

NPDES & WQBEL



What does every POTW have?

- NPDES permit for WWTP discharge
- Renewed every 5 years

NPDES Permit No. ...
Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
Reissued (NPDES) Permit

Expiration Date: May 31, 2016
Issue Date: May 19, 2011
Effective Date: June 1, 2011

Name and Address of Permittee:
Facility Name and Address:

Receiving Waters: Salt Creek

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of the Ill. Adm. Code, Subtitle C, Chapter 1, and the Clean Water Act (CWA), the above-named Permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the Permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Alan Keller
Alan Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control

SAK:FRB:10122801.ejo

Routine Monitoring

- Routine – page 2
- Daily
- Weekly
- Sample type

Page 2

Modification Date: October 6, 2011

NPDES Permit No.

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 001 STP Outfall (Existing facility)

Load limits computed based on a design average flow (DAF) of 1.0 MGD (design maximum flow (DMF) of 2.0 MGD).

Excess flow facilities (if applicable) shall not be utilized until the main treatment facility is receiving its maximum practical flow.

From the modification date of this Permit until the operation of the expanded facility or expiration date whichever comes first, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

Parameter	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS MG/L			Sample Frequency	Sample Type
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum		
Flow (MGD)							Continuous	
CBOD ₅ **	83 (167)		167 (334)	10		20	3 Days/Week	Composite
Suspended Solids	100 (200)		200 (400)	12		24	3 Days/Week	Composite
pH	Shall be in the range of 6 to 9 Standard Units						3 Days/Week	Grab
Fecal Coliform***	Daily Maximum shall not exceed 400 per 100 mL (May through October)						3 Days/Week	Grab
Ammonia Nitrogen as (N)								
March	13 (25)	32 (63)	56 (112)	1.5	3.8	6.7	3 Days/Week	Composite
April-May/Sept.-Oct.	13 (25)	---	25 (50)	1.5	---	3.0	3 Days/Week	Composite
June-August	12 (23)	---	25 (50)	1.4	---	3.0	3 Days/Week	Composite
Nov.-Feb.	33 (67)	---	63 (125)	4.0	---	7.5	3 Days/Week	Composite
Phosphorus	8.3 (17)			1.0			3 Days/Week	Composite
Total Nitrogen	Monitor Only						1 Day/Week	Composite
Barium	17 (33)		33 (67)	2.0		4.0	3 Days/Week	Composite
Chromium (Hex)	0.09 (0.18)		0.13 (0.27)	0.011		0.016	3 Days/Week	Grab
				Monthly Average not less than	Weekly Average not less than	Daily Minimum not less than		
Dissolved Oxygen								
March - July				N/A	6.0	5.0	3 Days/Week	Grab
August - February				5.5	4.0	3.5	3 Days/Week	Grab

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.
 **Carbonaceous BOD₅ (CBOD₅) testing shall be in accordance with 40 CFR 136.
 ***See Special Condition 8.

Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

Fecal Coliform shall be reported on the DMR as a daily maximum value.

pH shall be reported on the DMR as minimum and maximum value.

Samples may be taken prior to discharge to the enhancement wetland.

Dissolved oxygen shall be reported on the DMR as minimum value.

Infrequent Routine

SPECIAL CONDITION 6. The Permittee shall monitor the effluent and report concentrations (in mg/L) of the following listed parameters eighteen (18) months prior to the expiration date and again at twelve (12) months prior to the expiration date. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted on Discharge Monitoring Report Forms to IEPA unless otherwise specified by the IEPA. The parameters to be sampled and the minimum reporting limits to be attained are as follows:

<u>STORET CODE</u>	<u>PARAMETER</u>	<u>Minimum reporting limit</u>
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01027	Cadmium	0.001 mg/L
01032	Chromium (hexavalent) (grab)	0.01 mg/L
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00718	Cyanide (grab) (weak acid dissociable)	5.0 ug/L
00720	Cyanide (grab not to exceed 24 hours) (total)	5.0 ug/L
00951	Fluoride	0.1 mg/L
01045	Iron (total)	0.5 mg/L
01046	Iron (Dissolved)	0.5 mg/L
01051	Lead	0.05 mg/L
01055	Manganese	0.5 mg/L
71900	Mercury (grab) (using USEPA Method 1631 or equivalent)	1.0 ng/L*
01067	Nickel	0.005 mg/L
00556	Oil (hexane soluble or equivalent) (Grab Sample only)	5.0 mg/L
32730	Phenols (grab)	0.005 mg/L
01147	Selenium	0.005 mg/L
01077	Silver (total)	0.003 mg/L
01092	Zinc	0.025 mg/L

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.

*1.0 ng/L = 1 part per trillion.

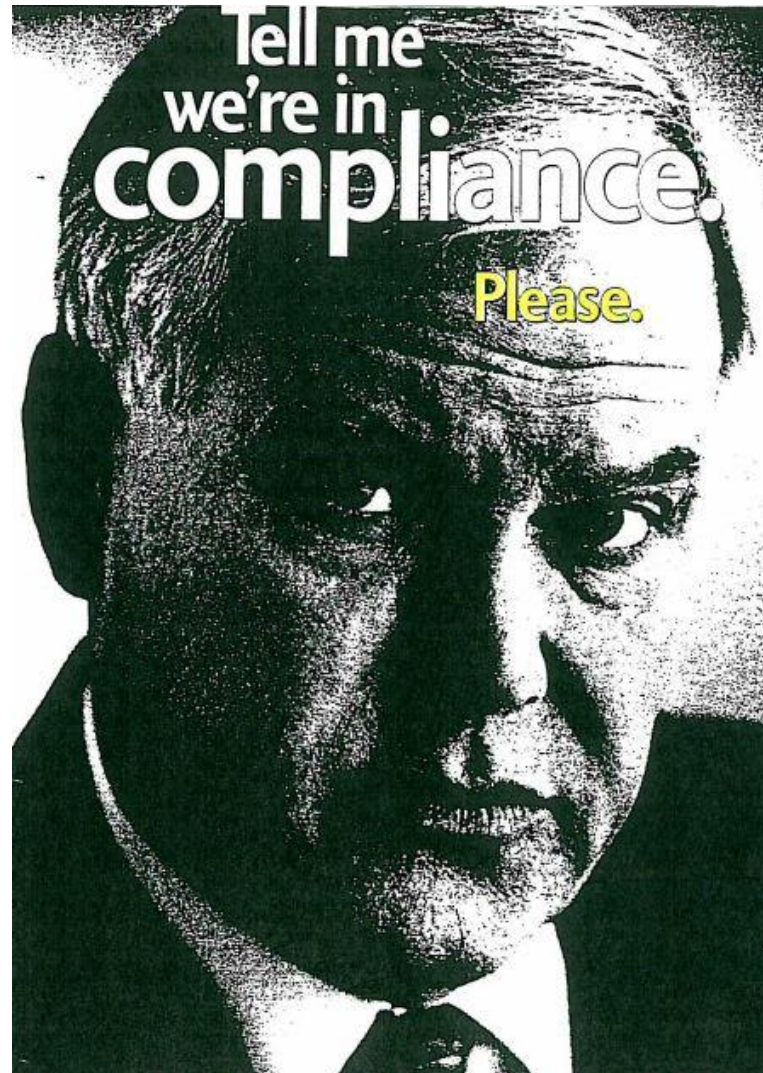
Non-Routine Monitoring

SPECIAL CONDITION 10. The Permittee shall monitor the effluent for the following parameters monthly for a period of **six (6) consecutive months**, beginning three (3) months from the effective date of this Permit. This Permit may be modified with public notice to establish effluent limitations if appropriate, based on information obtained through sampling. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted on the DMR's to IEPA. The parameters to be sampled and the minimum detection limits to be attained are as follows:

<u>STORET CODE</u>	<u>PARAMETER</u>	<u>Minimum detection limit</u>
01027	Cadmium	0.001 mg/L
01032	Chromium (hexavalent) (grab)	0.01 mg/L
01067	Nickel	0.005 mg/L
01077	Silver (total)	0.003 mg/L
01092	Zinc	0.025 mg/L

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.

- Located in Special Conditions
- Frequency likely monthly
- Usually defines MDL
- IEPA will decide if it will become routine



How Did They Get Into Permit ?

- Water Quality Based Effluent Limit Evaluation
- Conducted by IEPA during permit renewal process



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 • (217) 782-2829
James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601 • (312) 814-6026

PAT QUINN, GOVERNOR

DIRECTOR

Memorandum



DATE: 19 October 2011

TO: Getie Yilma

FROM: Scott Twait *ST*

SUBJECT: Water Quality Based Effluent Limits
- South NPDES #IL00 (County)

The subject facility discharges to Creek at a point where 0 cfs of flow exists upstream of the outfall during critical 7Q10 low-flow conditions. The facility has a DAF of 4.7 MGD. Creek is classified as a General Use Water. Creek is not listed as a biologically significant stream in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*, nor is it given an integrity rating in that document. Creek, Waterbody Segment, is listed on the draft 2010 Illinois Integrated Water Quality Report and Section 303(d) list as impaired for aquatic life use with potential causes given as alpha-BHC, alteration in streamside or littoral vegetation (non-pollutant), aquatic algae (non-pollutant), copper, hexachlorobenzene, other flow regime alterations (non-pollutant), dissolved oxygen (non-pollutant), phosphorus (total), polychlorinated biphenyls, sedimentation/siltation (non-pollutant), and total suspended solids (TSS). Creek is not subject to enhanced dissolved oxygen standards.

This discharge is direct to Waterbody Segment, which is listed as impaired with a potential cause of Aquatic Algae.

Cadmium, Chromium (Trivalent), Copper, Lead, Nickel, and Zinc standards are based on hardness data collected at AWQMN station Creek, in , with a critical hardness value of 259 mg/L as CaCO₃. Water quality standards identified in the table are expressed in units of mg/L except where noted. Dissolved metals standards have been converted to total metal except where noted. All data was provided by the discharger.

Substance	Max. Eff. Conc.	No. of Samples	Multiply by	95% Potential	Acute Standard	Chronic Standard	302.208(g) standard	Further Analysis?
Arsenic	0.00204	5	2.3	0.004692	0.3600	0.1900	-	No RP**
Barium	0.0249	5	2.3	0.05727	-	-	5.0	No RP**
Cadmium	< 0.001	5	2.3	0.0023	0.0285	0.0024	-	No RP**
Chromium (Hex)	0.005	5	2.3	0.0115	0.0160	0.0110	-	Yes
Chromium (Total)	0.00078	5	2.3	0.001794	3.7859	0.4513	-	No RP**
Cyanide (WAD)	0.002	5	2.3	0.0046	0.0220	0.0052	-	No RP**
Copper	6.36	61	1.0	6.36	0.0435	0.0267	-	Yes
Fluoride	0.9	5	2.3	2.07	-	-	1.4	Yes
Iron (Dissolved)	0.115	5	2.3	0.2645	-	-	1.0	No RP**
Lead	0.00062	5	2.3	0.001426	0.3215	0.0674	-	No RP**

Rockford • 4302 N. Main St., Rockford, IL 61103 • (815) 987-7760
Eggs • 395 S. State, Eggs, IL 60123 • (847) 668-3131
Bureau of Land • 7620 N. University St., Peoria, IL 61614 • (309) 693-5462
Collinsville • 2009 Main Street, Collinsville, IL 62234 • (618) 346-5120

Des Plaines • 9511 W. Harrison St., Des Plaines, IL 60016 • (847) 294-4000
Peoria • 5415 N. University St., Peoria, IL 61614 • (309) 693-5463
Champaign • 2125 S. First St., Champaign, IL 61820 • (217) 278-8600
Morton • 2309 W. Main St., Suite 116, Morton, IL 62569 • (618) 993-7200

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Changes are Coming!!!!

- **Draft Permits are being issued with changes!**
- **More non-organic limits in permits**
 - Daily, monthly and annual limits
 - Copper, hexavalent chromium, zinc
 - Mercury (12 nanograms/L annual average)
- **More special condition monitoring**
 - Metals
 - Organics: if you have an approved pretreatment program

Derived Water Quality Standards 302.208 (g)

Substance	CAS# ¹	Use ²	Aquatic Life Criteria ³		Units ⁴	Date Derived ⁵ (ymmdd)	Human Health Criteria ⁶		Units ⁴	Date Derived ⁵ (ymmdd)	NPDES Permit ⁷
			Acute	Chronic			HTC	HNC			
acenaphthene	83-32-9	GU	120	62	µg/L	990200	--	--			Y
acenaphthylene	208-96-8	GU	(190)	(15)	µg/L	980300	--	--			Y
acetochlor	34256-82-1	GU	150	12	µg/L	070926	590	--	µg/L	070926	
acetone	67-64-1	GU	1.5	0.12	g/L	930525	--	--			Y
acetonitrile	75-05-8	GU	380	30	mg/L	931122	14	--	mg/L	931122	Y
							20 (G)	--	mg/L	070123	
acrolein	107-02-8	GU	2.7	0.22	µg/L	990200	--	--			Y
acrylamide; 2-propenamide	79-06-1	GU	30	2.4	mg/L	950515	--	--			
acrylonitrile	107-13-1	GU	910	73	µg/L	980200	--	0.21	µg/L	990200	Y
alachlor	15972-60-8	GU	1100	(~100)	µg/L	920323	--	5.6	µg/L	920323	
aldrin	309-00-2	GU	[-3]	--	µg/L	990200	--	0.046	ng/L	990200	
2-amino-4,6-dinitrophenol	96-91-3	GU	(4.6)	(0.4)	mg/L	970400	--	--			
2-amino-4,6-dinitrotoluene	35572-78-2	GU	98	7.9	µg/L	920317	--	--			
4-amino-2,6-dinitrotoluene	19406-51-0	GU	180	14	µg/L	022904	--	--			
1-(2-aminoethoxy)piperazine	140-31-8	GU	(220)	(18)	mg/L	921216	--	--			
aniline	62-53-3	GU	120	15	µg/L	980724	--	--			
anthracene	120-12-7	GU	0.66	0.53	µg/L	070530	35	--	mg/L	990200	Y
antimony	7440-36-0	GU	1,200	320	µg/L	080929	12,000 (G)	--	µg/L	080929	
							1,200	--	µg/L	080929	
							6 (PWS)	--	µg/L	080929	
Antimycin A	1397-94-0	GU	(~0.02)	--	µg/L	950200	--	--			
atrazine	1912-24-9	GU	82	9.0	µg/L	050205	--	--			
benzaldehyde	100-52-7	GU	180	14	mg/L	920615	--	--			
benzene (2-bromo-2-nitroethenyl)	7166-19-0	GU	(1.1)	(0.86)	mg/L	980908	--	--			
benzidine	92-87-5	GU	--	--			--	0.17	ng/L	990200	
benzo (a) anthracene	56-55-3	GU	--	--			--	0.16	µg/L	990200	Y
benzo (a) pyrene	50-32-8	GU	--	--			--	0.016	µg/L	990200	Y
benzo (b) fluoranthene	205-99-2	GU	--	--			--	0.16	µg/L	990200	Y
benzo (k) fluoranthene	207-08-9	GU	--	--			--	1.6	µg/L	990200	Y
benzoic acid	65-85-0	GU	(18)	(1.4)	mg/L	931108	--	--			
benzyl alcohol	100-51-6	GU	1000	80	µg/L	920615	--	--			
BHC = hexachlorocyclohexane	608-73-1	GU	5	0.4	µg/L	980622	--	--			
alpha	319-84-6	GU	31	2.5	µg/L	990200	--	0.0042	µg/L	990200	
beta	319-85-7	GU	--	--			--	15	ng/L	990200	
gamma = lindane											
delta	319-86-8	GU	--	--			--	[41.4]	ng/L	990200	
bis (2-chloro-1-methylethyl) ether	39838-32-9	GU	--	--			46	--	mg/L	990200	

- Aquatic Life Criteria
 - Acute standards
 - Chronic standards
- Human Health criteria standards



What can you do?

- Know that ALL data counts
- Review data carefully
- If the reporting limit is exceeded or high
 - Data will be evaluated at $\frac{1}{2}$ RL if ND
- If data is unusual
 - Investigate
- More data helps

Source of Standards



United States
Environmental Protection
Agency

Office Of Water
(EN-336)

EPA/505/2-90-001
PB91-127415
March 1991

Technical Support Document For Water Quality-based Toxics Control



Sample Number Dependent

Table 3-2. Reasonable Potential Multiplying Factors: 95% Confidence Level and 95% Probability Basis

Number of Samples	Coefficient of Variation																			
	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
1	1.4	1.9	2.6	3.6	4.7	6.2	8.0	10.1	12.6	15.5	18.7	22.3	26.4	30.8	35.6	40.7	46.2	52.1	58.4	64.9
2	1.3	1.6	2.0	2.5	3.1	3.8	4.6	5.4	6.4	7.4	8.5	9.7	10.9	12.2	13.6	15.0	16.4	17.9	19.5	21.1
3	1.2	1.5	1.8	2.1	2.5	3.0	3.5	4.0	4.6	5.2	5.8	6.5	7.2	7.9	8.6	9.3	10.0	10.8	11.5	12.3
4	1.2	1.4	1.7	1.9	2.2	2.6	2.9	3.3	3.7	4.2	4.6	5.0	5.5	6.0	6.4	6.9	7.4	7.8	8.3	8.8
5	1.2	1.4	1.6	1.8	2.1	2.3	2.6	2.9	3.2	3.6	3.9	4.2	4.5	4.9	5.2	5.6	5.9	6.2	6.6	6.9
6	1.1	1.3	1.5	1.7	1.9	2.1	2.4	2.6	2.9	3.1	3.4	3.7	3.9	4.2	4.5	4.7	5.0	5.2	5.5	5.7
7	1.1	1.3	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.1	3.3	3.5	3.7	3.9	4.1	4.3	4.5	4.7	4.9
8	1.1	1.3	1.4	1.6	1.7	1.9	2.1	2.3	2.4	2.6	2.8	3.0	3.2	3.3	3.5	3.7	3.9	4.0	4.2	4.3
9	1.1	1.2	1.4	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.8	2.9	3.1	3.2	3.4	3.5	3.6	3.8	3.9
10	1.1	1.2	1.3	1.5	1.6	1.7	1.9	2.0	2.2	2.3	2.4	2.6	2.7	2.8	3.0	3.1	3.2	3.3	3.4	3.6
11	1.1	1.2	1.3	1.4	1.6	1.7	1.8	1.9	2.1	2.2	2.3	2.4	2.5	2.7	2.8	2.9	3.0	3.1	3.2	3.3
12	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.0
13	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.6	2.7	2.8	2.9
14	1.1	1.2	1.3	1.4	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.3	2.4	2.5	2.6	2.6	2.7
15	1.1	1.2	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.8	1.9	2.0	2.1	2.2	2.2	2.3	2.4	2.4	2.5	2.5
16	1.1	1.1	1.2	1.3	1.4	1.5	1.6	1.6	1.7	1.8	1.9	1.9	2.0	2.1	2.1	2.2	2.3	2.3	2.4	2.4
17	1.1	1.1	1.2	1.3	1.4	1.4	1.5	1.6	1.7	1.7	1.8	1.9	1.9	2.0	2.0	2.1	2.2	2.2	2.3	2.3
18	1.1	1.1	1.2	1.3	1.3	1.4	1.5	1.6	1.6	1.7	1.7	1.8	1.9	1.9	2.0	2.0	2.1	2.1	2.2	2.2
19	1.1	1.1	1.2	1.3	1.3	1.4	1.5	1.5	1.6	1.6	1.7	1.8	1.8	1.9	1.9	2.0	2.0	2.0	2.1	2.1
20	1.1	1.1	1.2	1.2	1.3	1.4	1.4	1.5	1.5	1.6	1.7	1.7	1.8	1.8	1.8	1.9	1.9	2.0	2.0	2.0

Example 1- Hex Cr

EPA WQBEL CRITERIA

No. of Samples	Multiply by
1	6.2
2	3.8
5	2.3
10	1.7
24	1.3
61	1

Hexavalent Chromium	Data	Multiply by	95% Potential	Acute Standard	Greater than std	Chronic Standard	Greater than std	Permit Limits
	<0.005	0.0025						
	<0.005	0.0025						
	<0.005	0.0025						
	<0.005	0.0025						
	<0.005	0.0025						
MAX	0.005	2.3	0.0115	0.0160	NO			NONE
AVERAGE		0.0025	2.3	0.0058		0.011	NO	NONE

Example 1A – Hex Cr

EPA WQBEL CRITERIA

No. of Samples	Multiply by
1	6.2
2	3.8
5	2.3
10	1.7
24	1.3
61	1

Hexavalent Chromium	Data	Multiply by	95% Potential	Acute Standard	Greater than std	Chronic Standard	Greater than std	Permit Limit
	0.026	0.026						
	<0.005	0.003						
MAX	0.026		3.8	0.0988	0.016	Yes		Daily Max
AVERAGE		0.014	3.8	0.0542		0.011	Yes	Monthly Ave

Example 2 - Zinc

EPA WQBEL CRITERIA

No. of Samples	Multiply by
1	6.2
2	3.8
5	2.3
10	1.7
24	1.3
61	1

Zinc	Data	Multiply by	95% Potential	Acute Standard	Greater than std	Chronic Standard	Greater than std	Permit Limit
	11 data points							
MAX	0.061	1.7	0.1037	0.2736	NO			
AVERAGE	0.0445	1.7	0.0757			0.071	Yes	Monthly Ave

The NPDES Draft

Parameter	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L			Sample Frequency	Sample Type	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum			
Flow (MGD)							Continuous		
CBOD ₅ **	392 (834)		784 (1668)	10		20	2 Days/Week	Composite	
Suspended Solids	470 (1001)		941 (2002)	12		24	2 Days/Week	Composite	
pH	Shall be in the range of 6 to 9 Standard Units							2 Days/Week	Grab
Fecal Coliform***	Daily Maximum shall not exceed 400 per 100 mL (May through October)							2 Days/Week	Grab
Chlorine Residual***							0.05	2 Days/Week	Grab
Ammonia Nitrogen: As (N)									
March-May/Sept.-Oct.	59 (125)	149 (317)	220 (467)	1.5	3.8	5.6	2 Days/Week	Composite	
June-August****	39 (83)	149 (317)	196 (417)	1.0	3.8	5.0	2 Days/Week	Composite	
Nov.-Feb.	129 (275)		220 (467)	3.3		5.6	2 Days/Week	Composite	
Phosphorus (as P)	Monitor Only							1 Day/Month	Composite
Total Nitrogen	Monitor only							1 Day/Month	Composite
Zinc	2.8 (5.9)			0.071				1 Day/Month	Composite

Example 2A - Zinc

EPA WQBEL CRITERIA

No. of Samples	Multiply by
1	6.2
2	3.8
5	2.3
10	1.7
24	1.3
61	1

Zinc	Data	Multiply by	95% Potential	Acute Standard	Greater than std	Chronic Standard	Greater than std	Permit Limit
24 data points								
MAX	0.061	1.7	0.1037	0.2736	NO			NONE
AVERAGE	0.0394	1.3	0.0512			0.071	NO	NONE

Special Conditions

SPECIAL CONDITION 15.

Project Description: Compliance with Zinc Water Quality Standards

Thirty-six (36) months from the effective date of this Permit the following Zinc limits shall become effective:

Load Limits lbs/day DAF (DMF)*		Concentration Limits mg/L	
Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.
0.98 (3.8)	5.4 (21)	0.045	0.2511

*Load limits based on design maximum flow shall apply only when flow exceeds the design average flow.

The Permittee shall complete the project described above in accordance with the following schedule:

- | | |
|--|--|
| (1) Interim Report on zinc reductions to date and what measures are necessary to comply with Final Zinc Effluent Limitations | 6 months from the effective date of this Permit |
| (2) Preliminary Report on construction of zinc reduction facilities | 12 months from the effective date of this Permit |
| (3) Plans and specifications | 18 months from the effective date of this Permit |
| (4) Commence Construction | 24 months from the effective date of this Permit |
| (5) Interim Report | 30 months from the effective date of this Permit |
| (6) Permittee Achieves Compliance with Final Zinc Effluent Limitations | 36 months from the effective date of this Permit |

This Permit may be modified, with Public Notice, to include revised compliance dates set out in this Permit that are superseded or supplemented by compliance dates in judicial orders, Pollution Control Board orders or grant agreements. Prior to such permit modification, the revised dates in the appropriate orders or grant agreements shall govern the Permittee's compliance.

In addition, the IEPA may initiate a modification of the construction schedule set forth in this Permit at any time, to include other dates which are necessary to carry out the provisions of the Illinois Environmental Protection Act, the Federal Clean Water Act or regulations promulgated under those Acts or compliance dates which have been submitted in writing by the Permittee and approved by the IEPA. Public Notice of such modifications and opportunity for public hearing shall be provided consistent with 40 CFR § 122.63.

REPORTING

The Permittee shall submit a report no later than fourteen (14) days following the completion dates indicated for each numbered item in the compliance schedule, indicating, a) the date the item was completed, or b) that the item was not completed. All reports shall be submitted to IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
Post Office box 19276
Springfield, Illinois 62794-9276

Attention: Compliance Assurance Section, Mail Code # 19

Example 3 - Bromodichloromethane

EPA WQBEL CRITERIA

No. of Samples	Multiply by
1	6.2
2	3.8
5	2.3
10	1.7
24	1.3
61	1

	Data ppb	Multiply by	95% Potential	Acute Standard	Greater than std	Chronic Standard	Greater than std	Permit Limit
5 data points								
MAX	0.0059	2.3	0.013616	0.0100	Yes but No			
AVERAGE	0.0033	2.3	0.0076			0.0010	Yes	Monthly Ave



Additional Monitoring RQ

SPECIAL CONDITION 18. The Permittee shall monitor the effluent for the following parameters twice a month for a period of five (5) consecutive months, beginning three (3) months from the effective date of this Permit. This Permit may be modified with public notice to establish effluent limitations if appropriate, based on information obtained through sampling. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted on the DMR's to IEPA. The parameters to be sampled and the minimum reporting limits to be attained are as follows:

<u>PARAMETER</u>	<u>Minimum reporting limit</u>
Bromodichloromethane	0.001 mg/L

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.

What can you do?



"IF YOU ARE TRULY SEEKING PEACE AND CONTENTMENT, MY SON, HOW COME YOU BECAME AN ENVIRONMENTAL MANAGER?"



Be Pro-active

- Review all data carefully
- Use methods with low detection limits
- Question high detection limits
- Get more data if you have an outlier

IEPA Changes

- Require sampling and analyses minimum of 2x/year for non-organics
- Reduces multiplier
 - No PT Program
3.8 to 1.7
 - PT Program
2.3 to 1.7

SPECIAL CONDITION 9. The Permittee shall conduct semi-annual monitoring of the effluent and report concentrations (in mg/l) of the following listed parameters. Monitoring shall begin three (3) months from the effective date of this permit. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted on Discharge Monitoring Report Forms to IEPA unless otherwise specified by the IEPA. The parameters to be sampled and the minimum reporting limits to be attained are as follows:

STORET CODE	PARAMETER	Minimum reporting limit
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01027	Cadmium	0.001 mg/L
01032	Chromium (hexavalent) (grab)	0.01 mg/L
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00718	Cyanide (weak acid dissociable) (grab)	5.0 ug/L
00720	Cyanide (total) (grab not to exceed 24 hours)	5.0 ug/L
00851	Fluoride	0.1 mg/L
01045	Iron (total)	0.5 mg/L
01046	Iron (Dissolved)	0.5 mg/L
01051	Lead	0.05 mg/L
01055	Manganese	0.5 mg/L
71900	Mercury (grab)**	1.0 ng/L*
01067	Nickel	0.005 mg/L
00556	Oil (hexane soluble or equivalent) (Grab Sample only)	5.0 mg/L
32730	Phenols (grab)	0.005 mg/L
01147	Selenium	0.005 mg/L
01077	Silver (total)	0.003 mg/L
01092	Zinc	0.025 mg/L

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.

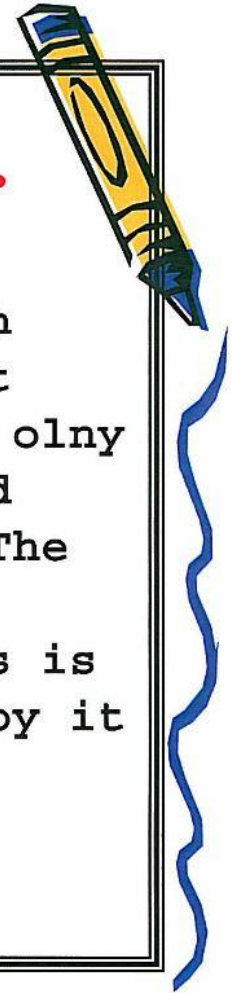
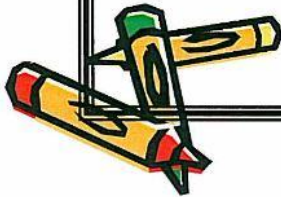
*1.0 ng/L = 1 part per trillion.

**Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E.



Our Amazing Brains...

Aoccdrnig to rscheearch at an Elingsh uinervtisy, it deosn't mtttaer in waht oredr the ltteers in a wrod are, the olny iprmoetnt tihng is taht the frist and lsat ltteer are in the rghit pclae. The rset can be a toatl mses and you can sitll raed it wouthit a porbelm. Tihs is bcuseae we do not raed ervey lteter by it slef but the wrod as a wlohe and the biran fguiers it out aynawy.





-Questions??????

Penny Bouchard

Environmental Specialist

Baxter & Woodman Inc.

847-223-5088

pbouchard@baxterwoodman.com

