IMPACT OF
CITGO'S PROPOSED
DISCHARGE ON
WATER QUALITY

DECEMBER, 2004

By

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EXHIBIT 6

BACKGROUND

Citgo Petroleum Corporation has entered into a Consent Agreement with the U.S. EPA to reduce air pollution from its refineries. At the Lemont Refinery, nitrous oxides (NO_x) and sulfure dioxide (SO_2) are to be reduced from the carbon monoxide (CO) boiler on the FCC unit. To carry out this requirement, the Lemont Refinery is proposing to install a selective catalytic reduction (SCR) unit for NO_x, followed by a wet gas scrubber (WGS) for SO_2. The SCR technology uses a catalyst to reduce NO_x to nitrogen. Ammonia is added as the reducing agent. Unreacted ammonia leaving the SCR (ammonia slip) is removed by the WGS. The purpose of the WGS is to control air emissions of particulate matter and SO_2. The WGS process generates water purge, which contains particulate and SO_2 removed from the flue gas. This purge stream is removed from the WGS to control Total Suspended Solids (TSS) and Total Dissolved Solids (TDS) levels in the scrubber water. Purge water from the WGS containing ammonia will then be treated to remove suspended solids, ammonia, and cooled to 90°F. The effluent from the purge treatment unit (PTU) will be discharged to the Treated Water Basin and discharged through Outfall 001 along with the existing process wastewater.

DESIGN LOADINGS

Sulfates and Total Dissolved Solids (TDS) are the two parameters of interest from a water quality perspective. No change in Total Suspended Solids (TSS), temperature, or ammonia in the plant Outfall 001 is contemplated from the contribution from the PTU.

Incremental Contribution From PTU Effluent

Average Flow	274,000 gpd
TDS	215,000 lbs/day
Sulfate	142,000 lbs/day

RELEVANT ILLINOIS WATER QUALITY STANDARDS

Citgo discharges into the Chicago Sanitary & Ship Canal, upstream of the Lockport Lock & Dam. Below the dam, the Ship Canal merges with the Des Plaines River, passes through Joliet, and 11 miles downstream of Joliet passes beneath the I-55 Bridge. Upstream of the I-55 Bridge, the receiving waters are designated as *Secondary Contact* waters, and downstream of the I-55 Bridge the Des Plaines River is designated as *General Use*. The *General Use* designation begins 18.5 miles below Citgo's outfall.

Illinois has adopted unique water quality standards for *Secondary Contact* and *General Use* streams. Secondary contact waters have less restrictive standards due to limited aquatic life and recreational use potential. The relevant water quality standards are as follows:

Parameters	General Use	Secondary Contact
Sulfates (SO_4) mg/L	500	------
Total Dissolved Solids (TDS), mg/L	1,000	1,500
Nitrates (NO_3 as N)	------	------

Water Quality Based Effluent Limits (WQBELs) would be determined during the NPDES process, and these limits are based on low flow stream conditions (7-day, 10-year) and average loadings. Estimated values for stream low flows are listed below:

	Low Flow, MGD
Ship Canal at Citgo Refinery	1,134
Des Plaines River at I-55 Bridge	1,260

These flow rates can be used in conjunction with pollutant loadings and existing water quality to determine water quality impacts. Existing water quality in both the Ship Canal and the Des Plaines River at the I-55 Bridge are relevant for assessing the impact.

EXISTING WATER QUALITY

Table 1 presents a summary of weekly samples collected at Citgo's water intake from the Chicago Sanitary and Ship Canal. Total dissolved solids (TDS), ammonia, and nitrates have been routinely monitored for the past five years (four years for nitrates) by Citgo. (The mean values over the past five years were used in the previous section for the contribution from the waterway.)

The Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) has had a weekly waterway sampling program since 2001. Table 2 presents the MWRDGC's TDS data since January 2001. At the MWRDGC first downstream site from the refinery at Lockport, the average TDS was 626 mg/L, slightly higher than Citgo's average since 2001 of 599 mg/L. At the I-55 Bridge, the beginning of the *General Use* Waterway, the mean TDS since 2001 has been 705 mg/L.

The MWRDGC's sulfate results are presented in Table 3. At Lockport, the mean sulfate has been 92 mg/l and at the I-55 Bridge the mean sulfate has been 95 mg/L.

Ammonia results are presented in Table 4. A steady decline in ammonia nitrogen is apparent across the four stations. At Lockport, the total ammonia nitrogen averaged 0.65 mg/L, declining to 0.36 mg/L by the I-55 Bridge. The 0.65 mg/L total ammonia as N at Lockport is identical to the Citgo Refinery's water intake average since 2001.

Un-ionized ammonia results are tabulated in Table 5. At Lockport, the average un-ionized ammonia since 2001 was 0.005 mg/L. At the I-55 Bridge the average un-ionized ammonia was 0.004 mg/L.

The assembled current water quality database can be used to predict the resultant water quality impacts from the proposed additional contribution from the FCC scrubber.

PROJECTED WATER QUALITY IMPACTS

Utilizing the estimated 7-day, 10-year low flow rates provided previously, the impact on the Sanitary & Ship Canal and the Des Plaines River can be predicted under worst case conditions.

First the incremental change in stream concentration can be calculated at low flow:

INCREMENTAL INCREASE IN SULFATE, TDS, AND NITRATE LEVELS

Parameters	**Ship Canal**	**Des Plaines River @ I-55 Bridge**
Sulfate (SO_4), mg/L	15	14
Total Dissolved Solids, (TDS), mg/L	23	21

Using the existing average water quality concentrations and adding the above incremental impact results in the following projections in water quality.

PROJECTED CONCENTRATIONS AFTER MIXING

Parameters	**Ship Canal**	**Des Plaines River @ I-55 Bridge**
Sulfate (SO_4), mg/L	107	109
Total Dissolved Solids, (TDS), mg/L	606	726

As there is a TDS water quality standard on *Secondary Contact Waters*, the TDS concentration at the edge of the mixing zone is important. Citgo completed a mixing zone determination in 1992, which determined the mixing zone provided a 40:1 dilution[1]/.

The combined outfall will have a projected TDS level of 8,700 mg/L[2]/. Applying the 40:1 dilution yields an increase above background of 218 mg/L in TDS. Adding this to the mean upstream TDS level (from Table 1) 583 mg/L, yields a TDS concentration at the edge of the mixing zone of 801 mg/L, below the 1,500 mg/L water quality standard.

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[1] /Environmental Assessment of Wastewater Ammonia Discharge from the Uno-Ven Refinery, Lemont, Illinois, J.E. Huff, et al., December 1992.

[2] / Based on 3.6 mgd at 2,160 mg/L plus 0.27 mgd containing 216,000 lbs/day.

OTHER REGULATORY CONSIDERATIONS

There are several other regulatory programs that potentially can impact Citgo's ability to obtain a permit. These issues are identified below:

Effluent Limits – There are no specific Illinois effluent limits on sulfates, or TDS. Therefore, any effluent limits would be based on the water quality considerations which were addressed in the previous section.

Categorical Limits – U.S. EPA has promulgated categorical limits on various industries, including the petroleum refining industry. These regulations found in 40 CFR 419 do not include sulfate, or TDS effluent limits.

Impaired Waterways – Section 303(d) of the Clean Water Act requires each state to identify impaired waterways and the caused of impairment and then develop what is essentially a waste load allocation for addressing the impairment. Illinois prepared a list of impaired waterways in 1998 and identified 738 segments. Illinois has developed a priority list for addressing these 738 segments.

The IEPA recently issued its *Illinois Water Quality Report 2002*. The entire stretch of the Ship Canal and the downstream Des Plaines River are both listed as *impaired waterways*, for a variety of reasons. However, none of the reasons listed are attributable to sulfates or total dissolved solids.

Antidegradation – The Illinois Pollution Control Board adopted last year antidegradation regulations that require the discharger to demonstrate that its change in effluent quality will have no negative impact on the receiving stream. At the incremental changes in the water quality, no impact on the receiving streams would be predicted.

WATER QUALITY EXCEEDANCES

TDS – From Table 2, one sample TDS sample at the Lockport Lock & Dam was above the 1,500 mg/L Secondary Contact Water Quality Standard. This sample was collected on January 4, 2001. All other samples achieved the Secondary Contact Water Quality Standard. No exceedances have been recorded at the other two downstream Secondary Contact sampling locations.

At the I-55 Bridge, three samples, from January 25th to February 8, 2001 were reported above the 1,000 mg/L General Use TDS standard. All others were below the TDS Water Quality standard.

The source of the elevated TDS in the waterway is from highway de-icing runoff. The significant tons of road salt that is applied in the drainage basin causes these TDS exceedances, independent of other activities.

The FCC wet gas scrubber will add only 21 mg/L TDS at the I-55 Bridge, to the Des Plaines at low flow conditions.

Sulfates – From Table 3, the sulfates in the waterway have been consistently low, with no documented exceedances of the General Use Water Quality Standard. The Lemont Refinery's contribution to the waterway, 14 to 15 mg/L sulfate at low flow, will not result in any violation of the sulfate water quality standard.

WATER QUALITY CONSIDERATIONS

The available data suggests that the TDS exceedances on the waterway are attributable to highway de-icing. The IEPA noted in a recent response to an NPDES permit condition[3]/;

> "The intent of the Agency was, and still is, that a District action must be responsible for a violation on the water quality standard before it is considered a permit violation."

The TDS water quality exceedances are analogous, in that the Lemont Refinery's should not be held accountable for TDS violations caused solely by highway de-icing.

One can view the water quality data available, and note some data gaps. The Agency has historically required dischargers to fill in such data gaps through a monitoring program attained in its NPDES. Then, upon permit renewal, the Agency evaluates the additional data and decides if effluent limitations would be warranted. Such an approach would seem appropriate in this situation, during snow melt periods water quality samples could be collected.

[3] / Letter from Dean J. Studer P.E., Supervisor, Southern Municipal Unit, Permit Section, IEPA to Steven Davis, Galesburg Sanitary District, November 15, 2004.

TABLE 1
CHICAGO SANITARY & SHIP CANAL WATER QUALITY
Intake to Citgo Refinery

Year	Total Dissoved Solids, mg/L		Ammonia as N, mg/L		Nitrates, NO3/N, mg/L	
	Maximum	Mean	Maximum	Mean	Maximum	Mean
1998	1,222	541	1.96	0.77	-	-
1999	1,477	585	2.91	1.42	9.1	-
2000	1,393	592	3.33	1.19	10.3	6.1
2001	1,408	629	2.37	0.79	8.7	5.6
2002	1,636	569	1.19	0.50	8.9	5.6

TABLE 2
CHICAGO SANITARY AND SHIP CANAL / DES PLAINES RIVER
DES PLAINES RIVER

Date	Lockport Forebay Chicago S&S Canal	Jefferson Street Des Plaines River	Empress Casino Des Plaines River	I-55 Bridge Des Plaines River
01/04/2001	1,595	1,319	1,020	
01/11/2001	1,151	1,109	1,006	983
01/18/2001	1,273	1,325	1,329	
01/25/2001	1,160	1,129	1,178	1,194
02/01/2001	ND	1,313	1,168	1,075
02/08/2001	1,116	1,168	1,182	1,139
02/15/2001	920	851	828	858
02/22/2001	906	842	823	
03/01/2001	746	794	730	
03/08/2001	772	602	626	648
03/15/2001	760	728	790	726
03/22/2001	950	976	1,058	966
03/29/2001	902	840	836	870
04/05/2001	852	870	876	892
04/12/2001	674	696	744	
04/19/2001	596	652	756	754
04/26/2001	574	620	648	696
05/03/2001	800	808	776	802
05/10/2001	824	800	856	832
05/17/2001	538	556	562	604
05/24/2001	594	576	470	816
05/31/2001	542	604	522	506
06/07/2001	612	596	586	
06/14/2001	598	612	576	624
06/21/2001	490	510	566	512
06/28/2001	582	542	574	584
07/05/2001	522	420	472	558
07/12/2001	452	432	444	520
07/19/2001	502	506	448	498
07/26/2001	402	406	380	392
08/02/2001	300	434	432	
08/09/2001	618	462	468	
08/16/2001	422	450	478	520
08/23/2001	398	362	404	438
08/30/2001	428	410	432	
09/06/2001	388	394	418	370
09/13/2001	468	448	470	
09/20/2001	334	374	446	
09/27/2001	414	396	404	
10/04/2001	438	362	308	376
10/11/2001	370	382	410	
10/15/2001	336			
10/18/2001	430	398	402	
10/25/2001	466	452	414	

TABLE 2
CHICAGO SANITARY AND SHIP CANAL / DES PLAINES RIVER
DES PLAINES RIVER

Date	Lockport Forebay Chicago S&S Canal	Jefferson Street Des Plaines River	Empress Casino Des Plaines River	I-55 Bridge Des Plaines River
11/01/2001	508	468	484	
11/08/2001	502	396	544	
11/15/2001	544	548	638	
11/19/2001	540			
11/20/2001	538	516	562	
11/29/2001	546	544	558	
12/06/2001	510	514	510	
12/13/2001	278	574	578	
12/20/2001	560	584	562	
12/27/2001	542	564	582	
01/14/2002	532			
01/22/2002	624			
01/28/2002	602			
02/04/2002	1,136			
02/11/2002	830			
02/19/2002	686			
02/25/2002	606			
03/04/2002	662			
03/11/2002	964			
03/18/2002	884			
03/25/2002	778			
04/01/2002	710			
04/08/2002	692			
04/15/2002	558			
04/22/2002	610			
04/29/2002	656			
05/06/2002	578			
05/13/2002	304			
05/20/2002	564			
05/28/2002	640			
06/03/2002	718			
06/10/2002	464			
06/17/2002	460			
06/24/2002	528			
07/01/2002	460			
07/08/2002	482			
07/15/2002	410			
07/22/2002	428			
07/29/2002	448			
AVERAGE	**626**	**639**	**641**	**705**
Std Dev	239	264	244	233
Count	82	52	52	28
Interval (Average +/- interval gives range of 95% certainty)				

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TABLE 3
CHICAGO SANITARY AND SHIP CANAL / DES PLAINES RIVER
SULFATE, mg/L

Date	Lockport Forebay Chicago S&S Canal	Jefferson Street Des Plaines River	Empress Casino Des Plaines River	I-55 Bridge Des Plaines River
01/04/2001	115	114	114	
01/11/2001	121	113	114	112
01/18/2001	131	130	133	
01/25/2001	120	121	129	127
02/01/2001	123	124	121	115
02/08/2001	99	95	99	100
02/15/2001	93	82	74	87
02/22/2001	112	103	99	
03/01/2001	85	78	77	
03/08/2001	112	97	106	92
03/15/2001	117	115	117	112
03/22/2001	103	94	103	99
03/29/2001	119	112	118	106
04/05/2001	126	118	127	126
04/12/2001	109	108	105	
04/19/2001	87	81	96	96
04/26/2001	83	77	82	89
05/03/2001	123	110	110	110
05/10/2001	123	120	124	122
05/17/2001	84	83	92	93
05/24/2001	102	93	94	98
05/31/2001	77	74	76	72
06/07/2001	101	82	90	
06/14/2001	93	86	97	92
06/21/2001	75	70	85	86
06/28/2001	86	85	88	85
07/05/2001	95	96	86	89
07/12/2001	67	69	81	82
07/19/2001	83	82	92	87
07/26/2001	66	65	65	70
08/02/2001	69	69	69	
08/09/2001	82	78	86	
08/16/2001	73	82	88	94
08/23/2001	71	68	76	87
08/30/2001	67	67	70	
09/06/2001	63	63	64	67
09/13/2001	77	82	84	
09/20/2001	62	65	70	
09/27/2001	64	62	64	
10/04/2001	65	64	68	64
10/11/2001	70	73	80	
10/15/2001	46			
10/18/2001	62	57	61	
10/25/2001	64	57	61	

TABLE 3
CHICAGO SANITARY AND SHIP CANAL / DES PLAINES RIVER
SULFATE, mg/L

Date	Lockport Forebay Chicago S&S Canal	Jefferson Street Des Plaines River	Empress Casino Des Plaines River	I-55 Bridge Des Plaines River
11/01/2001	79	77	87	
11/08/2001	104	100	102	
11/15/2001	98	101	101	
11/19/2001	96			
11/20/2001	93	92	92	
11/29/2001	96	92	99	
12/06/2001	93	89	94	
12/13/2001	95	94	91	
12/20/2001	103	98	99	
12/27/2001	95	95	99	
01/14/2002	99			
01/22/2002	104			
01/28/2002	107			
02/04/2002	107			
02/11/2002	98			
02/19/2002	98			
02/25/2002	104			
03/04/2002	115			
03/11/2002	83			
03/18/2002	107			
03/25/2002	119			
04/01/2002	119			
04/08/2002	89			
04/15/2002	90			
04/22/2002	107			
04/29/2002	104			
05/06/2002	100			
05/13/2002	60			
05/20/2002	94			
05/28/2002	106			
06/03/2002	103			
06/10/2002	85			
06/17/2002	85			
06/24/2002	84			
07/01/2002	89			
07/08/2002	76			
07/15/2002	75			
07/22/2002	77			
07/29/2002	69			
AVERAGE	**92**	**89**	**92**	**95**
MAXIMUM	**131**	**130**	**133**	**127**

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TABLE 4

CHICAGO SANITARY AND SHIP CANAL / DES PLAINES RIVER

TOTAL AMMONIA, NH3/N, mg/L

Date	Lockport Forebay Chicago S&S Canal	Jefferson Street Des Plaines River	Empress Casino Des Plaines River	I-55 Bridge Des Plaines River
01/04/2001	1.45	0.88	0.62	
01/11/2001	4.03	2.17	1.02	0.69
01/18/2001	1.04	1.17	0.94	
01/25/2001	0.95	0.78	0.68	0.73
02/01/2001	1.22	1.72	0.97	0.76
02/08/2001	0.95	0.72	0.77	0.78
02/15/2001	0.48	0.39	0.36	0.38
02/22/2001	0.81	0.48	0.57	
03/01/2001	1.28	0.95	1.01	
03/08/2001	1.01	0.98	0.77	0.59
03/15/2001	1.32	0.81	0.73	1.04
03/22/2001	1.18	1.13	0.76	0.60
03/29/2001	0.61	0.47	0.43	0.29
04/05/2001	2.59	1.11	0.55	0.81
04/12/2001	0.81	0.65	0.84	
04/19/2001	0.48	0.34	0.28	0.28
04/26/2001	0.47	0.30	0.23	0.23
05/03/2001	0.74	0.36	0.20	0.01
05/10/2001	0.62	0.42	0.27	0.18
05/17/2001	0.76	0.51	0.35	0.30
05/24/2001	0.51	0.37	0.28	0.33
05/31/2001	0.49	0.35	0.23	0.18
06/07/2001	0.42	0.31	0.33	
06/14/2001	0.87	0.41	0.15	0.08
06/21/2001	0.34	0.22	0.25	0.21
06/28/2001	0.39	0.24	0.10	0.07
07/05/2001	0.32	0.30	0.23	0.10
07/12/2001	0.37	0.29	0.21	0.36
07/19/2001	0.29	0.23	0.23	0.16
07/26/2001	0.65	0.52	0.37	0.30
08/02/2001	0.28	0.23	0.13	
08/09/2001	0.29	0.26	0.18	
08/16/2001	0.45	0.30	0.23	0.14
08/23/2001	0.25	0.25	0.22	0.21
08/30/2001	0.37	0.23	0.21	
09/06/2001	0.01	0.19	0.17	0.08
09/13/2001	0.28	0.23	0.15	
09/20/2001	0.61	0.31	0.31	
09/27/2001	0.37	0.30	0.20	
10/04/2001	0.18	0.13	0.10	0.07
10/11/2001	0.28	0.24	0.24	
10/15/2001	0.42			
10/18/2001	0.27	0.14	0.20	
10/25/2001	0.20	0.28	0.24	
11/01/2001	0.23	0.16	0.13	
11/08/2001	0.33	0.30	0.19	

TABLE 4

CHICAGO SANITARY AND SHIP CANAL / DES PLAINES RIVER

TOTAL AMMONIA, NH3/N, mg/L

Date	Lockport Forebay Chicago S&S Canal	Jefferson Street Des Plaines River	Empress Casino Des Plaines River	I-55 Bridge Des Plaines River
11/15/2001	0.37	0.36	0.23	
11/19/2001	0.42			
11/20/2001	0.40	0.35	0.24	
11/29/2001	0.33	0.34	0.21	
12/06/2001	0.39	0.36	0.30	
12/13/2001	0.48	0.36	0.23	
12/20/2001	0.33	0.32	0.23	
12/27/2001	0.24	0.28	0.27	
01/14/2002	0.27			
01/22/2002	0.61			
01/28/2002	0.95			
02/04/2002	0.77			
02/11/2002	0.74			
02/19/2002	0.47			
02/25/2002	0.62			
03/04/2002	0.58			
03/11/2002	0.59			
03/18/2002	0.87			
03/25/2002	1.08			
04/01/2002	0.79			
04/08/2002	0.72			
04/15/2002	0.58			
04/22/2002	1.38			
04/29/2002	0.62			
05/06/2002	0.77			
05/13/2002	0.49			
05/20/2002	0.48			
05/28/2002	0.55			
06/03/2002	0.61			
06/10/2002	0.31			
06/17/2002	0.52			
06/24/2002	0.32			
07/01/2002	0.50			
07/08/2002	0.42			
07/15/2002	0.69			
07/22/2002	0.70			
07/29/2002	0.57			
AVERAGE	**0.65**	**0.49**	**0.37**	**0.36**
Maximum	**4.03**	**2.17**	**1.02**	**1.04**

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TABLE 5
CHICAGO SANITARY AND SHIP CANAL / DES PLAINES RIVER
UN-IONIZED AMMONIA, mg/L

Date	Lockport Forebay Chicago S&S Canal	Jefferson Street Des Plaines River	Empress Casino Des Plaines River	I-55 Des Plaines River
01/04/2001	0.002	0.000	0.000	
01/11/2001	0.003	0.003	0.000	0.000
01/18/2001	0.017	0.018	0.012	
01/25/2001	0.000	0.000	0.001	0.000
02/01/2001	0.001	0.001	0.001	0.000
02/08/2001	0.000	0.000	0.000	0.000
02/15/2001	0.001	0.000	0.000	0.001
02/22/2001	0.000	0.000	0.002	
03/01/2001	0.003	0.001	0.002	
03/08/2001				0.010
03/15/2001				0.026
03/22/2001	0.003	0.002	0.002	0.004
03/29/2001	0.001	0.001	0.001	0.001
04/05/2001	0.007	0.003	0.001	0.001
04/12/2001	0.003	0.002	0.002	
04/19/2001	0.005	0.005	0.005	0.002
04/26/2001	0.039	0.010	0.024	0.001
05/03/2001	0.003	0.001	0.004	0.000
05/10/2001	0.006	0.006	0.005	0.004
05/17/2001	0.004	0.004	0.004	0.004
05/24/2001	0.003	0.005	0.002	0.036
05/31/2001	0.003	0.002	0.002	0.001
06/07/2001	0.001	0.001	0.001	
06/14/2001	0.015	0.007	0.002	0.000
06/21/2001	0.004	0.003	0.003	
06/28/2001	0.006	0.005	0.004	0.003
07/05/2001	0.002	0.005	0.006	0.000
07/12/2001	0.005	0.008	0.008	0.002
07/19/2001	0.008	0.007	0.007	0.001
07/26/2001	0.004	0.002	0.002	0.009
08/02/2001	0.005	0.003	0.002	
08/09/2001	0.001	0.001	0.001	
08/16/2001	0.005	0.002	0.000	0.001
08/23/2001	0.002	0.002	0.001	0.002
08/30/2001	0.003	0.003	0.004	
09/06/2001	0.000	0.002	0.002	0.001
09/13/2001	0.003	0.006	0.002	
09/20/2001	0.003	0.001	0.002	
09/27/2001	0.002	0.001	0.000	
10/04/2001	0.001	0.000	0.000	0.000
10/11/2001	0.008	0.007	0.007	
10/15/2001	0.001			
10/18/2001	0.001	0.001	0.000	
10/25/2001	0.002	0.001	0.001	
11/01/2001	0.003	0.002	0.003	
11/08/2001	0.001	0.001	0.000	

TABLE 5
CHICAGO SANITARY AND SHIP CANAL /
DES PLAINES RIVER
UN-IONIZED AMMONIA, mg/L

Date	Lockport Forebay Chicago S&S Canal	Jefferson Street Des Plaines River	Empress Casino Des Plaines River	I-55 Des Plaines River
11/15/2001	0.004	0.003	0.005	
11/19/2001	0.002			
11/20/2001	0.002	0.001	0.001	
11/29/2001	0.002	0.002	0.001	
12/06/2001	0.008	0.007	0.020	
12/13/2001	0.003	0.007	0.010	
12/20/2001	0.000	0.000	0.000	
12/27/2001	0.001	0.001	0.001	
01/14/2002	0.001			
01/22/2002	0.006			
01/28/2002	0.003			
02/04/2002	0.006			
02/11/2002	0.002			
02/19/2002	0.006			
02/25/2002	0.001			
03/04/2002	0.006			
03/11/2002	0.005			
03/18/2002	0.005			
03/25/2002	0.007			
04/01/2002	0.022			
04/08/2002	0.003			
04/15/2002	0.004			
04/22/2002	0.003			
04/29/2002	0.001			
05/06/2002	0.004			
05/13/2002	0.004			
05/20/2002	0.004			
05/28/2002	0.001			
06/03/2002	0.008			
06/10/2002	0.002			
06/17/2002	0.002			
06/24/2002	0.004			
07/01/2002	0.070			
07/08/2002	0.006			
07/15/2002	0.007			
07/22/2002	0.019			
07/29/2002	0.010			
Average	**0.005**	**0.003**	**0.003**	**0.004**
Maximum	**0.070**	**0.018**	**0.024**	**0.036**

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