

ILLINOIS POLLUTION CONTROL BOARD  
June 21, 1990

IN THE MATTER OF: )  
 )  
PROPOSED AMENDMENTS TO TITLE ) R88-21, DOCKET B  
35, SUBTITLE C (TOXICS CONTROL) ) (Rulemaking)

ADOPTED RULE. FINAL ORDER.

OPINION AND ORDER OF THE BOARD (by R. C. Flemal)

The Board by Order of December 6, 1989 created this Docket in the R88-21 proceeding for the purpose of allowing further consideration of certain adjuncts to the overall water toxics control regulations as adopted in Docket A of R88-21 (See Final Opinion and Order, January 25, 1990). The Board today adopts the Docket B amendments as final, without change from those amendments as proposed at Second Notice.

First Notice of Docket B was adopted by the Board on December 6, 1989; publication occurred at 13 Ill. Reg. 20230 et seq. The Board received five public comments during the First Notice period. After consideration of all the comments, the Board proposed the amendments for Second Notice on April 26, 1990. The Board's responses to these comments are contained in the April 26, 1990 Second Notice Opinion and will not be repeated here. The amendments were then submitted to the Joint Committee on Administrative Rules ("JCAR") for Second Notice Review pursuant to the Administrative Procedure Act (Ill. Rev. Stat. 1989 ch. 127, pars. 1001 et seq.) ("APA"). On June 5, 1990 JCAR issued Certifications of No Objection to the proposed amendments, and made no suggestions for changes to the proposed amendments.

The First Notice Docket B proposal considered amendments to seven different Sections in five separate Parts of the Board's water pollution control regulations. At Second Notice the Board elected not to proceed to final adoption with the proposed amendments to Parts 303, 305, 309, and certain of the proposed amendments to Part 302. Inasmuch as the Board stands by the analysis made in the April 26 Opinion, that analysis will also not be repeated here.

The Board notes that on June 8, 1990 one Board and one staff member received copies of a letter to the Illinois Environmental Protection Agency ("Agency") from the United States Environmental Protection Agency ("USEPA") concerning the Docket B amendments. The Board is unsure whether USEPA understands the purpose of the two 45-day notice periods established by the APA, or the significance of failure to timely file comments during the first notice period. The purpose of the first notice period is to require the rule-proposing agency to consider all public

comments, and to allow it to modify proposed rules in response. Any issues pertaining to the merits of the proposal should have been raised during the first notice period. Pursuant to the APA, once the second notice period is initiated by JCAR's receipt of a proposed rule for second notice, the proposed rule is "frozen": once JCAR has notified an agency that no objection will be issued for rules, the text of the rule if filed with the Secretary of State for final publication must be the text as agreed upon with JCAR. The rules cannot be modified in any way except by initiation of a new rulemaking proceeding to amend or repeal the rules; any such new proceeding must comply with the procedural requirements of the APA and the Act.

The record for comment in this matter has been closed since May 9, 1990, the date of JCAR's receipt of the Board's April 26, 1990 Second Notice proposal. As noted, JCAR considered and voted to issue Certifications of No Objection concerning these rules at its June 5 meeting. This was three days before USEPA's letter was received by the Board. Under these circumstances, the Board cannot consider USEPA's untimely letter as a public comment in this docket.

#### ORDER

The Board hereby adopts, as final, the following amendments to be filed with the Secretary of State and published in the Illinois Register.

TITLE 35: ENVIRONMENTAL PROTECTION  
SUBTITLE C: WATER POLLUTION  
CHAPTER I: POLLUTION CONTROL BOARD

PART 302  
WATER QUALITY STANDARDS

SUBPART A: GENERAL WATER QUALITY PROVISIONS

Section	
302.100	Definitions
302.101	Scope and Applicability
302.102	Allowed Mixing, Mixing Zones and ZIDs
302.103	Stream Flows
302.104	Main River Temperatures
302.105	Nondegradation

SUBPART B: GENERAL USE WATER QUALITY STANDARDS

Section	
302.201	Scope and Applicability
302.202	Purpose
302.203	Offensive Conditions
302.204	pH

302.205	Phosphorus
302.206	Dissolved Oxygen
302.207	Radioactivity
302.208	Numeric Standards for Chemical Constituents
302.209	Fecal Coliform
302.210	Other Toxic Substances
302.211	Temperature
302.212	Ammonia Nitrogen and Un-ionized Ammonia

SUBPART C: PUBLIC AND FOOD PROCESSING WATER SUPPLY STANDARDS

Section	
302.301	Scope and Applicability
302.302	Algicide Permits
302.303	Finished Water Standards
302.304	Chemical Constituents
302.305	Other Contaminants
302.306	Fecal Coliform

SUBPART D: SECONDARY CONTACT AND INDIGENOUS AQUATIC LIFE STANDARDS

Section	
302.401	Scope and Applicability
302.402	Purpose
302.403	Unnatural Sludge
302.404	pH
302.405	Dissolved Oxygen
302.406	Fecal Coliform (Repealed)
302.407	Chemical Constituents
302.408	Temperature
302.409	Cyanide
302.410	Substances Toxic to Aquatic Life

SUBPART E: LAKE MICHIGAN WATER QUALITY STANDARDS

Section	
302.501	Scope and Applicability
302.502	Dissolved Oxygen
302.503	pH
302.504	Chemical Constituents
302.505	Fecal Coliform
302.506	Temperature
302.507	Existing Sources on January 1, 1971
302.508	Sources under Construction But Not in Operation on January 1, 1971
302.509	Other Sources

SUBPART F: PROCEDURES FOR DETERMINING WATER QUALITY CRITERIA

Section	
302.601	Scope and Applicability
302.603	Definitions
302.604	Mathematical Abbreviations
302.606	Data Requirements

- 302.612 Determining the Acute Aquatic Toxicity Criterion for an Individual Substance - General Procedures
- 302.615 Determining the Acute Aquatic Toxicity Criterion - Toxicity Independent of Water Chemistry
- 302.618 Determining the Acute Aquatic Toxicity Criterion - Toxicity Dependent on Water Chemistry
- 302.621 Determining the Acute Aquatic Toxicity Criterion - Procedures for Combinations of Substances
- 302.627 Determining the Chronic Aquatic Toxicity Criterion for an Individual Substance - General Procedures
- 302.630 Determining the Chronic Aquatic Toxicity Criterion - Procedure for Combination of Substances
- 302.633 The Wild and Domestic Animal Protection Criterion
- 302.642 The Human Threshold Criterion
- 302.645 Determining the Acceptable Daily Intake
- 302.648 Determining the Human Threshold Criterion
- 302.651 The Human Nonthreshold Criterion
- 302.654 Determining the Risk Associated Intake
- 302.657 Determining the Human Nonthreshold Criterion
- 302.658 Stream Flow for Application of Human Nonthreshold Criterion
- 302.660 Bioconcentration Factor
- 302.663 Determination of Bioconcentration Factor
- 302.666 Utilizing the Bioconcentration Factor
- 302.669 Listing of Derived Criteria

APPENDIX A References to Previous Rules

APPENDIX B Sources of Codified Sections

AUTHORITY: Implementing Section 13 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111 1/2, pars. 1013 and 1027).

SOURCE: Filed with the Secretary of State January 1, 1978; amended at 2 Ill. Reg. 44, p. 151, effective November 2, 1978; amended at 3 Ill. Reg. 20, p. 95, effective May 17, 1979; amended at 3 Ill. Reg. 25, p. 190, effective June 21, 1979; codified at 6 Ill. Reg. 7818, effective June 22, 1982; amended at 6 Ill. Reg. 11161, effective September 7, 1982; amended at 6 Ill. Reg. 13750, effective October 26, 1982; amended at 8 Ill. Reg. 1629, effective January 18, 1984; peremptory amendments at 10 Ill. Reg. 461, effective December 23, 1985; amended in R87-27 at 12 Ill. Reg. 9911, effective May 27, 1988; amended in R85-29 at 12 Ill. Reg. 12082, effective July 11, 1988; amended in R88-1 at 13 Ill. Reg. 5998, effective April 18, 1989; amended in R88-21(A) at 14 Ill. Reg. 2899, effective February 13, 1990; amended in R88-21(B) at \_\_\_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

SUBPART B: GENERAL USE WATER QUALITY STANDARDS

Section 302.208 Numeric Standards for Chemical Constituents

- a) The acute standard (AS) for the chemical constituents listed in subsection (d) shall not be exceeded at any time except as provided in subsection (c).
- b) The chronic standard (CS) for the chemical constituents listed in subsection (d) shall not be exceeded by the arithmetic average of at least four consecutive samples collected over any period of at least four days, except as provided in subsection (c). The samples used to demonstrate compliance or lack of compliance with a CS must be collected in a manner which assures an average representative of the sampling period.
- c) In waters where mixing is allowed pursuant to Section 302.102, the following apply:
  - 1) The AS shall not be exceeded in any waters except for those waters for which the Agency has approved a ZID pursuant to Section 302.102;
  - 2) The CS shall not be exceeded outside of waters in which mixing is allowed pursuant to Section 302.102.

d)

Constituent	STORET Number	AS (ug/L)	CS (ug/L)
Arsenic (total)	01002	360	190
Cadmium (total)	01027	exp[A + Bln(H)], but not to exceed 50 ug/L, where A = -2.918 and B = 1.128	exp[A + Bln(H)], where A = -3.490 and B = 0.7852
Chromium (total hexavalent)	01032	16	11
Chromium (total trivalent)	01033	exp[A + Bln(H)], where A = 3.688 and B = 0.8190	exp[A + Bln(H)], where A = 1.561 and B = 0.8190
Copper (total)	01042	exp[A + Bln(H)], where A = -1.464 and B = 0.9422	exp[A + Bln(H)], where A = -1.465 and B = 0.8545

Cyanide	00718	22	5.2
Lead (total)	01051	exp[A + Bln(H)], but not to exceed 100 ug/L, where A = -1.460 and B = 1.273	Not Applied
Mercury	71900	0.5	Not Applied
TRC	50060	19	11

where: ug/L = microgram per liter,

exp[x] = base of natural logarithms  
raised to the x-power, and

ln(H) = natural logarithm of Hardness  
(STORET 00900).

- e) Concentrations of the following chemical constituents shall not be exceeded except in waters for which mixing is allowed pursuant to Section 302.102.

Constituent	Units	STORET Number	Standard
Barium (total)	mg/L	01007	5.0
Boron (total)	mg/L	01022	1.0
Chloride (total)	mg/L	00940	500.
Fluoride	mg/L	00951	1.4
Iron (dissolved)	mg/L	01046	1.0
Manganese (total)	mg/L	01055	1.0
Nickel (total)	mg/L	01067	1.0
Phenols	mg/L	32730	0.1
Selenium (total)	mg/L	01147	1.0
Silver (total)	ug/L	01077	5.0
Sulfate	mg/L	00945	500.
Total Dissolved Solids	mg/L	70300	1000.
Zinc (total)	mg/L	01092	1.0

where: mg/L = milligram per liter and

ug/L = microgram per liter

Source: Amended at \_\_\_\_ Ill. Reg. \_\_\_\_\_,  
effective \_\_\_\_\_

SUBPART C: PUBLIC AND FOOD PROCESSING  
WATER SUPPLY STANDARDS

Section 302.304 Chemical Constituents

The following levels of chemical constituents shall not be exceeded:

CONSTITUENT	STORET NUMBER	CONCENTRATION (mg/l)
Arsenic (total)	01002	0.05
Barium (total)	01007	1.0
Cadmium (total)	01027	0.010
Chloride	00940	250.
Chromium	01034	0.05
Iron (dissolved)	01046	0.3
Lead (total)	01051	0.05
Manganese (total)	01055	0.15
Nitrate-Nitrogen	00620	10.
Oil (hexane-solubles or equivalent)	00550, 00556 or 00560	0.1
Organics		
Pesticides		
Chlorinated Hydrocarbon Insecticides		
Aldrin	39330	0.001
Chlordane	39350	0.003
DDT	39370	0.05
Dieldrin	39380	0.001
Endrin	39390	0.0002
Heptachlor	39410	0.0001
Heptachlor Epoxide	39420	0.0001
Lindane	39782	0.004
Methoxychlor	39480	0.1
Toxaphene	39400	0.005
Organophosphate Insecticides		
Parathion	39540	0.1
Chlorophenoxy Herbicides		
2,4-Dichlorophenoxyacetic acid (2,4-D)	39730	0.1
2-(2,4,5-Trichlorophenoxy)-propionic acid (2,4,5-TP or Silvex)	39760	0.01
Phenols	32730	0.001
Selenium (total)	01147	0.01
Sulphates	00945	250.
Total Dissolved Solids	70300	500.

(Source: Amended at \_\_\_\_\_ Ill. Reg. \_\_\_\_\_,  
effective \_\_\_\_\_)

TITLE 35: ENVIRONMENTAL PROTECTION  
SUBTITLE C: WATER POLLUTION  
CHAPTER I: POLLUTION CONTROL BOARD

PART 304  
EFFLUENT STANDARDS

SUBPART A: GENERAL EFFLUENT STANDARDS

Section	
304.101	Preamble
304.102	Dilution
304.103	Background Concentrations
304.104	Averaging
304.105	Violation of Water Quality Standards
304.106	Offensive Discharges
304.120	Deoxygenating Wastes
304.121	Bacteria
304.122	Nitrogen (STORET number 00610)
304.123	Phosphorus (STORET number 00665)
304.124	Additional Contaminants
304.125	pH
304.126	Mercury
304.140	Delays in Upgrading (Repealed)
304.141	NPDES Effluent Standards
304.142	New Source Performance Standards (Repealed)

SUBPART B: SITE SPECIFIC RULES AND EXCEPTIONS  
NOT OF GENERAL APPLICABILITY

Section	
304.201	Wastewater Treatment Plant Discharges of the Metropolitan Sanitary District of Greater Chicago
304.202	Chlor-alkali Mercury Discharges in St. Clair County
304.203	Copper Discharges by Olin Corporation
304.204	Schoenberger Creek: Groundwater Discharges
304.205	John Deere Foundry Discharges
304.206	Alton Water Company Treatment Plant Discharges
304.207	Galesburg Sanitary District Deoxygenating Wastes Discharges
304.208	City of Lockport Treatment Plant Discharges
304.209	Wood River Station Total Suspended Solids Discharges
304.210	Alton Wastewater Treatment Plant Discharges
304.212	Sanitary District of Decatur Discharges
304.213	Union Oil Refinery Ammonia Discharge
304.214	Mobil Oil Refinery Ammonia Discharge

- 304.215 City of Tuscola Wastewater Treatment Facility Discharges
- 304.216 Newton Station Suspended Solids Discharges
- 304.219 North Shore Sanitary District Phosphorus Discharges
- 304.220 East St. Louis Treatment Facility, Illinois-American Water Company
- 304.221 Ringwood Drive Manufacturing Facility in McHenry County
- 304.222 Intermittent Discharge of TRC

SUBPART C: TEMPORARY EFFLUENT STANDARDS

- Section
- 304.301 Exception for Ammonia Nitrogen Water Quality Violations
- 304.302 City of Joliet East Side Wastewater Treatment Plant

APPENDIX A References to Previous Rules

AUTHORITY: Implementing Section 13 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111 1/2 pars. 1013 and 1027).

SOURCE: Filed with the Secretary of State January 1, 1978; amended at 2 Ill. Reg. 30, p. 343, effective July 27, 1978; amended at 2 Ill. Reg. 44, p. 151, effective November 2, 1978; amended at 3 Ill. Reg. 20, p. 95, effective May 17, 1979; amended at 3 Ill. Reg. 25, p. 190, effective June 21, 1979; amended at 4 Ill. Reg. 20, p. 53, effective May 7, 1980; amended at 6 Ill. Reg. 563, effective December 24, 1981; codified at 6 Ill. Reg. 7818; amended at 6 Ill. Reg. 11161, effective September 7, 1982; amended at 6 Ill. Reg. 13750, effective October 26, 1982; amended at 7 Ill. Reg. 3020, effective March 4, 1983; amended at 7 Ill. Reg. 8111, effective June 23, 1983; amended at 7 Ill. Reg. 14515, effective October 14, 1983; amended at 7 Ill. Reg. 14910, effective November 14, 1983; amended at 8 Ill. Reg. 1600, effective January 18, 1984; amended at 8 Ill. Reg. 3687, effective March 14, 1984; amended at 8 Ill. Reg. 8237, effective June 8, 1984; amended at 9 Ill. Reg. 1379, effective January 21, 1985; amended at 9 Ill. Reg. 4510, effective March 22, 1985; peremptory amendment at 10 Ill. Reg. 456, effective December 23, 1985; amended at 11 Ill. Reg. 3117, effective January 28, 1987; amended in R84-13 at 11 Ill. Reg. 7291, effective April 3, 1987; amended in R86-17(A) at 11 Ill. Reg. 14748, effective August 24, 1987; amended in R84-16 at 12 Ill. Reg. 2445, effective January 15, 1988; amended in R83-23 at 12 Ill. Reg. 8658, effective May 10, 1988; amended in R87-27 at 12 Ill. Reg. 9905, effective May 27, 1988; amended in R82-7 at 12 Ill. Reg. 10712, effective June 9, 1988; amended in R85-29 at 12 Ill. Reg. 12064, effective July 12, 1988; amended in R87-22 at 12 Ill. Reg. 13966, effective August 23, 1988; amended in R86-3 at 12 Ill. Reg. 20126, effective November 16, 1988; amended in R84-20 at 13 Ill. Reg.

851, effective January 9, 1989; amended in R85-11 at 13 Ill. Reg. 2060, effective February 6, 1989; amended in R88-1 at 13 Ill. Reg. 5976, effective April 18, 1989; amended in R86-17(B) at 13 Ill. Reg. 7754, effective May 4, 1989, amended in R88-22 at 13 Ill. Reg. 8880, effective May 26, 1989; amended in R87-36 at 14 Ill. Reg. XXXXX, effective May 31, 1990; amended in R88-21(B) at \_\_\_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

SUBPART B: SITE-SPECIFIC RULES AND EXCEPTIONS NOT OF GENERAL APPLICABILITY

Section 304.222 Intermittent Discharge of TRC

The acute TRC water quality standard of 35 Ill. Adm. Code 302.208 by operation of Section 304.105 shall not apply to any discharge which contains TRC solely as the result of intermittent usage for antifouling purposes related to the operation of condensers and cooling systems. For the purposes of this Section usage of chlorine or related substances measureable as TRC shall be deemed to be intermittent if usage is restricted to a maximum of two hours per day per condenser or cooling system unit. Discharge concentration of TRC averaged or composited over the discharge period shall not exceed 0.2 mg/l nor shall the TRC concentration exceed 0.5 mg/l at any time.

(Source: Added at \_\_\_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

IT IS SO ORDERED

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 21<sup>st</sup> day of JUNE, 1990, by a vote of 7-0

Dorothy M. Gunn, Clerk  
Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board