ILLINOIS POLLUTION CONTROL BOARD September 3, 1992

IN THE MATTER OF:)	
)	
GROUNDWATER QUALITY STANDARDS:)	R89-14(C)
AMENDMENTS TO 35 ILL. ADM. CODE)	(Rulemaking)
303, 616, AND 620)	

Adopted Rule

Final Action

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

By today's action the Board adopts certain amendments necessary to complete rulemaking on groundwater quality standards¹.

The principal amendment is a modification of 35 Ill. Adm. Code Section 303.203. This section has served to subject certain underground waters to the water quality standards of 35 Ill. Adm. Code: Subtitle C^2 . Now, however, groundwaters have their own standards found in Part 620. Section 303.203 has read as follows:

Section 303.203 Underground Waters

The underground waters of Illinois which are a present or a potential source of water for public or food processing supply shall meet the general use and public and food processing water supply standards of Subparts B and C, Part 302, except due to natural causes.

As a result of today's action Section 303.203 will read:

Section 303.203 Underground Waters

The primary rulemaking in this matter has been docket R89-14(B), in which the groundwater quality standards were established. In the Matter of: Groundwater Quality Standards (35 Ill. Adm. Code 620), R89-14(B), November 7, 1991; 15 Ill. Reg. 17614 (December 6, 1991), effective November 25, 1991.

² Subtitle C contains the Board's Water Quality Regulations. It consists of several parts, of which Part 302 (Water Quality Standards) and Part 303 (Water Use Designations and Site Specific Water Quality Standards) are pertinent to the instant matter. Part 302 is divided into subparts, of which Subpart A (General Water Quality Provisions), Subpart B (General Use Water Quality Standards), and Subpart C (Public and Food Processing Water Supply Standards) are pertinent to the instant matter.

35 Ill. Adm. Code 302. Subparts B and C do not apply to underground waters, except as provided at 35 Ill. Adm. Code 620.450(b).

It is also necessary that the form of the reference to the Subtitle C standards at Section 620.450(b) be amended to cite directly to the applicable parts rather than to the applicability section, 303.203.

As a third matter, the Board also today adopts at the request of the Joint Committee on Administrative Rules (JCAR) an amendment to Part 616 at Section 616.104 necessary to correct a typographical error in that section (see following discussion).

HISTORY - SECTION 303.203 PROPOSAL

The issue of how to handle Section 303.203 has a fairly prolonged history. Among other matters, proposals to amend the section have gone to first notice on three separate occasions, and to second notice on two occasions. For the purposes of the following discussion two proposals are of major note. These are the proposal originally sent to first notice in September 1990 (hereinafter "September 1990 proposal") and the proposal first offered by the Board in April 1992 and today adopted (hereinafter "April 1992 proposal").

The matter of amending Section 303.203 was initially recommend by the Illinois Environmental Protection Agency (Agency) as part of its larger proposal to implement the Illinois Groundwater Protection Act (IGPA), Ill. Rev. Stat. 1991, ch. 111½, par. 7451 et seq. In September 1990 the Board moved this recommendation to first notice along with the rest of the groundwater standards proposal³. The form and content of the Section 303.203 amendments were as proposed by the Agency (see PC #16 at p. 9):

Section 303.203 Underground Waters

The underground waters of Illinois which are a present or a potential source of water for public or food processing supply shall meet the general use and public and food processing water supply standards of Subparts B and C, Part 302, except due to natural causes. The underground waters of Illinois which are groundwater shall meet the standards set forth in 35 Ill. Adm. Code 620.

³ In the Matter of: Groundwater Quality Standards (35 Ill. Adm. Code 620) (Sept 27, 1990), R89-14 First Notice Proposal; published November 2, 1990 at 14 Ill. Reg. 17862.

The Board provided the following explanation for the proposed amendment:

Although the principal regulations proposed today consist of new Part 620, the promulgation of Part 620 requires a conforming amendment to Subtitle C. groundwater standards proposed today are intended to supersede the standards currently applicable to groundwater, which are found in Subtitle C. currently applicable standards are the General Use and Public and Food Processing Water Supply Standards of 35 Ill. Adm. Code: Subtitle C, which are applicable to groundwaters pursuant to Section 303.203 of Subtitle C. The amendment today proposed for Section 303.203 deletes the applicability of the General Use and Public and Food Processing Water Supply Standards to groundwater. The language is as recommended by the Agency. (In the Matter of: Groundwater Quality Standards (35 Ill. Adm. Code 620) (Sept. 27, 1990), R89-14, 115 PCB 177.)

The Board received no comment on either the form or content of the proposed Section 303.203 amendment during the ensuing R89-14 and R89-14(B) hearings or first notice public comment period. Accordingly, the Board at the next opportunity moved the proposed amendment to second notice without modification⁴. The Board at that time repeated the same explanatory statement that accompanied first notice (see above).

The Board was not able to again visit the proposed Section 303.203 amendment until the fall of 1991 due to unanticipated delay in moving the Part 620 regulations forward. Unfortunately, this required returning the Section 303.203 amendment to first notice, because one year had passed since publication of the September 1990 proposal in the Illinois Register.

Accordingly, in November 1991 the Board reproposed for first notice the same Section 303.203 amendment as in September 1990. The Board also opened instant Docket C for the expressed purpose of continuing the Section 303.203 amendment⁵. The opinion accompanying the November 1991 first notice also again repeated the explanatory statement that had accompanied the original September 1990 proposal at both first and second notice. However, the Board at this time added the following observations:

⁴ In the Matter of: Groundwater Quality Standards (35 Ill. Adm. Code 620) (July 25, 1991), R89-14(B) Second Notice Proposal.

⁵ In the Matter of: Groundwater Quality Standards, Amendments to 35 Ill. Adm. Code 303 (Nov. 7, 1991), R89-14(C), First Notice Proposal; published December 2, 1991, Illinois Register at 15 Ill. Reg. 17026.

It is worth noting with regard to both the Part 620 rules and Subtitle C that there is an important distinction between groundwater and underground water. Groundwater is expressly defined in both the IGPA and the Illinois Environmental Protection Act:

"GROUNDWATER" MEANS UNDERGROUND WATER WHICH OCCURS WITHIN THE SATURATED ZONE AND GEOLOGIC MATERIALS WHERE THE FLUID PRESSURE IN THE PORE SPACE IS EQUAL TO OR GREATER THAN ATMOSPHERIC PRESSURE. (Ill. Rev. Stat. 1989, ch. 111 1/2, par. 1003.64 and par. 7453(g)).

Conversely, underground water is defined in the IGPA (footnote omitted):

"UNDERGROUND WATER" MEANS ALL WATER BENEATH THE LAND SURFACE. (Ill. Rev. Stat. 1989, ch. 111 1/2, par. 7453(k)).

Pursuant to these two definitions, "groundwater" is a subset of "underground waters". Among other matters, it is that subset that occurs within the saturated zone. Not included within groundwater are underground waters that may occur in unsaturated portions of the subsurface, such as within the aerated portions of the soil. Also not included is the water normally found in the root zone of crops, since the roots of most crops do not propagate into the saturated zone (citation and footnote omitted).

The way Section 303.203 is today proposed to be amended, underground waters that are groundwaters are subject to Part 620. Underground waters that are not groundwaters remain subject to the Subtitle C regulations.

(In the Matter of: Groundwater Quality Standards, Amendments to 35 Ill. Adm. Code 303 (Nov. 7, 1991), R89-14(C), p. 1-2.)

These observations were added in recognition of concern raised in hearings that adoption of the version of the groundwater standards then under consideration would constitute a prohibition against many practices, particularly agricultural practices, that potentially impact very shallow underground waters.

The first notice comment period for the November 1991 proposal expired on January 16, 1991, 45 days after publication of the proposed amendments in the Illinois Register. The Board received three public comments during that period:

PC #66 ⁶	Administrative Code Division of the Secretary of State's Office (Code Division)
PC #67	Illinois Environmental Protection Agency
PC #68	Illinois Department of Commerce and Community Affairs, Bureau of Business Development (DCCA)

PC #66 and 68 addressed non-substantive matters; Code Division suggested some format changes which the Board accepted and DCCA found no significant impact regarding the proposal. The Agency in PC #67 raised for the first time the need to make a conforming amendment to 35 Ill. Adm. Code 620.450(b).

Three additional comments were received after the close of the first notice comment period⁷:

PC #69	Illinois Steel Group
PC #70	Illinois Department of Mines and Minerals (Mines and Minerals)
PC #71	Joint Comments of the Illinois Environmental Protection Agency, Illinois Steel Group, and Illinois Department of Mines and Minerals

In PC #69 the Illinois Steel Group raised for the first time the question of whether the September 1990 proposal as re-first noticed in November 1991 (and the Agency's position expressed in PC #67) accorded with its understanding of how underground waters should be treated in Section 303.203. Among the Illinois Steel Group's contentions was that both the September 1990 proposal and the Agency's PC #67 concepts were contrary to the Agency's position taken during the pendency of the R89-14(B) proceeding, and that they also were not supported by the record.

In PC #70 Mines and Minerals expressed support for the amendment proposed by the Agency in PC #67. The comment also provided Mines and Minerals' view of the development of Section 620.450(b).

⁶ The public comments were numbered consecutively with those filed in previous subdockets. Public comments 66 through 71 are the only comments that pertain to R89-14(C).

⁷ On April 23, 1992 the Board accepted these comments into the record to prevent material prejudice. Comments #69 and #70 were accompanied by motions to file. The Board granted those motions on April 23, 1992.

In PC #71 the Agency, Mines and Minerals, and the Illinois Steel Group (Joint Commenters) proposed a new method of amending Section 303.203. The Joint Commenters continued to recommend removal of the applicability of the General Use and Public and Food Processing Water Supply Standards from groundwaters, but recommended further that the applicability be removed from all underground waters. In support of this position, the Joint Commenters contented:

The Agency, [Mines and Minerals], and [the Illinois Steel Group] agree that the Illinois Groundwater Protection Act and the recently adopted Groundwater Quality Standards, 35 Ill. Adm. Code 620, were intended to replace the General Use and Public and Food Processing Water Supply Standards, Subparts B and C, with respect to the saturated and the unsaturated zones of "underground waters" of Section 303.203, except for specific exceptions listed in Part 620.

In order to be consistent with the provision described above, underground water should be exempt from the requirements of Subparts B and C of Part 302. The one exception in Part 620 which requires imposition of Subparts B and C of Section 302 involves the Alternative Groundwater Quality Standards of Subsections 620.450(b)(4)(A), 620.450(b)(5)(A), and 620.450(b)(7)(A) for certain mining activities. These provisions specifically incorporate the existing Section 303.203 application of Part 302 water quality standards.

Accordingly, the parties of these comments agree that the general water and public water supply standards of Section 303.203 are not appropriate for "underground waters" ... except in Section 620.450(b) where the standards of Subparts B and C of Part 302 apply.

PC #71 at 1-2.

Given that the Joint Commenters' recommendation constituted a significant departure from the position articulated in the three incarnations of the September 1990 proposal, the Board determined that it was again necessary to return to first notice. This was done by Board order of April 23, 19928.

⁸ In the Matter of: Groundwater Quality Standards (35 Ill. Adm. Code 303, 616, and 620), R89-14(C), April 23, 1992; Notice of withdrawal published at 16 Ill. Reg. 7511 (May 8, 1992); First Notice publication of amendments for Parts 303, 616, and 620 at 16 Ill. Reg. 7302, 7295, and 7286, respectively, (May 8, 1992).

Although the Joint Commenters had offered language to effect their proposal, the Board modified this language in order the implement the recommendation in a more straight forward manner. This constituted the origin of the April 1992 proposal and the language today adopted.

The 45-day public comment period for the April 1992 proposal expired on June 22, 1992. Five public comments were received:

PC #72 DCCA

PC #73 Code Division

PC #74 Illinois Steel Group

PC #75 Agency

PC #76 McHenry County Defenders, Citizens for a Better Environment, Illinois Chapter of the Sierra Club (collectively "Defenders")

DCCA found no significant impact regarding the proposal; Code Division suggested some format changes which the Board accepts.

In PC #75 the Agency expressed endorsement for the April 1992 proposal. The Agency also reiterated its position that the amendments are necessary to make the requirements of Part 302 consistent with the newly-adopted Part 620.

In PC #74 the Illinois Steel Group expressed its support for the April 1992 proposal and its concurrence with the Agency's position presented in PC #75.

In PC #75 Defenders objected to the manner in which those underground waters that are not groundwaters are treated in the April 1992 proposal. Among the Defenders contentions were that the April 1992 proposal is contrary to the intent of the IGPA and that it is not sufficiently protective of groundwater. The Defenders also took issue with the Joint Commenters' characterization of the role of Part 620 to unsaturated zones of groundwater.

On July 9, 1992 the Board adopted the April 1992 proposal for second notice. On August 11, 1992, JCAR issued a certificate of no objection to the amendments.

DISCUSSION - SECTION 303.203 PROPOSAL

It is generally agreed that to allow Section 303.203 to exist unaltered is to allow for conflict and confusion. The

question has been to eliminate this circumstance, and in particular how to address underground waters that are not groundwaters.

The solution that the Board believes to be most reasonably in accordance with the nature of both the existing water quality standards and the nature of unsaturated zone underground waters is to remove the applicability of the General Use Water Quality Standards (Subpart B) and the Public and Food Processing Water Supply Standards (Subpart C) from all underground waters9.

The principal reason why there are now groundwater standards different from the General Use Standards and the Public and Food Processing Water Supply Standards of Subtitle C is that the latter standards are not fully relevant to groundwater. This Board has observed at length that groundwaters differ in important regards from surface waters, and that standards based on surface water considerations (as are the Subtitle C standards) often have no basis in groundwater considerations¹⁰. For example, toxicity to aquatic organisms is the factor that most often controls the General Use Standards¹¹; toxicity to aquatic organisms is not a relevant groundwater matter.

The necessary distinction between surface water and groundwater is further recognized in the mandate of the IGPA that water quality standards specific to groundwater be developed. In particular, the legislature has declared:

⁹ It is to be noted that Subpart A, which includes the nondegradation provision at Section 302.105, would continue to apply to <u>all underground waters</u>.

¹⁰ See, for example, In the Matter of: A Plan for Protecting Illinois Groundwater R86-8 (August 28, 1986). This a report prepared by the Board for the Illinois General Assembly pursuant to P.A. 83-1268 and 13.1 of the Act. Particularly pertinent sections include: Groundwater versus Underground Water Protection (p. III-1 to III-2), Dissimilarities between Surface Waters and Groundwaters (p. III-2 to III-6), Existing Standards for Groundwater Protection (p. IV-1 to IV-6), Rationale for Water Quality Standards (p. IV-6 to IV-7), and Recommendations for Groundwater Standards (p. IV-7 to IV-18)

It should be noted that during the pendency of the groundwater rulemakings, the Subtitle C standards were amended to place even greater emphasis on toxicity to aquatic organisms than had previously been the case. See <u>In the Matter of: Amendments to Title 35</u>, <u>Subtitle C (Toxics Control)</u> R88-21 (January 25, 1990), final opinion and order.

... the Board shall promulgate the water quality standards for groundwater. In promulgating these regulations, the Board shall ... consider the following:

 recognition that groundwaters differ in many important respects from surface waters, including water quality, rate of movement, direction of flow, accessibility, susceptibility to pollution, and use ...

(Ill. Rev. Stat. 1991, ch 111½, par. 7458)

Although much of what has been said on this topic both in this proceeding and earlier has focused solely on groundwater, almost all is also pertinent to the broader matter of underground water. In particular, there is little in the General Use and Public and Food Processing Water Supply Quality Standards that seems to be germane to underground waters. The prohibition against offensive conditions of sludge, bottom deposits, floating debris, algal growth, etc. of Section 302.203 is not germane; the aquatic toxicity standards of Sections 302.208 and 302.210 are not germane. Neither are the reservoir and lake phosphorus standard of Section 302.205, the fecal coliform standards of Sections 302.208 and 302.306, the river temperature limitations of Section 302.211, the algicide permits of Section 302.302, and the finished water standards of Section 302.303. The pH and dissolved oxygen standards of Sections 302.204 and 302.206 are, at best, of questionable relevance.

Some of the Subtitle C standards, if applied to underground waters, would have fully unacceptable consequences. For example, Section 302.212 restricts ammonia concentrations to the low levels necessary to protect sensitive aquatic life in surface waters. These levels are far below those that result in the unsaturated zone due to application of ammonia fertilizers. Thus, application of the Section 302.212 ammonia limitations to underground waters in the unsaturated zone would be tantamount to a prohibition against application of ammonia fertilizer!

In sum, the Board can see no rationale for continuing the applicability of the General Use Standards or the Public and Food Processing Water Supply Standards to underground waters in general. These standards were originally designed to protect surface waters. Moreover, they have evolved even more strongly in support of this sole mission as the result of recent rulemakings. A general severance is now warranted.

The Board notes that the Defenders objected to this course of action. (PC #76.) Among the Defenders' observations is that the IGPA mandate directs the Board to address groundwater standards, not underground water standards. From this point the

implication is left that the Board lacks authority for today's action. The Board disagrees. The Board has authority to generally amend its regulations pursuant to Title VII of the Act.

Additionally, the Board notes that the Defenders contest the allegation of the Joint Commenters that Part 620 regulations were "intended to replace the existing water quality standards 'with respect to the saturated <u>and unsaturated zones</u> of underground waters'". (PC #76 at 3 quoting PC #71 at 1-2; emphasis added.) The Board agrees with the Defenders to the extent that it finds no support for the contention that the Part 620 regulations are or were intended to have application to underground waters within the unsaturated zone; the record is indeed replete with pleadings and explicit Board findings to the contrary.

CONFORMING AMENDMENT AT PART 620

In PC #67 the Agency changed its earlier recommendation that the applicability to groundwaters of the Subtitle C water quality standards be completely removed. The Agency pointed out that the water quality standards of Part 302 continue to be used in certain mining and CERCLA/RCRA contexts, including the establishment of cleanup objectives. The Agency also pointed out that Part 620 at Section 620.450(b) contains reference to Subtitle C^{12} , and that this reference must be accommodated in the general severance of the standards of Subtitle C and Part 620. Mines and Minerals and the Joint Commenters also supported this position (PC #70 and #71).

In reviewing this matter for April 1992 first notice the Board found it necessary that Section 620.450(b) itself be amended. The relevant portions of Section 620.450(b) cite to Section 303.203, which is an applicability statement. The proper form is to cite directly to the applicable standards. The standards are the standards of Subparts B and C of Part 302. Accordingly, the Board in the April 1992 proposal replaced the four citations to 35 Ill. Adm. Code 303.203 with citation to 35 Ill. Adm. Code 302.Subparts B and C. The phrase "except due to natural causes" was also added at each occurrence to expressly state this otherwise implied concept and in conformance with the Joint Commenters' intent.

¹² Section 620.450(b), titled "Coal Reclamation Groundwater Quality Standards", identifies the groundwater quality standards that are applicable in various reclamation circumstances associated with coal mining. The Subtitle C standards apply in the limited circumstance of certain refuse disposal or coal preparation plant areas placed into operation after February 1, 1983 and before the effective date of Part 620 (November 25, 1991), provided also that the groundwater is a present or potential source of water for public and food processing.

TEXT CORRECTION AT PART 616

JCAR has alerted the Board to a typographical error in Section 616.104(b). The error consists of a phrase inadvertently dropped from the subsection. The subsection quotes statutory language. The Board today corrects this oversight in this docket so as to make the correction as expeditiously as possible.

ORDER

The Board hereby directs the Clerk of the Board to submit the text of the following amendments to the Secretary of State for final notice pursuant to Section 6 of the APA.

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

PART 303
WATER USE DESIGNATIONS AND SITE SPECIFIC
WATER QUALITY STANDARDS

SUBPART B: NONSPECIFIC WATER USE DESIGNATIONS

Section 303.203 Underground Waters

35 Ill. Adm. Code 302.Subparts B and C do not apply to underground waters, except as provided at 35 Ill. Adm. Code 620.450(b) The underground waters of Illinois which are a present or a potential source of water for public or food processing supply shall meet the general use and public and food processing water supply standards of Subparts B and C, Part 302, except due to natural causes.

TITLE 35: ENVIRONMENTAL PROTECTION SUBTITLE F: PUBLIC WATER SUPPLIES CHAPTER I: POLLUTION CONTROL BOARD

PART 616

NEW ACTIVITIES IN A SETBACK ZONE OR REGULATED RECHARGE AREA

SUBPART A: GENERAL

Section 616.104 Exceptions to Prohibitions

- a) THE OWNER OF A NEW POTENTIAL PRIMARY SOURCE OR A POTENTIAL SECONDARY SOURCE MAY SECURE A WAIVER FROM THE prohibitions specified in Sections 616.402(a), 616.422(a), 616.442, 616.462(a), 616.602, 616.622, 616.702 or 616.722(a) against construction or operation within the setback zone FOR A POTABLE WATER SUPPLY WELL OTHER THAN A COMMUNITY WATER SUPPLY. A WRITTEN REQUEST FOR A WAIVER SHALL BE MADE TO THE OWNER OF THE WATER WELL AND THE AGENCY. SUCH REQUEST SHALL IDENTIFY THE NEW OR PROPOSED POTENTIAL SOURCE, SHALL GENERALLY DESCRIBE THE POSSIBLE EFFECT OF SUCH POTENTIAL SOURCE UPON THE WATER WELL AND ANY APPLICABLE TECHNOLOGY-BASED CONTROL WHICH WILL BE UTILIZED TO MINIMIZE THE POTENTIAL FOR CONTAMINATION, AND SHALL STATE WHETHER, AND UNDER WHAT CONDITIONS, THE REQUESTOR WILL PROVIDE AN ALTERNATIVE POTABLE WATER SUPPLY. WAIVER MAY BE GRANTED BY THE OWNER OF THE WATER WELL NO LESS THAN 90 DAYS AFTER RECEIPT UNLESS PRIOR TO SUCH TIME THE AGENCY NOTIFIES THE WELL OWNER THAT IT DOES NOT CONCUR WITH THE REQUEST. (Section 14.2(b) of the Act)
- b) THE AGENCY SHALL NOT CONCUR WITH ANY SUCH REQUEST WHICH FAILS TO ACCURATELY DESCRIBE REASONABLY FORESEEABLE EFFECTS OF THE POTENTIAL SOURCE OR POTENTIAL ROUTE UPON THE WATER WELL OR ANY APPLICABLE TECHNOLOGY-BASED CONTROLS. NOTIFICATION BY THE AGENCY SHALL BE IN WRITING, AND SHALL INCLUDE A STATEMENT OF REASONS FOR THE NONCONCURRENCE. WAIVER OF THE MINIMUM SETBACK ZONE SHALL EXTINGUISH THE WATER WELL OWNER'S RIGHTS UNDER SECTION 6b OF THE ILLINOIS WATER WELL CONSTRUCTION CODE BUT SHALL NOT PRECLUDE ENFORCEMENT OF ANY LAW REGARDING WATER POLLUTION. IF THE OWNER OF THE WATER WELL HAS NOT GRANTED A WAIVER WITHIN 120 DAYS AFTER RECEIPT OF THE REQUEST OR THE AGENCY HAS NOTIFIED THE OWNER THAT IT DOES NOT CONCUR WITH THE REQUEST, THE OWNER OF A POTENTIAL SOURCE OR POTENTIAL ROUTE MAY FILE A PETITION FOR AN EXCEPTION WITH THE BOARD AND THE AGENCY PURSUANT TO subsection (b) OF THIS SECTION. (Section 14.2(b) of the Act)
- O) NO WAIVER UNDER THIS SECTION IS REQUIRED WHERE THE POTABLE WATER SUPPLY WELL IS PART OF A PRIVATE WATER SYSTEM AS DEFINED IN THE ILLINOIS GROUNDWATER PROTECTION ACT, AND THE OWNER OF SUCH WELL WILL ALSO BE THE OWNER OF A NEW POTENTIAL SECONDARY SOURCE OR A POTENTIAL ROUTE. IN SUCH INSTANCES, A PROHIBITION OF 75 FEET SHALL APPLY AND THE OWNER SHALL

NOTIFY THE AGENCY OF THE INTENDED ACTION SO THAT THE AGENCY MAY PROVIDE INFORMATION REGARDING THE POTENTIAL HAZARDS ASSOCIATED WITH LOCATION OF A POTENTIAL SECONDARY SOURCE OR POTENTIAL ROUTE IN CLOSE PROXIMITY TO A POTABLE WATER SUPPLY WELL. (Section 14.2(b) of the Act)

- d) THE BOARD MAY GRANT AN EXCEPTION FROM THE SETBACK REOUIREMENTS OF THIS SECTION AND SECTION 14.3 TO THE OWNER OF A NEW POTENTIAL PRIMARY SOURCE OTHER THAN LANDFILLING OR LAND TREATING, OR A NEW POTENTIAL SECONDARY SOURCE. OWNER SEEKING AN EXCEPTION WITH RESPECT TO A COMMUNITY WATER SUPPLY WELL SHALL FILE A PETITION WITH THE BOARD AND THE AGENCY. THE OWNER SEEKING AN EXCEPTION WITH RESPECT TO A POTABLE WATER SUPPLY WELL SHALL FILE A PETITION WITH THE BOARD AND THE AGENCY, AND SET FORTH THEREIN THE CIRCUMSTANCES UNDER WHICH A WAIVER HAS BEEN SOUGHT BUT NOT OBTAINED PURSUANT TO subsection (a) OF THIS SECTION. PETITION SHALL BE ACCOMPANIED BY PROOF THAT THE OWNER OF EACH POTABLE WATER SUPPLY WELL FOR WHICH SETBACK REQUIREMENTS WOULD BE AFFECTED BY THE REQUESTED EXCEPTION HAS BEEN NOTIFIED AND BEEN PROVIDED WITH A COPY OF THE A PETITION SHALL SET FORTH SUCH FACTS AS MAY BE PETITION. REQUIRED TO SUPPORT AN EXCEPTION, INCLUDING A GENERAL DESCRIPTION OF THE POTENTIAL IMPACTS OF SUCH POTENTIAL SOURCE OR POTENTIAL ROUTE UPON GROUNDWATERS AND THE AFFECTED WATER WELL, AND AN EXPLANATION OF THE APPLICABLE TECHNOLOGY-BASED CONTROLS WHICH WILL BE UTILIZED TO MINIMIZE THE POTENTIAL FOR CONTAMINATION OF THE POTABLE WATER SUPPLY WELL. (Section 14.2(c) of the Act)
- e) THE BOARD SHALL GRANT AN EXCEPTION, WHENEVER IT IS FOUND UPON PRESENTATION OF ADEQUATE PROOF, THAT COMPLIANCE WITH THE SETBACK REQUIREMENTS OF THIS SECTION WOULD POSE AN ARBITRARY AND UNREASONABLE HARDSHIP UPON THE PETITIONER, THAT THE PETITIONER WILL UTILIZE THE BEST AVAILABLE TECHNOLOGY CONTROLS ECONOMICALLY ACHIEVABLE TO MINIMIZE THE LIKELIHOOD OF CONTAMINATION OF THE POTABLE WATER SUPPLY WELL, THAT THE MAXIMUM FEASIBLE ALTERNATIVE SETBACK WILL BE UTILIZED, AND THAT THE LOCATION OF SUCH POTENTIAL SOURCE OR POTENTIAL ROUTE WILL NOT CONSTITUTE A SIGNIFICANT HAZARD TO THE POTABLE WATER SUPPLY WELL. (Section 14.2(c) of the Act)
- f) A DECISION MADE BY THE BOARD PURSUANT TO THIS SUBSECTION SHALL CONSTITUTE A FINAL DETERMINATION. (Section 14.2(c) of the Act)
- g) THE GRANTING OF AN EXCEPTION BY THE BOARD SHALL NOT EXTINGUISH THE WATER WELL OWNER'S RIGHTS UNDER SECTION 6b OF THE ILLINOIS WATER WELL CONSTRUCTION CODE IN INSTANCES WHERE THE OWNER HAS ELECTED NOT TO PROVIDE A WAIVER PURSUANT TO subsection (a) OF THIS SECTION. (Section 14.2(a) of the Act)

TITLE 35: ENVIRONMENTAL PROTECTION SUBTITLE F: PUBLIC WATER SUPPLIES CHAPTER I: POLLUTION CONTROL BOARD

PART 620 GROUNDWATER QUALITY

Section 620.450 Alternative Groundwater Quality Standards

- a) Groundwater Quality Restoration Standards
 - 1) Any chemical constituent in groundwater within a groundwater management zone is subject to this Section.
 - Except as provided in subsections (a)(3) or (a)(4) below, the standards as specified in Sections 620.410, 620.420, 620.430, and 620.440 apply to any chemical constituent in groundwater within a groundwater management zone.
 - 3) Prior to completion of a corrective action described in Section 620.250(a), the standards as specified in Sections 620.410, 620.420, 620.430, and 620.440 are not applicable to such released chemical constituent, provided that the initiated action proceeds in a timely and appropriate manner.
 - 4) After completion of a corrective action as described in Section 620.250(a), the standard for such released chemical constituent is:
 - A) The standard as set forth in Section 620.410, 620.420, 620.430, or 620.440, if the concentration as determined by groundwater monitoring of such constituent is less than or equal to the standard for the appropriate class set forth in those sections; or
 - B) The concentration as determined by groundwater monitoring, if such concentration exceeds the standard for the appropriate class set forth in Section 620.410, 620.420, 620.430, or 620.440 for such constituent, and:
 - i) To the extent practicable, the exceedence has been minimized and beneficial use, as appropriate for the class of groundwater, has been returned; and

- ii) Any threat to public health or the environment has been minimized.
- The Agency shall develop and maintain a listing of concentrations derived pursuant to subsection (a)(4)(B) above. This list shall be made available to the public and be updated periodically, but no less frequently than semi-annually. This listing shall be published in the Environmental Register.
- b) Coal Reclamation Groundwater Quality Standards
 - 1) Any inorganic chemical constituent or pH in groundwater, within an underground coal mine, or within the cumulative impact area of groundwater for which the hydrologic balance has been disturbed from a permitted coal mine area pursuant to the Surface Coal Mining Land Conservation and Reclamation Act (Ill. Rev. Stat. 1989, ch. 96 1/2, pars. 7901.1 et seq., as amended) and 62 Ill. Adm. Code 1700 through 1850, is subject to this Section.
 - Prior to completion of reclamation at a coal mine, the standards as specified in Sections 620.410(a) and (d), 620.420(a) and (e), 620.430 and 620.440 are not applicable to inorganic constituents and pH.
 - 3) After completion of reclamation at a coal mine, the standards as specified in Sections 620.410(a) and (d), 620.420(a), 620.430, and 620.440 are applicable to inorganic constituents and pH, except:
 - A) The concentration of total dissolved solids (TDS) must not exceed:
 - The post-reclamation concentration or 3000 mg/L, whichever is less, for groundwater within the permitted area; or
 - ii) The post-reclamation concentration of TDS must not exceed the post-reclamation concentration or 5000 mg/L, whichever is less, for groundwater in underground coal mines and in permitted areas reclaimed after surface coal mining if the Illinois Department of Mines and Minerals and the Agency have determined that no significant resource groundwater

existed prior to mining (62 Ill. Adm. Code 1780.21(f) and (g)); and

- B) For chloride, iron, manganese and sulfate, the post-reclamation concentration within the permitted area must not be exceeded.
- C) For pH, the post-reclamation concentration within the permitted area must not be exceeded within Class I: Potable Resource Groundwater as specified in Section 620.210(a)(4).
- A refuse disposal area (not contained within the area from which overburden has been removed) is subject to the inorganic chemical constituent and pH requirements of:
 - A) 35 Ill. Adm. Code—303.203 302.Subparts B and C, except due to natural causes, for such area that was placed into operation after February 1, 1983, and before the effective date of this Part, provided that the groundwater is a present or a potential source of water for public or food processing;
 - B) Section 620.440(c) for such area that was placed into operation prior to February 1, 1983, and has remained in continuous operation since that date; or
 - C) Subpart D of this Part for such area that is placed into operation on or after the effective date of this Part.
- 5) For a refuse disposal area (not contained within the area from which overburden has been removed) that was placed into operation prior to February 1, 1983, and is modified after that date to include additional area, this Section applies to the area that meets the requirements of subsection (b)(4)(C) and the following applies to the additional area:
 - A) 35 Ill. Adm. Code 303.203 302.Subparts B and C, except due to natural causes, for such additional refuse disposal area that was placed into operation after February 1, 1983, and before the effective date of this Part, provided that the groundwater is a present or a potential source of water for public or food processing; and

- B) Subpart D for such additional area that was placed into operation on or after the effective date of this Part.
- 6) A coal preparation plant (not located in an area from which overburden has been removed) which contains slurry material, sludge or other precipitated process material, is subject to the inorganic chemical constituent and pH requirements of:
 - A) 35 Ill. Adm. Code 303.203 302.Subparts B and C, except due to natural causes, for such plant that was placed into operation after February 1, 1983, and before the effective date of this Part, provided that the groundwater is a present or a potential source of water for public or food processing;
 - B) Section 620.440(c) for such plant that was placed into operation prior to February 1, 1983, and has remained in continuous operation since that date; or
 - C) Subpart D for such plant that is placed into operation on or after the effective date of this Part.
- 7) For a coal preparation plant (not located in an area from which overburden has been removed) which contains slurry material, sludge or other precipitated process material, that was placed into operation prior to February 1, 1983, and is modified after that date to include additional area, this Section applies to the area that meets the requirements of subsection (b)(6)(C) and the following applies to the additional area:
 - A) 35 Ill. Adm. Code—303.203 302.Subparts B and C, except due to natural causes, for such additional area that was placed into operation after February 1, 1983, and before the effective date of this Part, provided that the groundwater is a present or a potential source of water for public or food processing; and
 - B) Subpart D for such additional area that was placed into operation on or after the effective date of this Part.

IT IS SO ORDERED.

	of the Illinois Pollution Control
Board, hereby certify that the	above opinion and order was
adopted on the day of	Leptember, 1992, by
a vote of $7-0$.	-
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	vorolly M. Sun
	Dorothy M. Gunn, Clerk
	Illinois Pollution Control Board