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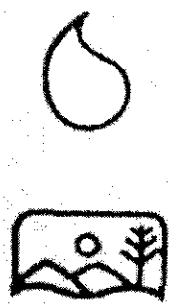

April 24, 2007

Pollution Control Board
Dorothy Gunn, Clerk
JRTC
100 Randolph Street, Suite 11-500
Chicago, Illinois 60601

RE: Proposed Amendments to Dissolved Oxygen Standard
35 ILL. ADM.CODE 302.206
Pollution Control Board Rule R04-25

The Illinois Association of Wastewater Agencies (IAWA) would like to request that additional data be entered into the record of the referenced petition. The data consists of continuous dissolved oxygen (DO) measurements taken on a number of Illinois rivers during the summer and early fall of 2006. This data was requested from the Illinois Environmental Protection Agency (IEPA) before the last hearing on this petition in November 2006. The data has only been made available to IAWA in late March 2007. That data is included with this letter. Please recall that during testimony much was made of any data collected during 2005 because of the widespread drought conditions that existed in Illinois that year. This data was collected in 2006 which was a much more average year in regards to rainfall totals.

While IEPA included a disclaimer stating that they will assume no responsibility for the accuracy of the data, the data is consistent with data that has been collected in numerous other continuous monitoring measurements previously entered as exhibits in this

proceeding. According to Mr. Matthew Short of IEPA ten of the thirty-two river segments on which measurements were taken are those that would have the proposed higher average DO limits of 6.25 mg/L applied as recommended in the Joint IEPA and Illinois Department of Natural Resources (IDNR) proposal. According to IEPA and IDNR, an enhanced DO limit is needed on selected Illinois river segments because the agencies have determined that there are DO sensitive fish species present in those river segments and that there is a need to maintain a higher average DO for a longer time into the year.

IAWA asked Dr. James Garvey to review the 2006 data; especially the ten river segments that are suggested to have the agencies enhanced DO standard applied and therefore should have the assemblage of DO sensitive fish species. IAWA asked Dr. Garvey to compare the IAWA proposed standard (both DO concentrations and proposed dates) to the Joint IEPA-IDNR proposed concentration and dates and to determine which standard would be a better fit. All of the 2006 data has been collected with continuous DO recorders during a non-drought year. Included with this letter is Dr. Garveys' response to that request. In summary, the 2006 data support Dr. Garvey and Dr. Whiles original suggested DO concentrations and dates for those concentrations and closely follow those found in the USEPA National Criteria Document. The 2006 data further supports the IAWA proposed limits and in comparison are a better fit and generate fewer violations than the proposed Joint IEPA-IDNR limits. That is true for both the DO concentrations and the dates.

Interestingly, some of the segments would even appear to be DO impaired. They would violate BOTH the IAWA and agency limits yet still are suggested to sustain a population of the DO sensitive species proposed by the agencies. As was said many times during testimony it once again calls into question the methods and assumptions made by the agencies in determining which river segments should have the enhanced DO limits imposed or which fish species are truly DO sensitive. The IAWA question the validity of those methods.

The IAWA respectfully asks that the Board consider this additional 2006 data as further evidence that the proposed Joint IEPA-IDNR Recommended Revisions to the Illinois General Use Water-Quality Standard for Dissolved Oxygen be rejected as not supported by all the data collected to date and made part of this review. The proposed joint standard does not accurately represent natural dissolved oxygen conditions in Illinois waters. As was stated in my previous letter to the board in December 2006, the IAWA assessment of national and Illinois dissolved oxygen water quality criteria has withstood the test of several years of evaluation and field measurements that have continued to support the position of IAWA in regards to establishing reasonable dissolved oxygen requirements in Illinois.

This new data further supports that position. The seasonality of the proposed concentrations has also held up to that test. The IAWA proposed standard is more conservative than the NCD in regards to establishing minimas for dissolved oxygen and it adheres to the advice of local experts in establishing the months of late spawning and protecting those early life stages.

The IAWA has acknowledged that some waters in Illinois could be identified as requiring a different dissolved oxygen average or minima for certain least disturbed waters. However, the IAWA adamantly opposes establishing such criteria without the ground truthing data to support that designation. The IAWA proposes to work closely with IEPA and IDNR and other interested parties in establishing those criteria and determining what are the attainable uses of the rivers and waters in Illinois.

I'd like to remind the Board the IEPA and IDNR filed no data to support their joint proposal. They further testified that they made no attempt to ground truth their proposal against collected data. The IAWA asks the board to adopt the IAWA petition in total with previously agreed to inclusion of a 30-day average and the narrative provision as proposed by IEPA.

Sincerely,

Dennis Streicher

Dennis Streicher
Director of Water & Wastewater

Cc: Richard McGill, Hearing Officer
Service list

10 April 2007

Mr. Dennis Streicher
IAWA

Dear Dennis:

You recently forwarded to me some 2006 semi-continuous dissolved oxygen (DO) monitoring data collected by the Illinois Environmental Protection Agency (IEPA). As noted by Matt Short's e-mail to you, several of the segments are listed to receive enhanced status under the proposed IDNR/IEPA standard before the Illinois Pollution Control Board (IPCB). I used the same approach as I did when analyzing 2006 data collected by IAWA. I summarized this approach during the November 2006 IPCB hearing. I evaluated the data relative to the proposed IAWA standard and the IDNR/IEPA standard for enhanced DO surface waters. The enhanced stream segments I evaluated are listed as

IEPA Segment	Stream Name
BM-PS-C2	Sugar Creek
DAG-03	Hodges Creek
GB-08	DuPage
GB-18	DuPage
PQC-06	SB Kishwaukee
PQFD-01	Hampshire
PQFD-H-C3	Hampshire
PQI-10	EB Kishwaukee
PQI-H-C5	SB Kishwaukee

In summary, both proposed sets of standards generated similar results, with the exception of Sugar Creek. In Sugar Creek, the proposed IDNR/IEPA standard generated violations whereas the IAWA standard did not (Tables 1, 2). For the minimum criterion, ten and sixteen percent of observations across months and stream segments generated violations for the IAWA and IDNR/IEPA proposed standards, respectively (Table 1). Five of the nine segments did not meet the IDNR/IEPA proposed standard (Tables 1, 2). The majority of these violations occurred in the Kishwaukee drainage.

Let me know if you have questions or need additional information.

Sincerely,

Jim Garvey
Associate Director & Associate Professor

Fisheries and IL Aquaculture Center, Southern Illinois University, Carbondale, IL 62901

Table 1. Minimum criteria. Proportion of dissolved oxygen concentration point estimates (mg/L) quantified at each "enhanced" river site and month that were less than the minimum acute concentration proposed by IEPA and IAWA are listed. IEPA: Not less than 5 mg/L through July 31; IAWA: Not less than 5 mg/L through June 30. For later months, IEPA: Not less than 4 mg/L; IAWA: Not less than 3.5 mg/L.

		Month	IAWA	IEPA
BM-PS-C2	Sugar Creek	July	0.00	**0.12**
		Sept	0.00	0.00
BP-03	Vermilion River	July	0.00	0.00
		August	0.00	0.00
		Sept	0.00	0.00
DAG-03	Hodges Creek	July	**0.62**	**1.00**
		August	**1.00**	**1.00**
		Sept	**0.29**	**0.60**
		Oct	0.00	**0.10**
GB-08	DuPage	July	0.00	**0.05**
		August	0.00	**0.14**
GB-18	DuPage	July	0.00	0.00
		August	0.00	0.00
PQC-06	SB Kishwaukee	June	0.00	0.00
		August	**0.32**	**0.35**
PQFD-01	Hampshire	June	0.00	0.00
		August	0.00	0.00
		Sept	0.00	0.00
PQFD-H-C3	Hampshire	June	0.00	0.00
		August	0.00	0.00
		Sept	0.00	0.00
PQI-10	EB Kishwaukee	June	**0.09**	**0.09**
		August	**0.02**	**0.11**
PQI-H-C5	SB Kishwaukee	June	**0.18**	**0.18**
		August	**0.07**	**0.19**
		Average	**0.10**	**0.16**
		Proportion of Observations	**0.32**	**0.48**

Table 2. Seven-day mean and 7-d minimum criteria. Average 7-d mean values and average 7-d minimum dissolved oxygen concentrations during each month. Each value within each month represents an average of the 7 preceding days (e.g., a month with two values listed below had 14 contiguous days of readings available; three would have 21 days; etc.).

		Month	7-d mean[a]	7-d min[b]	Violate IAWA	Violate IEPA
BM-PS-C2	Sugar Creek	July	6.02	5.23		X
			5.96	5.21		X
		Sept	7.38	6.26		
			6.91	5.96		
BP-03	Vermilion River	July	6.96	6.71		
			6.86	6.62		
		Sept	7.52	6.68		
			7.51	6.68		
			7.53	6.76		
DAG-03	Hodges Creek	August	1.32	0.43	X	X
		Oct	4.12	3.40	X	X
			4.27	3.57	X	X
GB-08	DuPage	July	9.54	5.55		
			9.23	5.01		
GB-18	DuPage	July	8.79	6.01		
PQC-06	SB Kishwaukee	June	8.47	7.47		
			8.47	7.34		
			8.38	7.30		
		August	8.09	2.64	X	X
			6.48	1.68	X	X
PQFD-01	Hampshire	June	8.83	6.91		
			8.79	6.85		
			8.65	6.85		
		Sept	7.72	6.52		
			7.71	6.52		
			7.71	6.53		
			7.55	6.51		
			7.56	6.52		
			7.51	6.60		
PQFD-H-C3	Hampshire	June	9.03	6.90		
			9.06	6.84		
			9.06	6.86		
		Sept	9.10	7.77		
			9.11	7.76		
			9.11	7.77		
			8.97	7.83		
			8.97	7.11		

			8.93	7.17		
			8.86	7.17		
			8.86	7.23		
PQI-10	EB Kishwaukee	June	8.41	5.13		
			7.66	4.79		
		August	9.21	4.24		X
			8.99	3.92	X	X
			8.37	3.76	X	X
PQI-H-C5	SB Kishwaukee	June	8.44	4.76		
			7.60	4.37		
			7.18	4.46		
		August	7.50	3.87	X	X
			6.85	3.54	X	X

[a] 7-d Means of daily means: IEPA: Seven day averages must not be less than 6.25 mg/L through July; IAWA: Seven day averages must not be less than 6 mg/L through June.

[b] 7-d means of daily minima: IEPA: Seven day averages must not be less than 4.5 mg/L after July 31; IAWA: Seven day averages must not be less than 4 mg/L after June 30. N/A = not applicable.

STATIONS HIGHLIGHTED IN YELLOW
ARE SEGEMNTS SUGGESTED FOR
6.25mg/L DO STANDARD

STATION	WATERBODY NAME	NEW_LOC	COUNTY	TOWNSHIP	RANGE	SECTION	QSEC	LATD	LONGD
BE-14	EMBARRAS RIVER	BR W EDGE OF CAMARGO	DOUGLAS	16N	9E	34		39.79973	-88.17041
BEZB-07	INDIAN CREEK	1.5 MI S LAWRENCEVILLE AT RT 1 BR	LAWRENCE	3N	12W	13	S	38.69245	-87.69367
BF-01	SUGAR CREEK	0.3 MI NE OF PALESTINE NEAR ICRR BR	CRAWFORD	7N	11W	35	NE	39.0046	-87.59748
BFC-20	ROBINSON CREEK	OLD RR BR NE ROBINSON 50YD UPS WWTP	CRAWFORD	7N	12W	34	SE	39.01495	-87.7262
BM-PS-C2	SUGAR CREEK-NORTH	US 150 BR., E EDGE OF PARIS AND 0.9 MI. DNS PARIS SOUTH STP	EDGAR	14N	11W	32	SW	39.607504	-87.661115
BP-03	VERMILION RIVER	VERMILION COUNTY FOREST PARK CANOE LAUNCH 4MI E 0.5MI S WESTVILLE	VERMILION	18N	11W	13	SE	40.0157	-87.54628
BPJC-06	SALINE BRANCH	CO RD 24 B4 1 MI N MAYVIEW, 4 MI E URBANA	CHAMPAIGN	19N	10E	5	SW	40.13312	-88.10473
BPJCA-UC-D1	BONEYARD CREEK	DNS OF US 150 NEAR SYCAMORE STREET URBANA	CHAMPAIGN	19N	9E	8	SE	40.1170055	-88.201375
BZK-01	RACCOON CREEK	4 MI WSW FRANCISVILLE ON CO RD 050N	LAWRENCE	2N	12W	27	NE	38.57558	-87.72488
C-09	LITTLE WABASH RIVER	0.5 MI S BENNINGTON ON SALEM MT ERIE RD	EDWARDS	1N	10E	18	SE	38.51842	-88.13199
C-33	LITTLE WABASH RIVER	6 MI WNW GRAYVILLE	EDWARDS	3S	10E	18	NE	38.26991	-88.1377
DA-11	MACOUPIN CREEK	2 MI SE OF STANDARD CITY ON COOPS MOUND RD	MACOUPIN	10N	6W	16	NW	39.316667	-89.773056
DAG-03	HODGES CREEK	CHISM RD BR 3.5 MI NE OF ROCKBRIDGE	MACOUPIN	10N	9W	30	E	39.283842	-90.139167
DB-01	APPLE CREEK	6 MI N ELDRED	GREENE	11N	13W	28	NE	39.3695	-90.54636
DG-04	MAUVAISE TERRE CREEK	1.5 MI NE MERRITT	SCOTT	15N	12W	23	SW	39.73139	-90.40736
DI-01	MICKEL CREEK	RT 104 BR AT CHAMBERSBURG	PIKE	3S	2W	8	SW	39.81757	-90.65332
DI-04	SUGAR CREEK	2 MI NW RAY	SCHUYLER	3N	1W	22	NE	40.2313889	-90.4927778
GB-08	DUPAGE RIVER	RENWICK RD SW PLAINFIELD	WILL	36N	9E	20	NE	41.5923	-88.22436
GB-18	DUPAGE RIVER	2 MI N SHOREWOOD AT BLACK RD BR	WILL	35N	9E	3		41.5361111	-88.1813889
HBD-04	THORN CREEK	THORTON RD BR AT THORNTON, IL	COOK	36N	14E	34		41.56821	-87.60782
HBDB-03	BUTTERFIELD CK	CHICAGO RD HOMEWOOD	COOK	35N	14E	8	NW	41.53986	-87.64954
HCC-07	NORTH BRANCH CHICAGO R	TOUHY AV BR AT NILES	COOK	41N	13E	30		42.01237	-87.79554
HCCB-05	WEK NORTH BRANCH	DUNDEE RD BR NORTHBROOK	COOK	42N	12E	4	NE	42.1383	-87.83478
HCCC-02	MIDDLE FORK	LAKE-COOK CO LINE RD BR AT DEERFIELD	COOK	42N	12E	3		42.1526	-87.81833
HF-01	TINLEY CREEK	135TH ST BR NR CRESTWOOD	COOK	37N	13E	32	NE	41.64664	-87.76646
PQ-13	KISHWAUKEE RIVER	PLEASANT VALLEY RD	MCHENRY	44N	6E	35	NW	42.24784	-88.50644
PQC-06	S BR KISHWAUKEE R	IRENE RD BR 2 MI ENE OF FAIRDALE	DEKALB	42N	3E	17		42.11029	-88.90053
PQC-13	S BR KISHWAUKEE R	2 MI SW DEKALB AT GURLER RD	DEKALB	39N	4E	4	NW	41.8925	-88.7861111
PQFD-01	HAMPSHIRE CREEK	2.6 MI NW HAMPSHIRE AT WALKER ROAD	MCHENRY	42N	6E	17	NW	42.12222222	-88.56888889
PQFD-H-C3	HAMPSHIRE CREEK	ALLEN RD BR, 1 MI NW OF HAMPSHIRE AND 1 MI DNS HAMPSHIRE WWTP	KANE	42N	6E	20	NE	42.1064	-88.5547
PQH-10	SOUTH BRANCH-EAST	2 MI SE UNION	MCHENRY	43N	6E	12		42.21943	-88.49159
PQH-C5	SOUTH BRANCH-EAST	MARENGO RD BR, 1.3 MI W OF HUNTLEY AND 2.9 MI DNS HUNTLEY WWTP	MCHENRY	43N	7E	30	SE	42.1681	-88.4535

STATION	WATERBODY NAME

STATIONS HIGHLIGHTED IN YELLOW
ARE SEGEMNTS SUGGESTED FOR
6.25mg/L DO STANDARD

BE-14	EMBARRAS RIVER
BEZB-07	INDIAN CREEK
BF-01	SUGAR CREEK
BFC-20	ROBINSON CREEK
BM-PS-C2	SUGAR CREEK-NORTH
BP-03	VERMILION RIVER
BPJC-06	SALINE BRANCH
BPJCA-UC-D1	BONEYARD CREEK
BZK-01	RACCOON CREEK
C-09	LITTLE WABASH RIVER
C-33	LITTLE WABASH RIVER
DA-11	MACOUPIN CREEK
DAG-03	HODGES CREEK
DB-01	APPLE CREEK
DD-04	MAUVAISE TERRE CREEK
DE-01	MCKEE CREEK
DH-04	SUGAR CREEK
GB-08	DUPAGE RIVER
GB-18	DUPAGE RIVER
HBD-04	THORN CREEK
HBDB-03	BUTTERFIELD CK
HCC-07	NORTH BRANCH CHICAGO R
HCCB-05	W FK NORTH BRANCH
HCCC-02	MIDDLE FORK
HF-01	TINLEY CREEK
PQ-13	KISHWAUKEE RIVER
PQC-06	S BR KISHWAUKEE R
PQC-13	S BR KISHWAUKEE R
PQFD-01	HAMPSHIRE CREEK
PQFD-H-C3	HAMPSHIRE CREEK
PQI-10	SOUTH BRANCH-EAST
PQI-H-C5	SOUTH BRANCH-EAST

NEW_LOC	COUNTY
BR W EDGE OF CAMARGO	DOUGLAS
1.5 MI S LAWRENCEVILLE AT RT 1 BR	LAWRENCE
0.3 MI NE OF PALESTINE NEAR ICRR BR	CRAWFORD
OLD RR BR NE ROBINSON 50YD UPS WWTP	CRAWFORD
US 150 BR., E EDGE OF PARIS AND 0.9 MI. DNS PARIS SOUTH STP	EDGAR
VERMILION COUNTY FOREST PARK CANOE LAUNCH 4MI E 0.5MI S WESTVILLE	VERMILION
CO RD 24 B4 1 MI N MAYVIEW, 4 MI E URBANA	CHAMPAIGN
DNS OF US 150 NEAR SYCAMORE STREET URBANA	CHAMPAIGN
4 MI WSW FRANCISVILLE ON CO RD 050N	LAWRENCE
0.5 MI S BENNINGTON ON SALEM MT ERIE RD	EDWARDS
6 MI WNW GRAYVILLE	EDWARDS
2 MI SE OF STANDARD CITY ON COOPS MOUND RD	MACOUPIN
CHISM RD BR 3.5 MI NE OF ROCKBRIDGE	MACOUPIN
6 MI N ELDRED	GREENE
1.5 MI NE MERRITT	SCOTT
RT 104 BR AT CHAMBERSBURG	PIKE
2 MI NW RAY	SCHUYLER
RENWICK RD SW PLAINFIELD	WILL
2 MI N SHOREWOOD AT BLACK RD BR	WILL
THORTON RD BR AT THORNTON, IL	COOK
CHICAGO RD HOMEWOOD	COOK
TOUHY AV BR AT NILES	COOK
DUNDEE RD BR NORTHBROOK	COOK
LAKE-COOK CO LINE RD BR AT DEERFIELD	COOK
135TH ST BR NR CRESTWOOD	COOK
PLEASANT VALLEY RD	MCHENRY
IRENE RD BR 2 MI ENE OF FAIRDALE	DEKALB
2 MI SW DEKALB AT GURLER RD	DEKALB
2.6 MI NW HAMPSHIRE AT WALKER ROAD	MCHENRY
ALLEN RD BR, 1 MI NW OF HAMPSHIRE AND 1 MI DNS HAMPSHIRE WWTP	KANE
2 MI SE UNION	MCHENRY
MARENGO RD BR, 1.3 MI W OF HUNTLEY AND 2.9 MI DNS HUNTLEY WWTP	MCHENRY

TOWNSHIP	RANGE	SECTION	QSEC	LATD	LONGD
16N	9E	34		39.79973	-88.17041
3N	12W	13	S	38.69245	-87.69367
7N	11W	35	NE	39.0046	-87.59748
7N	12W	34	SE	39.01495	-87.7262
14N	11W	32	SW	39.607504	-87.661115
18N	11W	13	SE	40.0157	-87.54628
19N	10E	5	SW	40.13312	-88.10473
19N	9E	8	SE	40.1170055	-88.201375
2N	12W	27	NE	38.57558	-87.72488
1N	10E	18	SE	38.51842	-88.13199
3S	10E	18	NE	38.26991	-88.1377
10N	6W	16	NW	39.316667	-89.773056
10N	9W	30	E	39.283842	-90.139167
11N	13W	28	NE	39.3695	-90.54636
15N	12W	23	SW	39.73139	-90.40736
3S	2W	8	SW	39.81757	-90.65332
3N	1W	22	NE	40.2313889	-90.4927778
36N	9E	20	NE	41.5923	-88.22436
35N	9E	3		41.5361111	-88.1813889
36N	14E	34		41.56821	-87.60782
35N	14E	8	NW	41.53986	-87.64954
41N	13E	30		42.01237	-87.79554
42N	12E	4	NE	42.1383	-87.83478
42N	12E	3		42.1526	-87.81833
37N	13E	32	NE	41.64664	-87.76646
44N	6E	35	NW	42.24784	-88.50644
42N	3E	17		42.11029	-88.90053
39N	4E	4	NW	41.8925	-88.7861111
42N	6E	17	NW	42.12222222	-88.56888889
42N	6E	20	NE	42.1064	-88.5547
43N	6E	12		42.21943	-88.49159
43N	7E	30	SE	42.1681	-88.4535