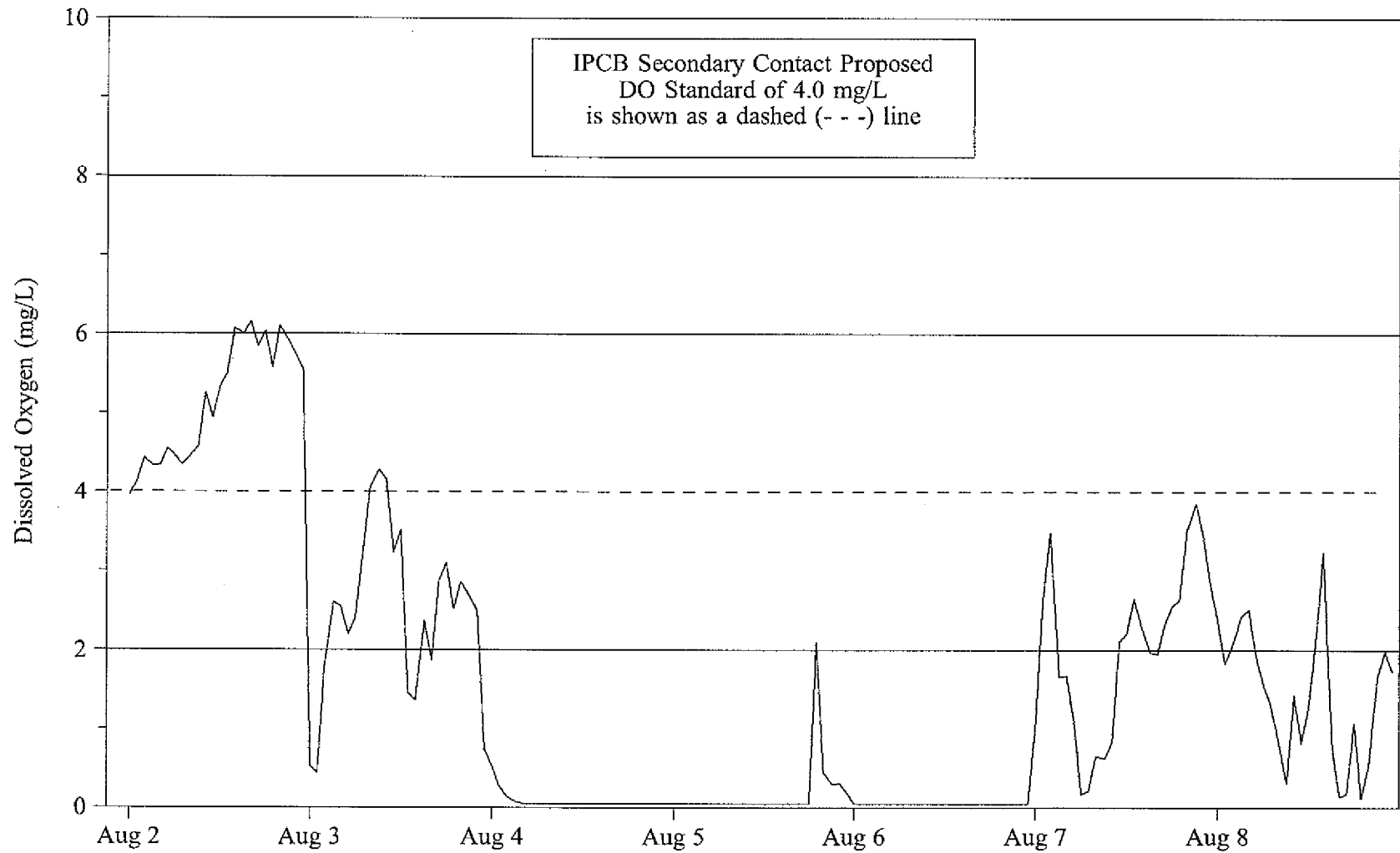


FIGURE 7: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT B&O CENTRAL RAILROAD ON THE CHICAGO SANITARY AND SHIP CANAL
FROM AUGUST 2, 2006 THROUGH AUGUST 8, 2006

