# ILLINOIS POLLUTION CONTROL BOARD September 4, 2008

IN THE MATTER OF:	)	
	)	
TRIENNIAL REVIEW OF SULFATE AND	)	R07-9
TOTAL DISSOLVED SOLIDS WATER	)	(Rulemaking - Water)
QUALITY STANDARDS:	)	
PROPOSED AMENDMENTS TO 35 ILL.	)	
ADM. CODE 302.102(b)(6), 302.102(b)(8),	)	
302.102(b)(10), 302.208(g), 309.103(c)(3),	)	
405.109(b)(2)(A), 405.109(b)(2)(B),	)	
406.100(d); REPEALER OF 35 ILL. ADM.	)	
CODE 406.203, 406.209, and PART 407; and	)	
PROPOSED NEW 35 ILL. ADM. CODE	)	
302.208(h)	)	

Adopted Rule. Final Order.

#### OPINION AND ORDER OF THE BOARD (by G.T. Girard):

The Illinois Environmental Protection Agency (IEPA) proposed rules to update existing general use water quality standards for sulfate and total dissolved solids (TDS) by amending or repealing certain sections and parts of 35 Ill. Adm. Code Parts 302, 309, 405, 406, and 407 of the Board's water and mine-related pollution rules. On September 20, 2007, the Board proposed, for first notice, the rule as proposed by IEPA with certain specific changes. Those changes included the addition of language reflecting current IEPA practice to the rules on mixing zones and the amendment of mixing zone regulations to allow mixing in certain small streams when adequate dilution is not available.

On June 19, 2008, the Board proposed for second notice the rule, amending the language from first notice. Specifically, the Board amended the rule by clarifying: 1) how the sulfate standard for waters where chloride concentrations are above 500 milligrams per liter (mg/L) and hardness is 500 mg/L or lower would be set and, 2) how much of the steam volume may be used for mixing when the dilution ration is less than 3:1.

Today the Board proceeds to final notice making only slight changes as suggested by the Joint Committee on Administrative Rules (JCAR). JCAR voted to issue a certificate of no objection on August 19, 2008.

The Board will briefly describe the procedural background and then summarize the rule. Next, the Board will discuss the reasons for proceeding to final notice.

#### PROCEDURAL BACKGROUND

On October 23, 2006, IEPA filed a proposal under the general rulemaking provisions of Section 27 of the Environmental Protection Act (Act) (415 ILCS 5/27 (2006)). The proposal included a 15-page Statement of Reasons (Reasons) and a bound 3-inch thick collection of supporting facts and exhibits. On November 16, 2006, the Board accepted the rulemaking for hearing.

On November 27, 2006, in accordance with Section 27(b) of the Act (415 ILCS 5/27(b) (2006)), the Board requested that the Department of Commerce and Economic Opportunity (DCEO) conduct an economic impact study for this rulemaking. To date, the Board has not received a response from DCEO.

The Board held two hearings in this proceeding before Hearing Officer Marie Tipsord. The first hearing was held on March 7, 2007, in Springfield and the second on April 23, 2007, in Chicago. At those hearings, the Board heard testimony from:

Robert Mosher, Brian Koch and Toby Frevert on behalf of IEPA; James Huff and Brigitte Postel on behalf of CITGO Petroleum Corporation (CITGO); Glynnis Collins on behalf of Prairie Rivers Network, Sierra Club and the Environmental Law and Policy Center (collectively Environmental Groups); Phil Gonet and Jim Boswell on behalf of the Illinois Coal Association (ICA).

At the close of hearings, a June 7, 2007 deadline for public comments to be filed was set. The Board received a total of eight public comments 1 from the following:

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IEPA (PC 2, PC 4);
ICA (PC 1, PC 3);
Illinois Association of Wastewater Agencies Water Quality Subcommittee (IAWA) (PC 5);
CITGO (PC 6)
Illinois Environmental Regulatory Group (IERG) (PC 7); and
Environmental Groups (PC 8).
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On September 20, 2007, the Board adopted the rule for first notice. The proposed rule was published in the *Illinois Register* on October 5, 2007 (31 III. Reg. 13624 (Oct. 5, 2007)). On October 11, 2007, by hearing officer order, the Board extended the deadline for filing first-notice public comments to December 3, 2007. The Board has received the following public comments since the rule was adopted for first notice:

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IERG (PC 9);
IEPA (PC 10, PC 11).
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On May 1, 2008, the Board adopted a *proposed* second notice to allow for comment on changes to the first notice proposal proposed at second notice. The Board allowed comments to

<sup>&</sup>lt;sup>1</sup> Public comments are cited as "PC \_ at \_."

be filed until June 2, 2008. On June 2, 2008, the Environmental Groups filed a comment (PC 13).

On June 19, 2008, the Board adopted the rule for second notice and filed the rule with JCAR. On August 19, 2008, JCAR voted a certificate of no objection to the rule.

#### **SUMMARY OF THE RULE**

IEPA's proposed rule set forth a sulfate standard for general use waters that varied from 500 milligrams per liter (mg/L) to 2,500 mg/L, depending on the associated chloride and hardness levels measured in the water. The sulfate standard in waters used for livestock watering had a maximum level of 2,000 mg/L. The proposal eliminated the total dissolved solids (TDS) water quality standard for general use waters. The proposal also amended the mixing zone regulations to allow for mixing in 7Q1.1 zero flow streams<sup>2</sup>, and in streams with less than a 3:1 dilution ratio. Finally, the proposal deleted the provisions addressing separate sulfate and chloride water quality standards for discharges from mining operations. Discharges from mining operations would be subject to the general use water quality standards under the proposed regulations. The Board requested additional comment on several of the provisions proposed for first notice, particularly regarding the economic reasonableness of the proposal to delete a special sulfate water quality standard for coal mines.

In response to the comments, the Board made changes to Section 302.208(h)(3)(C) and Section 309.102(b)(8). Specifically, the Board amended Section 302.208(h)(3)(C) to establish a standard for sulfate where chlorides exceed 500 mg/L and hardness is at or below 500 mg/L, according to Section 303(c) of the Clean Water Act and federal regulations at 40 C.F.R. 131.10(j)(2). Section 309.102(b)(8) was amended to require an NPDES permit applicant seeking a mixing zone more than 50% of the volume flow in streams where the dilution ratio is less than 3:1 to demonstrate the provision of an adequate zone of passage.

#### **DISCUSSION**

Section 27 of the Act obligates IEPA to provide an economic analysis to the Board and requires the Board to determine that the rule is economically reasonable and technically feasible. 415 ILCS 5/27 (2006). Specifically, the Act requires a person filing a proposed rule with the Board to "describe, to the extent reasonably practicable, the universe of affected sources and facilities and the economic impact of the proposed rule." 415 ILCS 5/27(a) (2006). The Board finds that IEPA has described affected sources including "19 active coal mines in Illinois at the present time." PC 2 at 2. Further, IEPA has described the economic reasonableness of the proposed sulfate standards. Specifically, IEPA analyzed point sources (including mining operations) within three categories (PC 11 at 3) concluding that only a small number of existing mines would need to employ additional controls such as best management practices.

The Illinois Coal Association (ICA) submitted as Hearing Exhibit 2 a technical report, dated May 1, 2004 through April 30, 2005, on the economic impact for coal mines. No other

<sup>&</sup>lt;sup>2</sup> Streams that have zero flow for at least seven consecutive days recurring on average in nine years out of ten.

group has provided specific cost estimates. ICA's report estimated that the total annualized cost (capital and operating) for all coal mines in Illinois for compliance with a 2000 mg/L sulfate standard would be \$730 million over a ten-year period. Exhibit 2 at 11. For compliance with a 500 mg/L standard, the report estimated a total annualized cost of \$7.5 billion over a ten-year period. *Id*.

The Board carefully reviewed ICA's report and the rest of the record, and found that the record supported proceeding to first notice with the proposed sulfate standard as amended by the Board. The Board concluded that ICA's economic analysis was based on an assumption that additional treatment would be required for coal mines to achieve compliance, but that the Board's proposed changes to mixing provisions would allow mixing as a means of compliance, thus significantly reducing the proposed rules' economic impact upon industrial dischargers and coal mines. *See* Triennial Review of Sulfate and Total Dissolved Solids Water Quality Standards: Proposed Amendments to 35 Ill. Adm. Code 302.102(b)(6), 302.102(b)(8), 302.102(b)(10), 302.208(g), 309.103(c)(3), 405.109(b)(2)(A), 405.109(b)(2)(B), 406.100(d); Repealer of 35 Ill. Adm. Code 406.203 and Part 407; and Proposed New 35 Ill. Adm. Code 302.206(h) (Triennial Review), R07-9, slip op. at 30-31 (Sept. 20, 2007) (first notice).

The Board notes that, in accordance with Section 27(b) of the Act (415 ILCS 5/27(b) (2006)), the Board conducted a public hearing on the economic impact of the proposed rules and notified the public at least 20 days before the hearing. 415 ILCS 5/27(b)(2) (2008). The Board requested that the Department of Commerce and Economic Opportunity conduct a study of the economic impact of the proposed rules. *Id.* at (b)(1).

No additional hearings were requested, and no participant besides the ICA has submitted any additional economic data regarding the economic reasonableness of the proposed sulfate standard. The Board again carefully reviewed the record and considered all evidence in the record regarding the economic reasonableness of the proposed rules including sulfate standards on mining operations, before proceeding to second notice. The Board found that the record supports proceeding to second notice with the rule including the sulfate standards as proposed by IEPA. Triennial Review of Sulfate and Total Dissolved Solids Water Quality Standards:

Proposed Amendments to 35 Ill. Adm. Code 302.102(b)(6), 302.102(b)(8), 302.102(b)(10), 302.208(g), 309.103(c)(3), 405.109(b)(2)(A), 405.109(b)(2)(B), 406.100(d); Repealer of 35 Ill. Adm. Code 406.203 and Part 407; and Proposed New 35 Ill. Adm. Code 302.206(h) (Triennial Review), R07-9, slip op. at 30-31 (June 19, 2008) (second notice).

During the proposed second notice period, only one comment was received (PC 13) and the Board amended the rulemaking language to address those concerns before proceeding to second notice.

The Board therefore finds that the rule is technically feasible and economically reasonable. Further, the Board finds that the record supports proceeding to adoption with the rule as proposed at second notice making only the changes suggested by JCAR.

#### **CONCLUSION**

The Board finds that the record supports proceeding to final notice with IEPA's proposal as amended by the Board. The Board finds the record establishes that the rulemaking is technically feasible and economically reasonable. Therefore the Board will proceed with final adoption of this rule.

#### **ORDER**

The Board adopts the proposed amendments set forth below for final notice and directs the Clerk to cause the rules to be filed with the Secretary of State for publication in the *Illinois Register* for final adoption.

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	Antidegradation
	SUBPART B: GENERAL USE WATER QUALITY STANDARDS

Section	
302.201	Scope and Applicability
302.202	Purpose
302.203	Offensive Conditions
302.204	рН
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	Total Ammonia Nitrogen
302.213	Effluent Modified Waters (Ammonia)(Repealed)

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
302.307	Radium 226 and 228

# SUBPART D: SECONDARY CONTACT AND INDIGENOUS AQUATIC LIFE STANDARDS

Section	
302.401	Scope and Applicability
302.402	Purpose
302.403	Unnatural Sludge
302.404	рН
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 BASIN WATER QUALITY STANDARDS

Section	
302.501	Scope, Applicability, and Definitions
302.502	Dissolved Oxygen
302.503	pH
302.504	Chemical Constituents
302.505	Fecal Coliform
302.506	Temperature
302.507	Thermal Standards for Existing Sources on January 1, 1971
302.508	Thermal Standards for Sources Under Construction But Not In Operation on
	January 1, 1971
302.509	Other Sources
302.510	Incorporations by Reference
302.515	Offensive Conditions
302.520	Regulation and Designation of Bioaccumulative Chemicals of Concern (BCCs)
302.521	Supplemental Antidegradation Provisions for Bioaccumulative Chemicals of
	Concern (BCCs)
302.525	Radioactivity
302.530	Supplemental Mixing Provisions for Bioaccumulative Chemicals of Concern
	(BCCs)

302.535	Ammonia Nitrogen
302.540	Other Toxic Substances
302.545	Data Requirements
302.550	Analytical Testing
302.553	Determining the Lake Michigan Aquatic Toxicity Criteria or Values - General Procedures
302.555	Determining the Tier I Lake Michigan Acute Aquatic Toxicity Criterion (LMAATC): Independent of Water Chemistry
302.560	Determining the Tier I Lake Michigan Basin Acute Aquatic Life Toxicity Criterion (LMAATC): Dependent on Water Chemistry
302.563	Determining the Tier II Lake Michigan Basin Acute Aquatic Life Toxicity Value (LMAATV)
302.565	Determining the Lake Michigan Basin Chronic Aquatic Life Toxicity Criterion (LMCATC) or the Lake Michigan Basin Chronic Aquatic Life Toxicity Value (LMCATV)
302.570	Procedures for Deriving Bioaccumulation Factors for the Lake Michigan Basin
302.575	Procedures for Deriving Tier I Water Quality Criteria and Values in the Lake Michigan Basin to Protect Wildlife
302.580	Procedures for Deriving Water Quality Criteria and Values in the Lake Michigan Basin to Protect Human Health – General
302.585	Procedures for Determining the Lake Michigan Basin Human Health Threshold Criterion (LMHHTC) and the Lake Michigan Basin Human Health Threshold Value (LMHHTV)
302.590	Procedures for Determining the Lake Michigan Basin Human Health Nonthreshold Criterion (LMHHNC) or the Lake Michigan Basin Human Health Nonthreshold Value (LMHHNV)
302.595	Listing of Bioaccumulative Chemicals of Concern, Derived Criteria and Values

# 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 - Procedure 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				
	Combinations of Substances				
302.633	The W	ild and Domestic Animal Protection Criterion			
302.642	The H	uman Threshold Criterion			
302.645	Detern	nining the Acceptable Daily Intake			
302.648	Detern	nining the Human Threshold Criterion			
302.651	The H	uman Nonthreshold Criterion			
302.654	Detern	nining the Risk Associated Intake			
302.657	Determ	nining the Human Nonthreshold Criterion			
302.658	Stream	Flow for Application of Human Nonthreshold Criterion			
302.660	Biocor	ncentration Factor			
302.663	Detern	nination of Bioconcentration Factor			
302.666	Utilizi	ng the Bioconcentration Factor			
302.669	Listing of Derived Criteria				
302.APPEND	IX A	References to Previous Rules			
302.APPEND	IX B	Sources of Codified Sections			
302.APPEND	IX C	Maximum total ammonia nitrogen concentrations allowable for certain			
		combinations of pH and temperature			
302.TABLE A		pH-Dependent Values of the AS (Acute Standard)			
302.TABLE B		Temperature and pH-Dependent Values of the CS (Chronic Standard) for			
		Fish Early Life Stages Absent			
302.TABLE C		Temperature and pH-Dependent Values of the CS (Chronic Standard) for			
		Fish Early Life Stages Present			
302.APPENDIX D		Section 302.206(d): Stream Segments for Enhanced Dissolved Oxygen Protection			

AUTHORITY: Implementing Section 13 and authorized by Sections 11(b) and 27 of the Environmental Protection Act [415 ILCS 5/13, 11(b), and 27]

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; 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 at R87-27 at 12 Ill. Reg. 9911, effective May 27, 1988; amended at 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 14 Ill. Reg. 11974, effective July 9, 1990; amended in R94-1(A) at 20 Ill. Reg. 7682, effective May 24, 1996; amended in R94-1(B) at 21 Ill. Reg. 370, effective December 23, 1996; expedited correction at 21 Ill. Reg. 6273, effective December 23, 1996; amended in R97-25 at 22 Ill. Reg. 1356, effective December 24, 1997; amended in R99-8 at 23 Ill. Reg. 11249, effective August 26, 1999; amended in R01-13 at 26 Ill. Reg. 3505, effective February 22, 2002; amended in R02-19 at 26 Ill. Reg. 16931, effective November 8, 2002; amended in R02-11 at 27 Ill. Reg. 166, effective December 20, 2002; amended in R04-21

at 30 Ill.	Reg. 4919	, effective	March 1, 20	06; ame	nded in R(	04-25 at 3	32 III. I	Reg. 225	4, effe	ctive
January	28, 2008; a	amended in	R07-9 at 32	Ill. Reg	z	, effe	ective _			

# SUBPART A: GENERAL WATER QUALITY PROVISIONS

Section 302.102 Allowed Mixing, Mixing Zones and ZIDs

- a) Whenever a water quality standard is more restrictive than its corresponding effluent standard, or where there is no corresponding effluent standard specified at 35 III. Adm. Code 304, an opportunity shall be allowed for compliance with 35 III. Adm. Code 304.105 by mixture of an effluent with its receiving waters, provided the discharger has made every effort to comply with the requirements of 35 III. Adm. Code 304.102.
- b) The portion, volume and area of any receiving waters within which mixing is allowed pursuant to subsection (a) shall be limited by the following:
  - 1) Mixing must be confined in an area or volume of the receiving water no larger than the area or volume which would result after incorporation of outfall design measures to attain optimal mixing efficiency of effluent and receiving waters. Such measures may include, but are not limited to, use of diffusers and engineered location and configuration of discharge points.
  - 2) Mixing is not allowed in waters which include a tributary stream entrance if such mixing occludes the tributary mouth or otherwise restricts the movement of aquatic life into or out of the tributary.
  - 3) Mixing is not allowed in water adjacent to bathing beaches, bank fishing areas, boat ramps or dockages or any other public access area.
  - 4) Mixing is not allowed in waters containing mussel beds, endangered species habitat, fish spawning areas, areas of important aquatic life habitat, or any other natural features vital to the well being of aquatic life in such a manner that the maintenance of aquatic life in the body of water as a whole would be adversely affected.
  - 5) Mixing is not allowed in waters which contain intake structures of public or food processing water supplies, points of withdrawal of water for irrigation, or watering areas accessed by wild or domestic animals.
  - Mixing must allow for a zone of passage for aquatic life in which water quality standards are met. However, a zone of passage is not required in receiving streams that have zero flow for at least seven consecutive days recurring on average in nine years out of ten.

- 7) The area and volume in which mixing occurs, alone or in combination with other areas and volumes of mixing, must not intersect any area of any body of water in such a manner that the maintenance of aquatic life in the body of water as a whole would be adversely affected.
- The area and volume in which mixing occurs, alone or in combination with other areas and volumes of mixing must not contain more than 25% of the cross-sectional area or volume of flow of a stream except for those streams where the dilution ratio is less than 3:1. In streams where the dilution ratio is less than 3:1, the volume in which mixing occurs, alone or in combination with other volumes of mixing, must not contain more than 50 % of the volume flow unless an applicant for an NPDES permit demonstrates, pursuant subsection (d) of this section, that an adequate zone of passage is provided for pursuant to Section 302.102(b)(6). Mixing is not allowed in receiving waters which have a zero minimum seven day low flow which occurs once in ten years.
- 9) No mixing is allowed where the water quality standard for the constituent in question is already violated in the receiving water.
- 10) No body of water may be used totally for mixing of single outfall or combination of outfalls, except as provided in Section 302.102(b)(6).
- Single sources of effluents which have more than one outfall shall be limited to a total area and volume of mixing no larger than that allowable if a single outfall were used.
- 12) The area and volume in which mixing occurs must be as small as is practicable under the limitations prescribed in this subsection, and in no circumstances may the mixing encompass a surface area larger than 26 acres.
- c) All water quality standards of this Part must be met at every point outside of the area and volume of the receiving water within which mixing is allowed. The acute toxicity standards of Sections 302.208 and 302.210 must be met within the area and volume within which mixing is allowed, except as provided in subsection (e).
- d) Pursuant to the procedures of Section 39 of the Act and 35 Ill. Adm. Code 309, a person may apply to the Agency to include as a condition in an NPDES permit formal definition of the area and volume of the waters of the State within which mixing is allowed for the NPDES discharge in question. Such formally defined area and volume of allowed mixing shall constitute a "mixing zone" for the purposes of 35 Ill. Adm. Code: Subtitle C. Upon proof by the applicant that a proposed mixing zone conforms with the requirements of Section 39 of the Act, this Section and any additional limitations as may be imposed by the Clean Water

Act (CWA) (33 <u>USC</u> <del>U.S.C</del> 1251 et seq.), the Act or Board regulations, the Agency shall, pursuant to Section 39(b) of the Act, include within the NPDES permit a condition defining the mixing zone.

- e) Pursuant to the procedures of Section 39 of the Act and 35 Ill. Adm. Code 309, a person may apply to the Agency to include as a condition in an NPDES permit a ZID as a component portion of a mixing zone. Such ZID shall, at a minimum, be limited to waters within which effluent dispersion is immediate and rapid. For the purposes of this subsection, "immediate" dispersion means an effluent's merging with receiving waters without delay in time after its discharge and within close proximity of the end of the discharge pipe, so as to minimize the length of exposure time of aquatic life to undiluted effluent, and "rapid" dispersion means an effluent's merging with receiving waters so as to minimize the length of exposure time of aquatic life to undiluted effluent. Upon proof by the applicant that a proposed ZID conforms with the requirements of Section 39 of the Act and this Section, the Agency shall, pursuant to Section 39(b) of the Act, include within the NPDES permit a condition defining the ZID.
- f) Pursuant to Section 39 of the Act and 35 Ill. Adm. Code 309.103, an applicant for an NPDES permit shall submit data to allow the Agency to determine that the nature of any mixing zone or mixing zone in combination with a ZID conforms with the requirements of Section 39 of the Act and of this Section. A permittee may appeal Agency determinations concerning a mixing zone or ZID pursuant to the procedures of Section 40 of the Act and 35 Ill. Adm. Code 309.181.
- g) Where a mixing zone is defined in an NPDES permit, the waters within that mixing zone, for the duration of that NPDES permit, shall constitute the sole waters within which mixing is allowed for the permitted discharge. It shall not be a defense in any action brought pursuant to 35 Ill. Adm. Code 304.105 that the area and volume of waters within which mixing may be allowed pursuant to subsection (b) is less restrictive than the area or volume or waters encompassed in the mixing zone.
- h) Where a mixing zone is explicitly denied in a NPDES permit, no waters may be used for mixing by the discharge to which the NPDES permit applies, all other provisions of this Section notwithstanding.
- i) Where an NPDES permit is silent on the matter of a mixing zone, or where no NPDES permit is in effect, the burden of proof shall be on the discharger to demonstrate compliance with this Section in any action brought pursuant to 35 Ill. Adm. Code 304.105.

(Source:	Amended at 32 Ill.	Reg	, effective)	

#### Section 302.208 Numeric Standards for Chemical Constituents

- a) The acute standard (AS) for the chemical constituents listed in subsection (e) shall not be exceeded at any time except as provided in subsection (d).
- b) The chronic standard (CS) for the chemical constituents listed in subsection (e) 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 (d). The samples used to demonstrate attainment or lack of attainment with a CS must be collected in a manner that assures an average representative of the sampling period. For the metals that have water quality based standards dependent upon hardness, the chronic water quality standard will be calculated according to subsection (e) using the hardness of the water body at the time the metals sample was collected. To calculate attainment status of chronic metals standards, the concentration of the metal in each sample is divided by the calculated water quality standard for the sample to determine a quotient. The water quality standard is attained if the mean of the sample quotients is less than or equal to one for the duration of the averaging period.
- c) The human health standard (HHS) for the chemical constituents listed in subsection (f) shall not be exceeded when the stream flow is at or above the harmonic mean flow pursuant to Section 302.658 nor shall an annual average, based on at least eight samples, collected in a manner representative of the sampling period, exceed the HHS except as provided in subsection (d).
- d) 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 zone of initial dilutions (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.
  - 3) The HHS shall not be exceeded outside of waters in which mixing is allowed pursuant to Section 302.102.
- e) Numeric Water Quality Standards for the Protection of Aquatic Organisms

Constituent	STORET	AS	CS
	Number	(µg/L)	(µg/L)
Arsenic (trivalent, dissolved)	22680	$360 \times 1.0^* = 360$	$190 \times 1.0^* = 190$

Cadmium (dissolved)	01025	$e^{A+B\ln(H)} \times \left\{ \frac{1.138672 - \left[ (\ln H)(0.041838) \right]}{\left[ (\ln H)(0.041838) \right]} \right\}^*,$	$e^{A+B\ln(H)} \times \begin{cases} 1.101672 - \\ [(\ln H)(0.041838)] \end{cases} *,$
		where $A = -2.198$ and $B = 1.128$	where $A = -3.490$ and $B = 0.7852$
Chromium (hexavalent, total)	01032	16	11
Chromium (trivalent, dissolved)	80357	$\frac{\exp}{e^{A+B\ln(H)}} \times 0.316^*,$	$\frac{\exp}{e^{A+B\ln(H)}} \times 0.860 *,$
		where $A = 3.688$ and $B = 0.8190$	where $A = 1.561$ and $B = 0.8190$
Copper (dissolved)	01040	$\frac{\exp}{e^{A+B\ln(H)}} \times 0.960^*,$	$\frac{\exp}{e^{A+B\ln(H)}} \times 0.960^{*},$
		where $A = -1.464$ and $B = 0.9422$	where $A = -1.465$ and $B = 0.8545$
Cyanide	00718	22	5.2
Lead (dissolved)	01049	exp $e^{A+B\ln(H)} \times \left\{ \frac{1.46203 - \left[(\ln H)(0.145712)\right]}{*}, \right\}$	exp $e^{A+B\ln(H)} \times \left\{ \frac{1.46203 - \left[ (\ln H)(0.145712) \right]}{*}, \right.$
		where $A = -1.301$ and $B = 0.1.273$	where $A = -2.863$ and $B = 1.273$
Mercury (dissolved)	71890	$2.6 \times 0.85$ * = $2.2$	$1.3 \times 0.85$ * = 1.1

Nickel (dissolved)	01065	$\frac{\exp}{e^{A+B\ln(H)}} \times 0.998 *,$	$\frac{\exp}{e^{A+B\ln(H)}} \times 0.997 *,$
		where $A = 0.5173$ and $B = 0.8460$	where $A = -2.286$ and $B = 0.8460$
TRC	500600	19	11
Zinc (dissolved)	01090	$e^{A+B\ln(H)} \times 0.978^*,$	$\frac{\exp}{e^{A+B\ln(H)}} \times 0.986^*,$
		where $A = 0.9035$ and $B = 0.8473$	where $A = -0.8165$ and $B = 0.8473$
Benzene	78124	4200	860
Ethyl- benzene	78113	150	14
Toluene	78131	2000	600
Xylene(s)	81551	920	360

where:  $\mu g/L$  = microgram per liter,

 $\frac{\exp^{[x]}}{e^x}e^x$  = base of natural logarithms raised to the x-power,

ln(H) = natural logarithm of Hardness (STORET 00900), and

\* = conversion factor multiplier for dissolved metals

# f) Numeric Water Quality Standard for the Protection of Human Health

Constituent	STORET Number	(μg/L)
Mercury	71900	0.012
Benzene	78124	310

where:  $\mu g/L$  = micrograms per liter

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

# **STORET**

Constituent	Unit	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
Phenols	mg/L	32730	0.1
Selenium (total)	mg/L	01147	1.0
Silver (total)	$\mu g/L$	01077	5.0
Sulfate	mg/L	00945	<del>-500</del>
Total Dissolved Solids	mg/L	<del>70300</del>	1000
where:	mg/L	= milligram per	r liter and

h) The following concentrations for sulfate must not be exceeded except in receiving waters for which mixing is allowed pursuant to Section 302.102:

= microgram per liter

μg/L

- 1) At any point where water is withdrawn or accessed for purposes of livestock watering, the average of sulfate concentrations must not exceed 2,000 mg/L when measured at a representative frequency over a 30 day period.
- 2) The results of the following equations provide sulfate water quality standards in mg/L for the specified ranges of hardness (in mg/L as CaCO<sub>3</sub>) and chloride (in mg/L) and must be met at all times:
  - A) If the hardness concentration of receiving waters is greater than or equal to 100 mg/L but less than or equal to 500 mg/L, and if the chloride concentration of waters is greater than or equal to 25 mg/L but less than or equal to 500 mg/L, then:

C = [1276.7 + 5.508 (hardness) - 1.457 (chloride)] \* 0.65

where, C = sulfate concentration

B) If the hardness concentration of waters is greater than or equal to 100 mg/L but less than or equal to 500 mg/L, and if the chloride

concentration of waters is greater than or equal to 5 mg/L but less than 25 mg/L, then:

C = [-57.478 + 5.79 (hardness) + 54.163 (chloride)] \* 0.65

where C = sulfate concentration

- The following sulfate standards must be met at all times when hardness (in mg/L as CaCO<sub>3</sub>) and chloride (in mg/L) concentrations other than specified in (h)(2) are present:
  - A) If the hardness concentration of waters is less than 100 mg/L or chloride concentration of waters is less than 5 mg/L, the sulfate standard is 500 mg/L.
  - B) If the hardness concentration of waters is greater than 500 mg/L and the chloride concentration of waters is 5 mg/L or greater, the sulfate standard is 2,000 mg/L.
  - C) If the combination of hardness and chloride concentrations of existing waters are not reflected in subsection (h)(3)(A) or (B), the sulfate standard may be determined in a site-specific rulemaking pursuant to section 303(c) of the Federal Water Pollution Control Act of 1972 (Clean Water Act), 33 USC 1313, and Federal Regulations at 40 CFR. 131.10(j)(2).

(Source: Amended at 32 Ill. Reg., effective
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# TITLE 35: ENVIRONMENTAL PROTECTION SUBTITLE C: WATER POLLUTION CHAPTER I: POLLUTION CONTROL BOARD

# PART 309 PERMITS

# SUBPART A: NPDES PERMITS

Section	
309.101	Preamble
309.102	NPDES Permit Required
309.103	Application - General
309.104	Renewal
309.105	Authority to Deny NPDES Permits
309.106	Access to Facilities and Further Information
309.107	Distribution of Applications
309.108	Tentative Determination and Draft Permit
309.109	Public Notice

200 110	Contents of Dali's Nation of Analisation
309.110	Contents of Public Notice of Application
309.111	Combined Notices
309.112	Agency Action After Comment Period
309.113	Fact Sheets
309.114	Notice to Other Governmental Agencies
309.115	Public Hearings on NPDES Permit Applications
309.116	Notice of Agency Hearing
309.117	Agency Hearing
309.118	Agency Hearing File
309.119	Agency Action After Hearing
309.120	Reopening the Record to Receive Additional Written Comment
309.141	Terms and Conditions of NPDES Permits
309.142	Water Quality Standards and Waste Load Allocation
309.143	Effluent Limitations
309.144	Federal New Source Standards of Performance
309.145	Duration of Permits
309.146	Authority to Establish Recording, Reporting, Monitoring and Sampling
	Requirements
309.147	Authority to Apply Entry and Inspection Requirements
309.148	Schedules of Compliance
309.149	Authority to Require Notice of Introduction of Pollutants into Publicly Owned
	Treatment Works
309.150	Authority to Ensure Compliance by Industrial Users with Sections 204(b), 307
	and 308 of the Clean Water Act
309.151	Maintenance and Equipment
309.152	Toxic Pollutants
309.153	Deep Well Disposal of Pollutants (Repealed)
309.154	Authorization to Construct
309.155	Sewage Sludge Disposal
309.156	Total Dissolved Solids Reporting and Monitoring
309.157	Permit Limits for Total Metals
309.181	Appeal of Final Agency Action on a Permit Application
309.182	Authority to Modify, Suspend or Revoke Permits
309.183	Revision of Schedule of Compliance
309.184	Permit Modification Pursuant to Variance
309.185	Public Access to Information
309.191	Effective Date
	SUBPART B: OTHER PERMITS
Section	
309.201	Preamble
309.202	Construction Permits
309.203	Operating Permits; New or Modified Sources
309.204	Operating Permits; Existing Sources
309.205	Joint Construction and Operating Permits
309.206	Experimental Permits

309.207	Former Permits (Repealed)
309.208	Permits for Sites Receiving Sludge for Land Application
309.221	Applications - Contents
309.222	Applications - Signatures and Authorizations
309.223	Applications - Registered or Certified Mail
309.224	Applications - Time to Apply
309.225	Applications - Filing and Final Action By Agency
309.241	Standards for Issuance
309.242	Duration of Permits Issued Under Subpart B
309.243	Conditions
309.244	Appeals from Conditions in Permits
309.261	Permit No Defense
309.262	Design, Operation and Maintenance Criteria
309.263	Modification of Permits
309.264	Permit Revocation
309.265	Approval of Federal Permits
309.266	Procedures
309.281	Effective Date
309.282	Severability

#### 309.APPENDIX A References to Previous Rules

AUTHORITY: Implementing Sections 13 and 13.3 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/13, 13.3 and 27].

SOURCE: Adopted in R71-14, at 4 PCB 3, March 7, 1972; amended in R73-11, 12, at 14 PCB 661, December 5, 1974, at 16 PCB 511, April 24, 1975, and at 28 PCB 509, December 20, 1977; amended in R73-11, 12, at 29 PCB 477, at 2 Ill. Reg. 16, p. 20, effective April 20, 1978; amended in R79-13, at 39 PCB 263, at 4 Ill. Reg. 34, p. 159, effective August 7, 1980; amended in R77-12B, at 41 PCB 369, at 5 Ill. Reg. 6384, effective May 28, 1981; amended in R76-21, at 44 PCB 203, at 6 Ill. Reg. 563, effective December 24, 1981; codified at 6 Ill. Reg. 7818; amended in R82-5, 10, at 54 PCB 411, at 8 Ill. Reg. 1612, effective January 18, 1984; amended in R86-44 at 12 Ill. Reg. 2495, effective January 13, 1988; amended in R88-1 at 13 Ill. Reg. 5993, effective April 18, 1989; amended in R88-21(A) at 14 Ill. Reg. 2892, effective February 13, 1990; amended in R91-5 at 16 Ill. Reg. 7339, effective April 27, 1992; amended in R95-22 at 20 Ill. Reg. 5526, effective April 1, 1996; amended in R99-8 at 23 Ill. Reg. 11287, effective August 26, 1999; amended in R02-11 at 27 Ill. Reg. 202, effective December 20, 2002; amended in R03-19 at 28 Ill. Reg. 7310, effective May 7, 2004; amended in R07-9 at 32 Ill. Reg. , effective

SUBPART A: NPDES PERMITS

Section 309.103 Application - General

a) Application Forms

- An applicant for a National Pollution Discharge Elimination System (NPDES) Permit shall file an application, in accordance with Section 309.223-hereof, on forms provided by the Illinois Environmental Protection Agency (Agency). Such forms shall comprise the NPDES application forms promulgated by the U.S. Environmental Protection Agency for the type of discharge for which an NPDES Permit is being sought and such additional information as the Agency may reasonably require in order to determine that the discharge or proposed discharge will be in compliance with applicable state and federal requirements.
- 2) In addition to the above application forms, the Agency may require the submission of plans and specifications for treatment works and summaries of design criteria.
- 3) Effluent toxicity monitoring
  - A) In addition to the above application forms, the Agency may require, pursuant to Section 39 of the Act, the installation, use, maintenance and reporting of results from monitoring equipment and methods, including biological monitoring. The Agency may require, pursuant to Section 39 of the Act, effluent toxicity testing to show compliance with 35 Ill. Adm. Code 302.621 and 302.630. If this toxicity testing shows the effluent to be toxic, the Agency may require pursuant to Section 39 of the Act further testing and identification of the toxicants toxicant(s) pursuant to 35 Ill. Adm. Code 302.210(a).
  - B) The following POTWs shall provide the results of valid whole effluent biological toxicity testing to the Agency:
    - i) All POTWs with design influent flows equal to or greater than one million gallons per day;
    - ii) All POTWs with approved pretreatment programs or POTWs required to develop a pretreatment program pursuant to 35 Ill. Adm. Code 310.Subpart E;
  - C) In addition to the POTWs listed in <u>subsection</u> (a)(3)(B), the Agency may require other POTWs to submit the result of toxicity tests with their permit applications, based on consideration of the following factors.
    - i) The variability of the pollutants or pollutant parameters in the POTW effluent (based on chemical-specific information, the type of treatment facility, and types of industrial contributors);

- ii) The dilution of the effluent in the receiving water (ratio of effluent flow to receiving stream flow);
- iii) Existing controls on point or nonpoint sources, including total maximum daily load calculations for the waterbody segment and the relative contribution of the POTW;
- iv) Receiving stream characteristics, including possible or known water quality impairment, and whether the POTW discharges to a coastal water, one of the Great Lakes, or a water designated as an outstanding natural resource; or
- v) Other considerations (including but not limited to the history of toxic impact and compliance problems at the POTW), which the Agency determines could cause or contribute to adverse water quality impacts.
- D) The POTWs required under <u>subsection</u> <u>subsections</u> (a)(3)(B) or (a)(3)(C) to conduct toxicity testing shall use the methods prescribed at 35 Ill. Adm. Code 302.Subpart F. Such testing must have been conducted since the later of the last NPDES permit reissuance or permit modification pursuant to Section 309.182, 309.183 or 309.184 for any of the reasons listed at 40 CFR 122.62(a) (1994), as amended at 60 Fed. Reg. 33926 effective June 29, 1995, herein incorporated by reference (including no later amendments or editions).
- 4) All POTWs with approved pretreatment programs shall provide the following information to the Agency: a written technical evaluation of the need to revise local limits pursuant to 35 Ill. Adm. Code 310.210. BOARD NOTE: Subsections (a)(3)(B) through (a)(4) are derived from 40 CFR 122.21(j) (1994).

#### b) Animal Waste Facilities

An applicant for an NPDES Permit in connection with the operation of an animal waste facility shall complete, sign, and submit an NPDES application in accordance with the provisions of 35 Ill. Adm. Code: Subtitle E, Chapter I.

#### c) Mining Activities

If, as defined by 35 Ill. Adm. Code 402.101, mining activities are to be carried out on a facility for which an NPDES Permit is held or required, the applicant must submit a permit application as required by 35 Ill. Adm. Code 403.103, 403.104 and 405.104. If the facility will have a discharge

other than a mine discharge or non-point source mine discharge as defined by 35 Ill. Adm. Code 402.101, the applicant shall also submit an NPDES Permit application in accordance with Section 309.223 on forms supplied by the Agency.

- 2) As provided by 35 Ill. Adm. Code 403.101, except to the extent contradicted in 35 Ill. Adm. Code: Subtitle D, Chapter I, the rules contained in this Subpart apply only to 35 Ill. Adm. Code: Subtitle D, Chapter I NPDES Permits.
- 3) As provided by 35 Ill. Adm. Code 406.100, except to the extent provided in 35 Ill. Adm. Code: Subtitle D, Chapter I, the effluent and water quality standards of 35 Ill. Adm. Code 302, 303 and 304 are inapplicable to mine discharges and non-point source mine discharges.

### d) New Discharges

Any person whose discharge will begin after the effective date of this Subpart A or any person having an NPDES Permit issued by the U.S. Environmental Protection Agency for an existing discharge which will substantially change in nature, or increase in volume or frequency, must apply for an NPDES Permit either:

- 1) No later than 180 days in advance of the date on which such NPDES Permit will be required; or
- In sufficient time prior to the anticipated commencement of the discharge to insure compliance with the requirements of Section 306 of the Clean Water Act (CWA) (33 <u>USC U.S.C.</u> 1251 et seq), or with any other applicable water quality standards and applicable effluent standards and limitations.

# e) Signatures

An application submitted by a corporation shall be signed by a principal executive officer of at least the level of vice president, or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the application form originates. In the case of a partnership or a sole proprietorship, the application shall be signed by a general partner or the proprietor, respectively. In the case of a publicly owned facility, the application shall be signed by either the principal executive officer, ranking elected official, or other duly authorized employee.

(Source:	Amended at 32 Ill. Reg.	. effective	
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# TITLE 35: ENVIRONMENTAL PROTECTION SUBTITLE D: MINE RELATED WATER POLLUTION CHAPTER I: POLLUTION CONTROL BOARD

# PART 405 STATE AND NPDES PERMITS

Section	
405.100	Preamble
405.101	Special Conditions: Agency Guidance Document
405.102	Standard for Permit Issuance or Certification
405.103	Permit Modification When New Regulations are Adopted
405.104	Permit Applications
405.105	Surface Drainage Control
405.106	Refuse Disposal
405.107	Experimental Permits for Refuse Disposal
405.108	Permit for Use of Acid-producing Mine Refuse
405.109	Abandonment Plan
405.110	Cessation, Suspension or Abandonment
405.111	Emergency Procedures To Control Pollution
405.112	Mine Entrances
405.113	Permit Area
405.APPEND	IX A References to Previous Rules

AUTHORITY: Implementing Sections 12 and 13 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/12, 13, and 27 (2006)].

SOURCE: Adopted in R76-20, R77-10, 39 PCB 196, at 4 Ill. Reg. 34, p. 164, effective August 7, 1980; codified at 5 Ill. Reg. 8527; amended in R83-6A at 8 Ill. Reg. 13267, effective July 16, 1984; amended in R07-9 at 32 Ill. Reg. \_\_\_\_\_\_\_, effective \_\_\_\_\_\_.

#### Section 405.109 Abandonment Plan

- a) A state or NPDES permit shall include an abandonment plan as a condition.
- b) An abandonment plan shall be incorporated into the permit by reference if it:
  - Includes a time schedule establishing that the abandonment plan will be executed and completed within a reasonable time after abandonment considering any potential adverse impact on the environment pending completion of the plan and the amount of time required to carry out the steps in the plan; one year is assumed to be a reasonable time unless the operator demonstrates that a longer time is reasonable; and
  - 2) Shows that the mine related facilities and mining activities will be abandoned so as not to cause a violation of the Act or this Chapter.;

- A) If the plan includes a discharge which will remain after abandonment which will not meet the requirements of 35 III. Adm. Code 406.202, and if the permit included water quality-based conditions under 35 III. Adm. Code 406.203 during active mining, the discharge shall be deemed to meet 35 III. Adm. Code 406.202 with respect to total dissolved solids, chloride, sulfate, iron and manganese if it will meet the requirements of 35 III. Adm. Code 406.106 and 406.203(c)(1) and (c)(2); or
- B) If the plan includes impoundments which will remain after abandonment and which will not meet the water quality standards of 35 Ill. Adm. Code 302.204 or 302.208, with respect to total dissolved solids, chloride, sulfate, iron, manganese and pH, such fact shall not prevent approval of the plan if the impoundment will meet the requirements of 35 Ill. Adm. Code 406.106 and 406.203(c)(1) and (c)(2).
- c) If the abandonment plan does not meet the standard of paragraph subsection (b) the Agency may either deny the permit or issue it with an abandonment plan modified by conditions subject to Section 405.101.
- d) The time limit provided by paragraph subsection (b)(1) is inapplicable to abandonment plans for surface coal mines which are approved as reclamation plans under the Surface Coal Mining Land Conservation and Reclamation Act, [225 ILCS 720] (Ill. Rev. Stat. 1983, ch. 96 1/2, par. 7902.03).
- e) Any abandonment plan constituting a substantial change from the permitted abandonment plan is a revised abandonment plan.
- f) A permittee shall apply for a new or revised or supplemental NPDES or <u>State</u> state permit prior to implementation of a revised abandonment plan within the time limits provided by 35 Ill. Adm. Code 403.104(c).
- g) An abandonment plan incorporated into a permit pursuant to showing under 35 Ill. Adm. Code 406.203 shall include conditions pursuant to 35 Ill. Adm. Code 406.203(e)(1) and (e)(2).

(C	Amended at 32 Ill. Reg.	- CC 4 :
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TITLE 35: ENVIRONMENTAL PROTECTION SUBTITLE D: MINE RELATED WATER POLLUTION CHAPTER I: POLLUTION CONTROL BOARD

#### MINE WASTE EFFLUENT AND WATER QUALITY STANDARDS

#### SUBPART A: EFFLUENT STANDARDS

Section	
406.100	Preamble
406.101	Averaging
406.102	Sampling, Reporting and Monitoring
406.103	Background Concentrations
406.104	Dilution
406.105	Commingling of Waste Streams
406.106	Effluent Standards for Mine Discharges
406.107	Offensive Discharges
406.108	Non-Point Source Mine Discharges
406.109	Effluent Standards for Coal Mine Discharge from Reclamation Areas
406.110	Alternate Effluent Standards for Coal Mine Discharges During Precipitation
	Events

#### SUBPART B: WATER QUALITY STANDARDS

Section		
406.201	Temporary Exemption from Section 406.105 (Repealed)	
406.202	Violation of Water Quality Standards	
406.203	TDS Related Permit Conditions (Repealed)	
406.204	Good Mining Practices	
406.205	Contact with Disturbed Areas	
406.206	Retention and Control of Exposed Waters	
406.207	Control of Discharge Waters	
406.208	Unconventional Practices	
406.209	Expiration of Former Exemptions (Repealed)	
406.APPENDIX A References to Previous Rules		

AUTHORITY: Implementing Sections 12 and 13 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/12, 13 and 27].

SOURCE: Adopted in R76-20, R77-10, 39 PCB 196, at 4 Ill. Reg. 34, p. 164, effective August 7, 1980; codified at 5 Ill. Reg. 8527; emergency amendment in R83-6B at 7 Ill. Reg. 8386, effective July 5, 1983, for a maximum of 150 days; amended in R83-6B at 7 Ill. Reg. 14510, effective October 19, 1983; amended in R83-6A at 8 Ill. Reg. 13239, effective July 16, 1984; amended in R84-29 at 11 Ill. Reg. 12899, effective July 27, 1987; amended in R07-9 at 32 Ill. Reg. \_\_\_\_\_\_\_, effective \_\_\_\_\_\_\_.

# SUBPART A: EFFLUENT STANDARDS

Section 406.100 Preamble

- a) Part 406 applies to mine discharges and non-point source mine discharges as defined by Section 402.101.
- b) Other discharges, including sanitary sewers, are regulated under Subtitle C, Chapter I: Water Pollution.
- c) A facility which has another discharge will be subject to both Subtitle C and Subtitle D. Subtitle D governs mining activities, including mine discharges and non-point source mine discharges. Subtitle C governs other discharges.
- d) Except to the extent provided in this Part 406, <u>Part Parts 302, 303 and 304</u> of subtitle C <u>is are inapplicable</u> to mine discharges and non-point source mine discharges.

(Source: Amended at 32 III. Reg	, effective
SUBPART	B: WATER OHALITY STANDARDS

Section 406.203 TDS Related Permit Conditions (Repealed)

- This Section sets forth procedures by which water quality based permit conditions for total dissolved solids, chloride, sulfate, iron and manganese may be established by the Agency for coal mine discharges. These procedures apply instead of Section 406.202 whenever a permit applicant elects to proceed under this Section. A permittee must comply with water quality-based permit conditions for total dissolved solids, chloride, sulfate, iron and manganese established pursuant to this Section instead of Section 406.202. Public hearings may be required pursuant to 35 Ill. Adm. Code 309.115.
- b) An applicant may elect to proceed under this Section by providing the required information as part of a new or renewed or supplemental state or NPDES permit application.
- e) The Agency shall establish permit conditions under this Section if all of the following conditions are met:
  - 1) The applicant proves to the Agency that the discharge will not cause an adverse effect on the environment in and around the receiving stream, by either:
    - A) Demonstrating that the discharge will contain a concentration less than or equal to 3500 mg/l sulfate and 1000 mg/l chloride; or,
    - B) Through actual stream studies.

- 2) The applicant proves to the Agency that the discharge will not adversely affect any public water supply; and
- 3) The applicant proves to the Agency that it is utilizing good mining practices designed to minimize discharge of total dissolved solids, chloride, sulfate iron and manganese.
- d) The Agency may promulgate under 35 Ill. Adm. Code 405.101(c) a code of good mining practices consistent with the definition in Section 406.204. Compliance with the code of good mining practices shall be prima facie evidence that the applicant is utilizing good mining practices within the meaning of paragraph (c)(3).
- e) Whenever the Agency issues a permit based on this Section, it shall include such conditions as may be necessary to ensure that:
  - 1) There is no adverse effect on the environment in and around the receiving stream;
  - 2) The discharge does not adversely affect any public water supply; and
  - 3) The permittee utilizes good mining practices designed to minimize discharge of total dissolved solids, chloride, sulfate, iron and manganese.
- f) Whenever the Agency issues a permit pursuant to this Section, if may include as a condition a requirement that the permittee submit to the Agency effluent data for total dissolved solids, chloride, sulfate, iron and manganese.

(Source: Repealed at	32 Ill. Reg	:	, effective _	
Section 406.209	Expiration o	f Former	Exemptions	s (Repealed)

- a) Exemptions from the water quality standards granted prior to the effective date of Section 406.203 shall continue until any of the following events occurs:
  - 1) Any State or NPDES permit for the facility expires, or is revoked, renewed or reissued;
  - 2) Any State or NPDES permit for the facility is modified, unless the Agency expressly continues the exemption pending review pursuant to paragraph (b);
  - 3) An application period set pursuant to paragraph (b) expires with no application having been received;
  - 4) The Agency grants or denies a permit under Section 406.203; or

5) January 1, 1987, the final date for continuation of former exemptions.
b) The Agency may require applications for review pursuant to Section 406.203 by notifying individual permittees and setting a date for application not less than 15 months after the date notice is given.
c) If an appeal to the Board is filed, exemptions continue until the Board enters a final order disposing of the appeal.
(Source: Repealed at 32 Ill. Reg. \_\_\_\_\_\_\_, effective \_\_\_\_\_\_\_)

# TITLE 35: ENVIRONMENTAL PROTECTION SUBTITLE D: MINE RELATED WATER POLLUTION CHAPTER I: POLLUTION CONTROL BOARD

# PART 407 COMPLIANCE AND EFFECTIVE DATES (REPEALED)

Section		
407.101	Effective Date	
407.102	Applications from Holders of Outstanding Permits	
407.103	Expiration of Outstanding Permits	
407.104	Abandonment Plan for Existing Permits	
APPENDIX A References to Previous Rules		

AUTHORITY: Authorized by Section 27 and implementing Sections 12 and 13 and authorized by Section 27 of the Illinois Environmental Protection Act (Ill. Rev. Stat., ch. 111 1/2, pars. 1012, 1013 and 1027) unless otherwise noted.

SOURCE: Adopted at 4 Ill. Reg. 34, p. 164, effective August 7, 1980; codified at 5 Ill. Reg. 34, p. 8527, effective August 10, 1981; Repealed in R07-9 at 31 Ill. Reg. \_\_\_\_\_\_, effective

Section 407.101 Effective Date

This Chapter is effective upon filing with the Secretary of State.

Section 407.102 Applications from Holders of Outstanding Permits

- a) A holder of an outstanding operating permit under the old Chapter 4 may apply for a state or NPDES permit at any time.
- b) The Agency may by notification require a holder of an outstanding operating permit to apply for a state or NPDES permit.

c) Notification shall contain a date, not less than 180 days after notification, by which date an application must be received by the Agency.

#### Section 407.103 Expiration of Outstanding Permits

Compliance with the provisions of this Chapter is required on the effective date except that immediate compliance with the permit requirement of Section 404.101 is not required of holders of outstanding permits for mines opened prior to the effective date of this Subtitle D, Chapter I. For such facilities, compliance with Section 404.101 is required upon expiration of the outstanding operating permit. Such permits shall expire upon the occurrence of any of the following conditions, whichever occurs first:

- a) The lapse of three years after the effective date of this Chapter; or
- b) The expiration of any NPDES permit held by the permittee for the facility; or
- c) Issuance of a permit for the facility pursuant to Section 403.102 or Section 404.101; or
- d) The lapse of an application period fixed pursuant to Section 407.102(c) if an application is not received by the date given in the notification.

#### Section 407.104 Abandonment Plan for Existing Permits

The requirement of a permit to abandon contained in Rule 502 of old Chapter 4, effective May 23, 1972 shall continue to apply to operators of mines opened prior to the effective date of this Subtitle D, Chapter I, until such time as such operator shall have been issued under this Subtitle D, Chapter I a valid permit containing an abandonment plan.

#### Section 407.APPENDIX A REFERENCES TO PREVIOUS RULES

The following table is provided to aid in referencing old Board rule numbers to section numbers pursuant to codification.

# Chapter 4, Mine Related Pollution Part VII, 35 Ill. Admin. Code Part 407 Compliance and Effective Dates

Rule 701	Section 407.101
Rule 702	Section 407.102
Rule 703	Section 407.103
Rule 704	Section 407.104

Section 41(a) of the Environmental Protection Act provides that final Board orders may be appealed directly to the Illinois Appellate Court within 35 days after the Board serves the

order. 415 ILCS 5/41(a) (2006); see also 35 Ill. Adm. Code 101.300(d)(2), 101.906, 102.706. Illinois Supreme Court Rule 335 establishes filing requirements that apply when the Illinois Appellate Court, by statute, directly reviews administrative orders. 172 Ill. 2d R. 335. The Board's procedural rules provide that motions for the Board to reconsider or modify its final orders may be filed with the Board within 35 days after the order is received. 35 Ill. Adm. Code 101.520; see also 35 Ill. Adm. Code 101.902, 102.700, 102.702.

I, John T. Therriault, Assistant Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on June 19, 2008, by a vote of 4-0.

John T. Therriault, Assistant Clerk Illinois Pollution Control Board