ILLINOIS POLLUTION CONTROL BOARD May 6, 1999

N THE MATTER OF:)	
SDWA UPDATE, USEPA REGULATIONS (July 1, 1998, through December 31, 1998))))	R99-12 (Identical-in-Substance Rulemaking Public Water Supplies)

Proposed Rule. Proposal for Public Comment.

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

Under Section 17.5 of the Environmental Protection Act (Act) (415 ILCS 5/17.5 (1996)), the Board proposes amendments to the Illinois regulations that are "identical-in-substance" to the National Primary Drinking Water regulations (NPDWRs) adopted by the United States Environmental Protection Agency (USEPA). These regulations implement sections 1412(b), 1414(c), 1417(a), and 1445(a) of the Safe Drinking Water Act (SDWA), 42 U.S.C. §§ 300g-1(b), 300g-3(c), 300g-6(a) & 300j-4(a). The timeframe of this docket includes SDWA amendments that USEPA adopted in the period July 1, 1998, through December 31, 1998. USEPA took four actions during this period that necessitate Board action. The federal SDWA regulations are found at 40 C.F.R. 141 and 142.

The rules proposed today include major revisions to the program for relief from NPDWRs, including additional mandatory requirements for, among other things, small system variances; introduction of entirely new requirements for consumer confidence reports, including expansive public notification requirements about potential health threats; adoption of new maximum contaminant levels (MCLs) to be phased in for disinfection and disinfectant byproducts; and addition of interim enhanced surface water treatment rules to improve control of microbiological pathogens while addressing risk trade-offs with disinfection byproducts.

Section 17.5 provides for quick adoption of regulations that are "identical-in-substance (IIS)" to federal regulations that USEPA adopts to implement sections 1412(b), 1414(c), 1417(a), and 1445(a) of the SDWA. Section 17.5 also provides that Title VII of the Act and Section 5 of the Administrative Procedure Act (APA) (5 ILCS 100/5-35 & 5-40 (1996)) do not apply to the Board's adoption of identical-in-substance regulations.

FEDERAL ACTIONS CONSIDERED IN THIS RULEMAKING

USEPA amended the federal SDWA regulations six times during the period of July 1, 1998, through December 31, 1998. Four of these amendments necessitate action by the Board. Those actions are summarized as follows:

63 Fed. Reg. 43833 (August 14, 1998)

USEPA adopted amendments that revised variances and exemptions. In addition to revising existing language for State-issued variances and exemptions, the rule adds procedures and conditions under which the State may issue small system variances to public water systems (PWSs) serving less than 10,000 persons.

63 Fed. Reg. 44511 (August 19, 1998)

USEPA amended the public notice regulations to include consumer confidence reporting requirements as required under the SDWA Amendments of 1996. The rule requires a PWS to provide their customers with annual reports on the quality of delivered water and health risks imposed by any detected contaminants.

63 Fed. Reg. 69390 (December 16, 1998)

USEPA adopted the disinfectant and disinfection byproducts rule amendments to the NPDWRs. The new NPDWRs are for three disinfectants, two groups of organic disinfection byproducts, and two inorganic disinfection byproducts. The NPDWRs consist of maximum residual disinfectant levels, maximum contaminant levels, or treatment techniques for these disinfectants and their byproducts. The NPDWRs also include monitoring, reporting and public notification requirements for these compounds.

63 Fed. Reg. 69477 (December 16, 1998)

USEPA adopted the interim enhanced surface water treatment rule amendments. The purposes of the rule are to improve control of microbial pathogens and to address risk trade-offs with disinfection byproducts. Key provisions of the rule include 99 percent Cryptosporidium removal requirements for systems that filter, strengthened turbidity standards, requirements for covers on new water reservoirs and sanitary surveys for all surface water systems. The rules add a new requirement allowing the Illinois Environmental Protect Agency (Agency) to direct a source to conduct a composite correction plan.

The Board is today proposing to amend the Illinois regulations to incorporate the substance of the four sets of federal amendments.

DISCUSSION

General Considerations Used In Assessing Federal Amendments for Inclusion in Illinois' IIS Rules

The Board will examine and discuss each of the four federal rulemakings below, detailing which portions of the federal regulations are being adopted verbatim, which are being adopted with modifications, and which are being omitted. Prior to doing so, however, the Board will make some introductory remarks to establish the context for today's proposal.

The federal actions that underlie this proceeding require amendment of the Illinois SDWA regulations. However, not all of the federal amendments resulted in corresponding change in the Illinois rules, since some segments of the amendments extend beyond the scope of the Illinois SDWA rules as adopted pursuant to Section 17.5 of the Act.

Section 7.2 of the Act establishes the ground rules for the Board's exercise of its IIS mandate; it is a lengthy and detailed list of concerns which the Board must take into account when comparing newly adopted federal rules to the Board's existing drinking water rules codified at 35 Ill. Adm. Code 600 *et seq*. The statutory language will not be set forth here, but the following is a distillation of some of the commonly encountered considerations.

When assessing federal amendments in the course of completing our SDWA regulation updates, the Board includes all USEPA amendments to 40 C.F.R. 141, and we evaluate the amendments to 40 C.F.R. 142 for their effect on the substance of the NPDWRs. If the USEPA amendments to 40 C.F.R. 142 affect little more than the state primacy requirements - *i.e.*, they constitute requirements on the state only - the Board does not include them in the affected SDWA update docket. In contrast, if the amendments affect the application of the NPDWRs on public water systems, the Board includes amendments that incorporate that effect into the Illinois SDWA rules.

Section 7.2(a)(5) of the Act requires the Board to specify which decisions USEPA will retain. In addition, the Board is to specify which State agency is to make decisions, based on the general division of functions between the Board, Agency, and other entities within the Act and other Illinois statutes.

In situations where the Board has determined that USEPA will retain decision-making authority, the Board has replaced "Regional Administrator" or "Administrator" with USEPA, so as to avoid specifying which office within USEPA is to make a decision.

In a few instances in identical-in-substance rules, decisions are not appropriate for Agency action pursuant to a permit application. Among the considerations in determining the general division of authority between the Agency and the Board are:

- 1. Whether the person making the decision is applying a Board regulation, or taking action contrary to ("waiving") a Board regulation. It generally takes some form of Board action to "waive" a Board regulation.
- 2. Whether there is a clear standard for action such that the Board can give meaningful review to an Agency decision.
- 3. Whether the action would result in exemption from the permit requirement itself. If so, Board action is generally required.
- 4. Whether the decision amounts to "determining, defining or implementing environmental control standards" within the meaning of Section 5(b) of the Act. If so, it must be made by the Board.

Regulatory Relief Mechanisms: Sections 611.111, 611.112, 611.130, 611.131

Overview

USEPA adopted amendments to the variance and exemption regulations on August 14, 1998. The amendments revise existing regulations regarding variances and exemptions, and include procedures and conditions under which the State may issue small system variances. The Board directs attention to the August 14, 1998 issue of the *Federal Register* for a more complete discussion of the federal amendments. The Board's discussion here will focus on our incorporation of those amendments into the Illinois SDWA regulations.

Section-by-Section Analysis

Relief from MCLs and Treatment Techniques (Sections 611.111 and 611.112). The substance of 40 C.F.R. 142.20(a) and (b) is included in today's rule in amended Section 611.111 and Section 611.112. The intent of the amendments is to describe how the Board grants State relief equivalent to that available from USEPA under Section 1415(a)(1)(A) and (B) and Section 1416 of the SDWA. Neither SDWA Section 1415 variances nor Section 1416 exemptions require ultimate compliance within five years in every situation. Therefore, the proposed amendments to Section 611.111 and 611.112 allow a PWS to file a petition for a variance, a site-specific rule, or an adjusted standard.

Among the proposed amendments to Section 611.111, is Section 611.111(b)(2), where the PWS, in justifying relief under the Section, must demonstrate that it will install or has installed the best available technology (BAT), treatment technique, or other means that the Agency finds available. See amended Section 611.111(b)(2).

One of the more significant changes to Section 611.111 is found at amended Section 611.111(d)(2). The Board proposes that if the Board prescribes a schedule of compliance with an MCL or treatment technique for relief granted later than five years from the date of issuance of the relief, the Board will document the rationale for the extended schedule, discuss the rationale in the public notice and public hearing, and provide the shortest time schedule feasible. See amended Section 611.111(d)(2).

Also proposed today is the Board's deletion of the definition of "unreasonable risk to health level" in Section 611.111(g). Further, the Board proposes to commit to hold at least one public hearing for the requested relief. See amended Section 611.111(e) and Section 611.112(e).

In amended Section 611.112(d), the Board proposes to add to the current language that no schedule of compliance shall extend more than 12 months after the date of the relief. The proposal adds that no relief may be requested later than three years after the otherwise applicable compliance date established in Section 1412(b)(10) of the SDWA. See amended Section 611.112(d).

¹ Pursuant to 415 ILCS 5/36 (b), except as provided by 415 ILCS 5/38, any variance granted shall not exceed five years.

Another amendment to Section 611.112(d) changes one of the exceptions to the general rule of Section 611.112(d). Specifically, Section 611.112(d)(2) provides that a PWS that serves 3,300 or fewer persons may, in certain circumstances, extend the compliance schedule for one or more additional two year periods, but not exceeding a total of four years. See proposed Section 611.112(d)(2). The amendment changes the number of persons a PWS serves from 500 or fewer service connections to 3,300 or fewer persons. Also, the four-year limit on the extensions is different from the federal regulations which allow a six-year limit. The limit was changed to four years so that it would be within the five-year limit on variances.

Lastly, the Board proposes to amend Section 611.111(h) and Section 611.112(h) to provide that in addition to the requirements of Section 611.111 and 611.112, respectively, the provisions of Section 611.130 or 611.131 may apply to the relief granted pursuant to Sections 611.111 and 611.112. See proposed Sections 611.111(h) and 611.112(h).

Small System Variances (611.131). The substance of new 40 C.F.R. 142 Subpart K is incorporated into today's proposed rule as Section 611.131, Relief Equivalent to SDWA Section 1415(e) - Small System Variance. The question and answer format utilized in the federal rule has been dispensed with in the new Illinois rule as the question and answer format does not conform with Illinois Administrative Code requirements. The format has been changed to be consistent with the Board's regulations by changing the question to a title of a Section and the answer to the substance of the Section. The substance of 40 C.F.R. 142.301 is included as Section 611.131(a), and is a general indication as to what relief is available from and the size of systems entitled to such relief afforded by the procedures in Section 611.131. A PWS must file a variance petition pursuant to 35 Ill. Adm. Code 104.

The substance of 40 C.F.R. 142.302 is not included in the rule, as it addresses the power to issue such variances and is not necessary for this rulemaking. The substance of 40 C.F.R. 142.303 is included as Section 611.131(b) and further delineates the relief available based on the size of the system. The substance of 40 C.F.R. 142.304 is included as Section 611.131(c) without significant changes, and the Note to 40 C.F.R. 142.304(b)(1) is included as the Board Note to Section 611.131(c).

The substance of 40 C.F.R. 142.305 is included as Section 611.131(d) and explains when a small system variance may be granted by the State. The provision directing the USEPA to act on the variance petition within 90 days is not included, as it is not directed at a PWS or the Board.

The substance of 40 C.F.R. 142.306 is included as Section 611.131(e). In subsection (e), the Board sets forth the requirements the PWS must prove and document before a small system variance can be granted by the Board. In the federal rule, the State must find and document that the requirements have been met before the variance may be granted by the Board. This requirement is in following with the other variance procedures which are available to a PWS. The Board welcomes comments on this proposal.

The substance of 40 C.F.R. 142.307 is included as 611.131(f), which includes minimum terms and conditions that the Board must impose in the small system variance. The Board does

not include a reference to the Section 1412(b)(15) of the SDWA. The small system variance technology developed and published to that section is referenced in Section 611.131(e)(3). The Board also does not include the reference to 40 C.F.R. part 141 monitoring requirements as it is unnecessary to include the cross-reference in the State rule. The monitoring requirements of 40 C.F.R. 141 are already included in Part 611.

The substance of 40 C.F.R. 142.308 is included as Section 611.131(g). The notice and public hearing will be pursuant to 35 Ill. Adm. Code 104. In addition to that section, there are specific requirements for the PWS to notify billed customers and persons regularly served. Notice must be given by the PWS at least thirty days prior to the public hearing. The Board did not include a provision that a PWS must provide notice at least 15 days before the date of proposal. It is the Board's opinion that this provision is covered by the Board's existing procedures under Sections 35-37 of the Act and 35 Ill. Adm. Code 104. The Board has specific requirements for the publication of notice of hearing already in place and the Agency is required pursuant to Section 37 of the Act to provide notice of variance petitions. More specifically, the Board's notice of hearing must be published in the *Environmental Register* and in a newspaper of general circulation in the county in which the PWS is located. Also the Board's final actions are published in the *Environmental Register*. The Board believes that these existing notice requirements are sufficient. The Board invites comments on this proposal.

The substance of 40 C.F.R. 142.308(d) is included in Section 611.131(g)(1). The substance of 40 C.F.R. 142.308(e) is not included in today's proposed rule. The Board finds that the notice provisions in the Act, this Section and in 35 Ill. Adm. Code 104 provide adequate notice to meet the requirements of 40 C.F.R. 142.308(e). The Board has included in part the substance of 40 C.F.R. 142.309 in today's rule. Rather than use the federal phrase "Public meeting" the Board is requiring that at least one public hearing be held on all petitions for variance brought pursuant to this section. That requirement is included at Section 611.131(g).

The substance of 40 C.F.R. 142.310 is included as Section 611.131(h). The provision requiring the USEPA to respond within thirty days has been omitted, as well as USEPA's right to object to a proposed variance. The substance of 40 C.F.R. 142.312 is included in part in Section 611.131(i). The Board imposes the duty to forward the proposed variance to the USEPA on the Agency. The Board does not include the substance of 40 C.F.R. 142.313 in today's rule, which deals with USEPA's review of the State's program, as the regulations do not apply to a PWS. The Board welcomes comments on the proposed rule.

Consumer Confidence Reports: Section 611. Subpart U

Overview

USEPA adopted its consumer confidence report regulations on August 19, 1998. The Board directs attention to the August 19, 1998 issue of the *Federal Register* for a more complete discussion of the federal amendments. The federal regulations have been amended by adding 40 C.F.R. 141 Subpart O, the substance of which is proposed as 35 Ill. Adm. Code 611 Subpart U.

The consumer confidence report requirement applies to community water systems (CWSs), defined as those supplying water to at least 15 service connections or 25 residents year-round. With some exceptions listed in the rules, a CWS must deliver annual reports to its customers beginning October 19, 1999, with reports to be supplied annually every July thereafter. The reports must include information on the source and quality of the water delivered. If any contaminants are detected in the drinking water delivered to its customers, the CWS must provide them with written notice of the contaminant(s) detected, as well as a description developed by USEPA of the health risks (if any) from exposure to the contaminant. Also, if the CWS has received relief from an NPDWR, it must include information about that in the report.

Section-by-Section Analysis

The substance of 40 C.F.R. 141.151 has been added as new Section 611.881. The detection limits for radioactive contaminants are found in 40 C.F.R. 141.25(c) and have no counterpart in the Board's existing rules. Accordingly, the Board adds Section 611.720(c)(3) to give detection levels for radionuclides (radioactive contaminants) in table form. The definitions of "Inorganic contaminants" and "Radioactive contaminants" have been added to the definitions found in Section 611.101.

The Board does not include provisions relating to the adoption of alternative requirements for the form and content of consumer confidence reports, because mechanisms for regulatory relief are already specified in the Act in Title VII "Regulations" and Title IX "Variances." Alternatively, the Board could add references to the existing relief mechanisms similar to those appearing in , *e.g.* Sections 611.111-611.112. The Board welcomes comment on which would be the preferred approach. The Board adopts the compliance dates for delivery of the report found in 40 C.F.R. 141.152 in new Section 611.882. The Board does not include the first federal compliance dates of September 18, 1998, for existing CWSs or of April 19, 1999, for a CWS selling water to another, as those dates have passed. See 611.882(a), (c). Comment is requested on the omission of these past compliance dates.

The substance of 40 C.F.R. 141.153 is included as Section 611.883. As the Board has not adopted them since they are not enforceable standards, we do not include the maximum contaminant level goal (MCLG) definition in Section 811.883(c). Likewise, the definition of Maximum Contaminant Level (MCL) does not include the language that "MCLs are set as close to MCLGs as feasible." The federal definitions of "variances" and "exemptions" have been slightly modified to fit the Illinois scheme in the same manner as done in *e.g.* Section 611.111. Following USEPA's recommendation, the Board adds the requirement that a CWS must report the presence of "other contaminants" in finished water in Section 611.883(e)(3).

The Board includes the substance of 40 C.F.R. 141.154 in Section 611.884. The Board has eliminated an option to reword certain language in Section 611.884(b), (c) and (d), making it a requirement that a PWS which detects certain contaminants must include certain required language. The Board requests comment on this provision. The substance of 40 C.F.R. 141.155 is included as Section 611.885. Finally, the Board added new appendices to this subpart. See

Section 611.Appendix F, G, and H. For the reason explained above, the Board does not include MCLGs in the appendices.

Disinfectants and Disinfection Byproducts: Section 611.Subparts F and I

Overview

USEPA adopted its disinfectants and disinfection byproducts rule on December 16, 1998. The Board directs attention to the December 16, 1998 issue of the *Federal Register* for a more complete discussion of the federal amendments. These federal regulations are known as the Stage 1 Disinfection Byproducts Rules. While various provisions are located throughout 40 C.F.R. 141 as detailed below, the bulk of them appear as new 40 C.F.R. Subparts F, H, and L. Most of the amendments to the Board rules appear in Part 611. Subparts F and I.

USEPA promulgated NPDWRs for three disinfectants (chlorine, chloramines, and chlorine dioxide), two groups of organic disinfection byproducts (total trihalomethane (TTHM) and haloacetic acids (five) (HAA5)), and two inorganic disinfection byproducts (chlorite and bromate). The NPDWRs consist of maximum residual disinfectant levels (MRDLs), MCLs, or treatment techniques. The NPDWRs also include monitoring, reporting, and public notification requirements for these chemicals. Larger systems (serving more than 10,000 persons) must comply with these requirements by December 16, 2001, while certain smaller systems have an additional two years in which to achieve compliance.

Section-by-Section Analysis

The substance of the definitions amended in 40 C.F.R. 141.2 are included in today's proposed rule. In a departure from the federal organization system, the Board does not include in the definition of "Maximum Residual Disinfectant Level" the explanation of when a PWS will be in compliance and applicable monitoring frequency. To minimize confusion to the regulated community, those standards for MRDLs are listed in Section 611.313 and compliance requirements are located in Section 611.383. Consistent with our past practice, the Board does not include "Maximum Disinfectant Level Goals" in this proposal, as these are not enforceable standards.

The Board's proposal includes two definitions for terms that the federal register did not define. Specifically, the Board has included a definition for "Disinfection Byproduct" (DBP) and "paired sample." The DBP definition was created from language in the preamble of the federal regulations for this proposal. The "paired sample" language was created from the new Section 611.382, which was taken from the federal regulations.

Throughout the proposal, the term "Subpart B" systems is used in the place of the federal "Subpart H" systems. These are the public water systems which must meet the requirements of existing Subpart B and the analytical and monitoring requirements of Sections 611.531, 611.532, 611.533, 611.Appendix B and 611.Appendix C of this Part. The federal equivalent to these sections are located in the federal 40 C.F.R. 141 Subpart H.

The substance of 40 C.F.R. 141.12, which covers TTHMs, is included in this rule. The old MCL for TTHM is 0.10 mg/L. The MCL applies to Subpart B systems serving more than 10,000 persons until December 16, 2001. The level applies to systems using groundwater not under the direct influence of surface water until December 16, 2003. The Board added these compliance dates directly after the old MCL in Section 611.310. The new MCL is 0.08 mg/L and is located in new Section 611.312. The Board did not include the parenthetical sum of concentrations of chemicals that constitute TTHM because they are included in the definition of TTHM in Section 611.101. The substance of 40 C.F.R. 141.30 concerning compliance dates could not be proposed within a single section of Part 611. The Board included the compliance dates of the old TTHM MCLs in new Section 611.688 and sunsets Sections 611.680 through 611.688 by making them inapplicable after December 16, 2003. New Subpart I contains monitoring requirements for TTHM; the frequency of monitoring is indicated in Section 611.Table J.

The substance of the 40 C.F.R. 141.32 requirements dealing with violations of the MRDL for chlorine dioxide are included in Section 611.851. A PWS must give a copy of the most recent public notice to new billing units for any outstanding violation of a MRDL, as required in Section 611.853. The new federal definitions (chlorine, chlorine dioxide, disinfection byproducts and treatment technique for DPBs, bromate, and chlorite) are added to Section 611.Appendix A.

The Board does not include in the proposal state counterparts to the substance of the amendments to 40 C.F.R. 141 Subpart F. These amendments add MCLGs and Maximum Residual Disinfectant Goals; they are not included in the Board's rules as they are not enforceable standards.

The substance of 40 C.F.R. 141. Subpart G is included in Sections 611.312 and 611.313. The MCLs for DBPs are found in new Section 611.312, as is the new 0.08 mg/l MCL for TTHM. MRDLs are located in Section 611.313. The Board specifically draws commenters attention to a provision found in Section 611.312(b) allowing for extension of compliance dates. As the rule is proposed, the Board may grant an extension of the compliance deadline for an additional 24 months if a system is installing granular activated carbon (GAC) or membrane technology. The Board must set the schedule of compliance and may impose interim measures. Since the extension is a compliance extension, the Board believes it, rather than the Agency, must extend this date.

The Board is adopting new Subpart I: Disinfectant Residuals, Disinfection Byproducts, and Disinfection Byproduct Precursors in the same format as found in the federal rule. The federal counterpart is 40 C.F.R. 141 Subpart L. The new rule is found in Sections 611.380 through 611.385.

The substance of 40 C.F.R. 141.130 is found in Section 611.380 virtually unchanged. In making the substance of 40 C.F.R. 141.131 a part of today's proposal, the Board did not include an effective date for monitoring methods, as the date of compliance has passed. The Board requests comment on this omission.

In Section 611.381 the Board sets out the substance of the federal analytical requirements. Many documents referred to therein are incorporated by reference in Section 611.102. Section 611.102 has been updated to reference the 19th edition of "Standard Methods" and its "1996 Supplement." The Board has placed the tables of approved methods for Disinfection Byproduct Compliance Monitoring and Disinfectant Residual Compliance Monitoring in new Sections 611.381(b)(1) and (c)(1)

The substance of 40 C.F.R. 141.132 is included in this proposed rule as Section 611.382. This section contains the provision that systems may use data collected under the Information Collection Rule(40 C.F.R. 141 Subpart M). There is no equivalent Illinois rule for Subpart M. However, The proposal provides that if a system has conducted monitoring under the federal Subpart M, then the system may use that data. The Board retains the provision allowing the Agency to return a system to routine monitoring for TTHMs and HAA5 in Section 611.382(b) and invites comment. Also included is the provision that the Agency may return a system to routine monitoring. See proposed Section 611.382(b)(1)(D). The Board notes that there are no federal criteria for this return. Nonetheless, the provision is included so that the proposal is as stringent as the federal rule. The Board invites comment on this provision.

The substance of 40 C.F.R. 141.133 is made a part of today's rule in Section 611.383; the substance of 40 C.F.R. 141.134 is made a part of today's rule in Section 611.384. The Board retains the chart format in this Section which shows the information that must be reported for different types of systems. The Board added footnote 1 in Section 611.384(b), which appears to have been inadvertently omitted in the federal rule.

New Section 611.385 regulates treatment techniques for DBPs and includes the amendments to 40 C.F.R. 141.135. In 611.385(a)(2)(C) the Board gives the Agency authority to determine if a system seeking to use the alternative compliance criteria has made a clear and irrevocable financial commitment prior to the deadline. The Board invites comments.

In the enhanced softening requirements in subsection (b) the Board delegates to the Agency the authority to make a determination and approve an alternate minimum total organic carbon (TOC) removal requirement. The Board also delegates to the Agency the authority to grant a waiver of enhanced coagulation requirements. This approach is similar to requesting a special exception permit (SEP). An alternate approach to the alternate minimum (Step 2) and waiver of enhanced coagulation provisions would be to require a site-specific rule, variance, or adjusted standard following the procedures in 35 Ill. Adm. Code 102, 104, or 106. The Board welcomes comments on the proposed rule.

In Section 611.385 (b), the Board includes the substance of 40 C.F.R. 141.135 (b). The Board has identified the Agency as the entity to make two determinations, concerning which the Board requests comment. The rule provides that if the PWS cannot achieve the Step 1 TOC removal requirement due to water quality parameters or operational constraints, the Agency shall approve the use of the Step 2 TOC removal requirement. The rule also provides that if the TOC removal is consistently less than 0.3 mg/L of TOC per 10 mg/L of incremental alum dose (as

aluminum) at all dosages of alum (or equivalent addition of iron coagulant), the Agency shall grant the waiver of enhanced coagulation requirements.

Interim Enhanced Surface Water Treatment: Subpart R

Overview

USEPA adopted the interim enhanced surface water treatment rule on December 16, 1998. The purpose of the rule is to improve control of microbiological pathogens and address risk trade-offs with disinfection byproducts. The Board directs attention to the December 16, 1998 issue of the *Federal Register* for a more complete discussion of the federal amendments.

The rule applies to PWSs that use surface water or ground water under the direct influence of surface water and serve 10,000 or more persons beginning December 17, 2001. The rule establishes or extends treatment techniques for certain contaminants in lieu of establishing MCLs. The contaminants involved are Giardia lamblia, viruses, herotrophic plate count bacteria, Legionella, Cryptosporidium, and turbidity.

Key provisions of the rule include 99% (2-log) Cryptosporidium removal requirements for systems that filter, strengthened turbidity standards, requirements for covers on new water reservoirs and sanitary surveys for all surface water systems. As addressed in some detail below, the rule also adds a somewhat problematical new provision allowing the Agency to direct a PWS to conduct a composite correction plan.

Section-by-Section Analysis

In the Interim Enhanced Surface Water Treatment rule, definitions amended in 40 C.F.R. 141.2 were added to Section 611.101 definitions. "Groundwater under the direct influence of surface water" is defined at Section 611.212(d). The Board includes Cryptosporidium as a pathogen without regard to the type of system in which the pathogen is found. This is keeping with the Board's current definition where Cryptosporidium was included as "(*e.g.*, cryptosporidium)".

The provisions of 40 C.F.R. 141.32 with the reference to Subpart P in language necessary in public notices concerning "Microbiological contaminants" is added to Section 611.Appendix A(10) as the Illinois equivalent, Subpart R.

The substance of the 40 C.F.R. 141.52 MCL Goals are not included in the Board's rule as they impose no requirements for PWSs. The requirements in 40 C.F.R. 141.70 for systems serving more than 10,000 persons are found in new Section 611.220(d). Subpart R is the Illinois equivalent to federal Subpart P.

The substance of the amendments in 40 C.F.R. 141.71 is included as Section 611.232(f). The gist of the provisions are that when attempting to avoid filtration, systems must now comply

with the TTHM MCL found in Section 611.232 until December 17, 2001. After that date, systems must comply with new requirements in Subpart I.

The substance of 40 C.F.R. 141.73 amendments are included in this rule in various locations. Beginning December 17, 2001, systems serving 10,000 persons must meet turbidity requirements and other filtration technologies in new Subpart R, Enhanced Filtration and Disinfection. This requirement is added to Section 611.250 Filtration. The provisions of 40 C.F.R. 141.153 amend part of the new consumer confidence rule, and the requirement imposed is found in Section 611.883(4)(d).

The substance of 40 C.F.R. 141 Subpart P is included in this rule as new Subpart R. It is a major revision affecting Subpart B systems that serve more than 10,000 persons. The provisions of 40 C.F.R. 141.170 contain the general requirements for enhanced filtration and disinfection effective December 17, 2001. The regulations extend treatment techniques in lieu of MCLs for certain contaminants, and are found in Section 611.740. The substance of amendments in 40 C.F.R. 141.171 concerning requirements to avoid filtration are found in Section 611.741.

In Section 611.742, the Board includes a provision requiring systems to develop a disinfection profile and benchmarking. The Board retains the provisions that if a system collected data under 40 C.F.R. 141 Subpart M, Information Collection Rule, then it must use the data collected to determine if disinfection profiling is required. In subsection (b), the Board requires a system to develop its disinfection profile for a period of up to three years, and adds the provision that the Agency shall determine the period of the profile.

In Section 611.742 (b)(3), the Agency determines whether operational data of a system and a profile generated using that data are substantially equivalent to that required to be collected in subsection (b)(2). The Board has added a provision that if the Agency determines that the data is substantially equivalent, the Agency must approve the request to use the three years of existing operational data.

In Section 611.742(b)(5), the Board authorizes the Agency to approve methods to calculate the logs of inactivation of viruses for systems that use either chloramines or ozone for disinfection. Systems are required to consult with the Agency before they make a significant change in disinfection practices.

The substance of 40 C.F.R. 141.173 is included in today's rule as Section 611.743. The proposal authorizes the Agency to approve a protocol for systems using lime softening that acidify samples, and to approve filtration technology and set turbidity performance requirements. The Board believes the Agency may approve the protocols and filtration technology because neither require the extension of a compliance date and there is a standard for decision (*i.e.*, 99% removal). The Board invites comment on this provision.

The substance of 40 C.F.R. 141.174 is included as Section 611.744. The substance of 40 C.F.R. 141.175 is included in the rule as Section 611.745.

The Board does not include the substance of revisions to 40 C.F.R. 142.14 and 142.15 as these sections deal with requirements on the State only, concerning records and reports. The federal amendments to Section 142.16 deal with special primacy requirements for the State, and in most instances do not necessitate amendments to the Board's rules. However, in 40 C.F.R. 142.16(g)(1), the regulations require a State to have rules to implement a Composite Correction Program (CCP). This provision is addressed in some detail below.

Composite Correction Program (CCP)—Section 611.160. On December 16, 1998 (63 Fed. Reg. 69520), as a segment of the interim enhanced surface water treatment rule (IESWTR), USEPA added 40 C.F.R. 142.16(g)(1). This is a requirement that the state must have authority to require PWSs to conduct a composite correction program. USEPA describes the CCP has having two aspects: (1) the comprehensive performance evaluation (CPE) and (2) comprehensive technical assistance (CTA). In the CPE, the PWS undertakes a comprehensive review to identify its capabilities and practices that may be adversely affecting its ability to comply with the NPDWRs. The PWS implements a CTA if the CPE identifies potential areas for improvements. In the CTA, the system must identify facility-specific factors and implement operational changes to improve performance.

The Board has proposed the CCP requirements for the purposes of public comment. The Board notes two troublesome aspects of the requirements. The first is whether these amendments are within the scope of the Board's identical-in-substance mandate. The second is when the Agency may require a CCP, as there are no stated federal criteria for such a program. In this regard, the Board requests comments on whether a separate rulemaking under Section 27 of the Act should be used to establish the criteria for the CCP.

Board Authority to Adopt. As previously stated, Section 17.5 of the Act requires the Board to adopt regulations that are identical-in-substance to rules adopted by USEPA pursuant to sections 1412(b), 1414(c), 1417(a), and 1445(a) of the SDWA (42 U.S.C. §§ 300g-1(a). 300g-3(c), 300g-6(a), and 300j-4(a) (1998)). These federal regulations generally provide for the establishment and enforcement of national primary drinking water regulations (NPDWRs). USEPA has codified nearly all of the NPDWRs in 40 C.F.R. 141, so that federal part forms the primary basis for the corresponding Illinois SDWA-based drinking water rules in 35 Ill. Adm. Code 611.

In the case of the new CCP requirements, USEPA codified them in 40 C.F.R. 142, which sets forth the requirements for state programs. Thus, the CCP requirements are not clearly NPDWRs. To determine whether the CCP requirements are within the Board's identical-in-substance mandate under Section 17.5 of the Act, we examine the statutory authority claimed by USEPA in adopting them. USEPA nowhere in the preamble discussion of the CCP specifically identifies the statutory authority under which it adopted the CCP requirements. See 63 Fed. Reg. at 69479-80. Rather, USEPA discusses the requirements generally as a segment of the IESWR (see 63 Fed. Reg. 69483-84), which it adopted pursuant to section 1412(b) of SDWA. See 63 Fed. Reg. at 69480. Thus, establishing the CCP requirements as part of the Illinois regulations would appear to be within the Board's identical-in-substance mandate.

Criteria for Requiring CCPs. In adopting its rules, USEPA did not set forth any requirements that would direct the State in the selection of PWSs that must undertake the CCP; USEPA only requires that the State must have authority to require selected PWSs to undertake the CCP. Section 7.2(a)(3) of the Act authorizes the Board to itself craft a regulation that is consistent with existing federal and State requirements where USEPA has outlined the rule that is required without setting forth its content. The CCP requirements present the Board with such a rule. Examination of the text of 40 C.F.R. 142.16(g)(1) itself does not indicate when the Agency should require a PWS to undertake a CCP. Examination of the preamble discussion of the CCP reveals little more: "It is conducted to identify factors that may be adversely impacting a plant's capability to achieve compliance and emphasizes approaches that can be implemented without significant capital improvements." See 63 Fed. Reg. at 69483-84. The preamble discussion reveals one further aspect of the CCP requirement: It relates to compliance with the turbidity requirements of the IESWTR. See 63 Fed. Reg. at 69483. A review of other USEPA documents provides little additional information.²

Thus, although the text of the federal rule, the preamble discussion, and the documents encountered go into detail on the performance of CCPs and into their purpose, USEPA does not describe when the State should require a PWS to undertake a CCP. The proposed rule further requires the Agency to render its determination in writing, as it would render a permit decision under Section 39 of the Act. An Agency determination to impose the CCP requirement on a particular PWS is appealable to the Board under Section 40 of the Act.

To ensure that the Illinois rules remain identical in substance to the federal requirements, the Board has not added qualifications or standards to the federal text, which is adopted nearly verbatim. Instead, to mitigate concerns that the Agency might arbitrarily require a CCP, the

² A search of documents on the USEPA Office of Groundwater and Drinking Water Web site revealed four documents including discussion of the CCP requirement: two abstracts for full reports and two public information reports. The abstract for the USEPA handbook, "Optimizing Water Treatment Plant Performance Using the Composite Correction Program Approach," EPA/625/6-91/027 (http://www.epa.gov/ttbnrmrl/625/6-91/027.htm), discusses the CCP as used to assess ability to achieve the finished water turbidity requirements, to identify factors that limit plant performance. The document, "Optimizing Water Treatment Plant Performance with the Composite Correction Program," EPA/625/8-90/017 (http://www.epa.gov/ttbnrmrl/625/8-90/017.htm), discusses the CCP in the context of turbidity and also mentions remedial actions undertaken in response to actual pilot CCP study findings. The other two full-text documents contain more details, but little more substance of direct interest. The draft document, "Information for the Public on Participating with States in Preparing Capacity Development Strategies," EPA816-D-97-003 (http://www.epa.gov/OGWDW/smallsys/appendix.html), discusses the CPE segment of a CCP in the context of examining facility capacity for system capacity development requirements. The document, "Information for the States on Implementing the Capacity Development Provisions of the Safe Drinking Water Act Amendments of 1986," EPA816-R-98-008 (http://www.epa.gov/OGWDW/smallsys/capdev.html), similarly discusses the CPE segment for use in statewide prioritization of capacity development.

Board has proposed that the Agency make its determinations in writing, and we have noted that Agency CCP determinations are appealable to the Board pursuant to Section 40 of the Act. In this manner, a PWS would be relieved of compliance with any requirement that the Board determines is not necessary to accomplish the purposes of the Act or the SDWA regulations. The Board requests comment on this approach.

The Board does not include the amendments to 40 C.F.R. 14216(g)(2). These amendments address State procedures. The procedures include how the State will approve a more representative data set and method to calculate virus inactivation, evaluate modifications to disinfection practice, and approve alternate filtration technology. The Board requests comments from the Agency indicating if rules are in place that address these amendments.

<u>DEVIATIONS FROM THE TEXT OF THE FEDERAL AMENDMENTS</u>

Illinois Section	40 C.F.R. Section	Revision(s)
611.101 Comprehensive performance evaluation	141.2	Added quotation marks to defined term; added "or"; changed "Subpart P" to "Subpart R"; added Board Note;
611.101 Disinfection profile	141.2	Added quotation marks to defined term; referenced new Section 611.742; added Board Note;
611.101 Enhanced coagulation	141.2	Added quotation marks to defined term; added "(DBP)"; added Board Note
611.101 Enhanced softening	141.2	Added quotation marks to defined term; added "(DBP)"; added Board Note
611.101 Filter profile	141.2	Added quotation marks to defined term; added Board Note
611.101 GAC10	141.2	Added quotation marks to defined term; added "(GAC)"; added Board Note
611.101 Groundwater under the direct influence of surface water	141.2	Added "and 40 CFR 141.2 (1998)" to Board Note
611.101 Haloacetic acids (five)	141.2	Added quotation marks to added term; placed HAA5 in quotations; added an "s" to "means"; added "(mg/L)"; removed comma after "monobromoacetic acid"; added Board Note
611.101 Maximun residual disinfectant level	141.2	Added quotation marks to added term; placed MRDL in quotations; added "the maximum permissible"; deleted "a"; added reference to 611.313 and 611.383; deleted remaining federal text; added Board Note
611.101 Uncovered finished water	141.2	Added quotation marks to defined term; added Board Note;

storage facility		
611.101 Subpart B systems	141.2	Added quotation marks to defined term; changed "Subpart H" to "Subpart B"; added reference to Sections of the Ill. Adm. Code that are requirements on Subpart B systems; added Board Note
611.101 SUVA	141.2	Added quotation marks to defined term; added "which is"; deleted "(DOC)"; added Board Note
611.101 Total Organic Carbon	141.2	Added quotation marks to defined term; placed TOC in quotations; removed comma after "chemical oxidants"; added Board Note
611.111 (d)	142.20 (a)	Changed "a State" to "the Board"; deleted "pursuant to section 1415(a) of the Act"; changed "contaminant level" to "MCL"; changed "State" to "Board"; changed "must" to "will"
611.112 (b)(4)	1416 SDWA	Added "Management or restructuring changes cannot reasonably be made that will result in compliance with the NPDWR."
611.112 (d)	1416 SDWA	Added "and relief may not be requested later than three years after the otherwise applicable compliance date established in Section 1412(b)(10) of the SDWA"
611.112 (d)	142.20	Deleted "with 500 or fewer service connections" and added "which serves 3,300 or fewer persons"; changed "but not to exceed a total of 6 additional years" to "not to exceed a total of four years"
611.131 (a)	142.301	Rendered entire federal section as subsection; changed "Section 1415(e) of the Act authorizes the issuance of" to "Variances may be obtained from"; changed "maximum contaminant level" to "MCL"; changed "system" to "a PWS"; added "in this Section"; did not include the remainder of the federal text; added "The PWS shall file a variance petition"
611.131 (b)	142.303	Rendered entire federal section as subsection; changed "A State exercising" to "The Board will"; changed "Public water system" to "a PWS"; changed "With the approval may" to "The Board will"; changed "Public water system" to "a PWS"; added "with the approval of the USEPA"; changed "Public water system" to "PWS"; changed "Public water system" to "PWS"; changed "the State" to "the Board will"; changed "Public water system would also" to "a PWS also applies"
611.131 (c)	142.304	Rendered entire federal section as subsection,

		renumbering subsections accordingly; changed "subpart" to "Section"; abbreviated NPDWR; changed "subpart" to "Section"; deleted "otherwise available"; abbreviated MCL; abbreviated NPDWR; changed "Administrator" to "USEPA"; abbreviated PWS; abbreviated MCL (twice);
611.131 (d)	142.305	Rendered entire federal section as subsection, renumbering subsections accordingly; changed "can be granted by a State" to "will be in effect"; changed "State" to "Board" (twice); abbreviated PWS; changed "Administrator" to "USEPA"; changed "State" to "Board" (twice); abbreviated PWS; changed "Administrator" to "USEPA"; did not include the remainder of the federal text
611.131 (e)	142.306	Rendered entire federal section as subsection, renumbering subsections accordingly; abbreviated PWS; changed "must" to "shall"; changed "State" to "Board"; did not include the remainder of the federal text of (a); changed "subpart" to "Section"; changed "the State or Administrator must find" to "the PWS shall prove and document the following to the Board"; abbreviated PWS; did not include the parenthetical federal text (twice); abbreviated PWS; changed "State" to "Board"; did not include the parenthetical federal text; abbreviated NPDWR; abbreviated PWS; changed "Act" to "SDWA"; abbreviated PWS; changed "Act" to "SDWA"; abbreviated PWS; did not include "as developed through compliance with § 142.307"; abbreviated PWS
611.131 (f)	142.307	Rendered entire federal section as subsection, renumbering subsections accordingly; changed "A State or" to "The Board will set"; added "issued under this Section"; changed "must" to "will"; changed Administrator" to "USEPA"; did not include "pursuant to section 1412(b)(15) of the Act; did not include "as specified in 40 CFR part 141"; changed "The State or Administrator must" to "The Board will"; abbreviated PWS; changed "must" to "will"; abbreviated PWS; changed "State or Administrator" to "Agency"; abbreviated PWS; changed "State or Administrator" to "Board"; changed "3" to "three"; changed "State or

		Administrator" to "Board"; changed "2" to "two"; changed "State or Administrator" to "Board"; abbreviated PWS; changed "Act" to "SDWA"; changed "Administrator or State" to "Board"; changed "must" to "will"; changed "5" to "five"; abbreviated PWS (twice); changed "Administrator or State" to "Board"; changed "must" to "will"; changed "Administrator or State" to "Board"; changed "must" to "will"
611.131 (g)	142.308	Rendered entire federal section as subsection, renumbering subsections accordingly; added "The Board will provide notice and opportunity for a public hearing as provided in 35 Ill. Admin. Code 104, except as modified or supplemented by this Section."; did not include "At least fifteen (15) days before the date of proposal, and"; did not include "(30)"; changed "prior to" to "before a"; changed "the State, Administrator, or public water system as directed by the State or Administrator, must" to "the PWS shall"; did not include "served by the public water system"; did not include "identified in paragraph (a)(1) of this section"; did not include "identified in paragraph (a)(2) of this section"; changed "system" to "PWS"; did not include the federal text of subsection (b); changed "EPA" to "USEPA"; changed "primacy agency" to "Board"; did not include the federal text of subsections (d) and (e); changed "Administrator or State" to "Board"; changed "must" to "will" (twice)
611.131 (g)(3)	142.309	Rendered entire federal section as subsection(g)(3); changed "Administrator or State" to "Board"; changed "must" to "will"; did not include "(1)"; did not include the remaining federal text in (a) or the federal text in (b); added "The PWS must provide notice in the manner required under subsection (g)(1) of this Section at least thirty days prior to the public meeting."; did not include the remainder of federal text in (c); added the Board Note
611.131 (h)	142.310	Rendered entire federal section as subsection(h); changed "public water system" to "PWS"; changed Administrator" to "USEPA"; changed "30" to "thirty"; changed "State" to "Board"; changed "public water system" to "PWS"

611.131 (i)	142.312	Rendered entire federal section as subsection(i); changed "State must submit" to "Agency shall promptly send"; did not include the remainder of the federal text; changed "If the Administrator disapproves" to "The Board will"
611.160	142.15 (g)(1)	Added subsection (g)(1) as Section 611.160; changed "Enforceable requirements. States must have the authority to" to "The Agency may"; added "in writing"; did not include "and to assure that PWSs implement"; added "shall"; changed "is conducted to" to "must"; ***; changed "system" to "PWS"; changed "must" to "shall"; added "A PWS shall implement any followup recommendations made in writing by the Agency that result as part of the CCP."
611.310 (c)	141.12	Abbreviated "MCL"; abbreviated "TTHM"; did not include parenthetical sum of TTHM; changed "subpart H' to "Subpart B"; changed "which" to "that"; changed "a population of 10,000 people or more" to "10,000 or more persons"; changed "This level" to "The MCL of 0.10 mg/L for TTHM"; changed "this section" to "the MCL for TTHM in this Section"; did not include the remainder of the federal text
611.312	141.64	Added new section; added "(MCLs)" and "(DBPs)" to section heading; added "(DBPs)"; changed "must" to "shall" (twice); changed "system" to "PWS"; changed "State" to "Board"; spelled out "twenty four"; changed "In granting the extension, States must" to "The Board shall grant the extension"; changed "must" to "shall"; changed "system" to "PWS"; changed "The Administrator, pursuant to Section 1412 of the Act, hereby identifies" to "The following are identified"; added "(DBPs)"
611.313	141.65	Added new section; capitalized Section heading; added "(MRDLs)"; changed "must" to "shall" (twice); changed "Subpart H" to "Subpart B" (twice); changed "must" to "shall" (twice); changed "Subpart H" to "Subpart B" (twice); deleted "The Administrator, pursuant to Section 1412 of the Act, hereby identifies" and added "are identified"
SUBPART I:	Subpart L:	Changed "Subpart L" to "SUBPART I"
611.380 (a)	141.130 (a)	Abbreviated "NPDWRs"; changed "subpart L" to

		"Subpart I"; changed "criteria" to "standards"; changed "which" to "that"; hyphenated "non-
		transient, non-community"; abbreviated "DBP"; changed "criteria" to "standards"; changed
		"transient NCWSs" to "transient non-community
		water systems (transient non-CWSs)"; did not
611.380 (b)	141.130 (b)	include the remainder of the federal text Changed "Subpart H" to "Subpart B" (four times);
011.500 (b)	141.130 (0)	changed "subpart in to "stubpart in (four times); changed "must" to "shall" (four times); changed "Transient NCWSs" to "Transient non-CWSs"
611.380 (c)	141.130 (c)	Deleted "by the State and are included in a State
011.500 (0)	111.130 (0)	register of qualified operators." and replaced it
		with reference to "35 Ill. Admin. Code 680."
611.381 (a)	141.131(a)	Deleted "General"; changed "must" to "shall";
		deleted "or otherwise approved by the EPA for
		monitoring under this subpart"; deleted "These
		methods are effective for compliance monitoring
		February 16, 1999."; did not include the remainder
		of the federal text; the incorporations by reference are found in Section 611.102
611.381 (b)	141.131(b)	Added "(DPS)" (three times); changed "must" to
011.301 (0)	141.131(0)	"shall"; abbreviated "DBP"; changed "must" to
		"shall"; changed "EPA or the State" to "USEPA or
		the Agency" (twice);
611.381(c)	141.131(c)	Changed "must" to "shall"; changed "State" to
		"Agency"; changed "EPA" to "USEPA"; changed
		"State" to "Agency"
611.381(d)	141.131(d)	Deleted "Additional analytical methods."; changed
		"must" to "shall"; changed "EPA" to "USEPA";
		changed "State" to "Agency"; changed "must" to
		"shall"; "EPA" to "USEPA" (twice); deleted "or"
		and added coma to offset final element of a series (twice)
611.382 (a)	141.132 (a)	Changed "must" to shall"; changed "State" to
011.00 2 (u)	111132 (4)	"Agency"; deleted federal text "in accordance with
		criteria developed under Sec. 142.16(f)(5) of this
		chapter."; changed the structure of the federal
		sentence in (a)(4); changed "may" to "shall";
		added "under the Information Collection Rule (40
		CFR 141 Subpart M)"
611.382 (b)	141.132 (b)	Added "(DBPs)"; changed "must" to "shall";
		changed "Subpart H" to "Subpart B" in chart
		(three times); changed "Subpart H" to "Subpart B"
		in chart (three times); changed "must" to "shall";
		changed "State" to "Agency"; changed "must" to

		"shall"; changed "must" to "shall"; changed "must" to "shall"; changed "is required" to "shall"; changed "must" to "shall"; changed "must" to "shall" (three times)
611.382 (c)	141.132 (c)	Changed "must" to "shall"; changed "Subpart H" to "Subpart B"; changed "must" to "shall" (twice); changed "is required" to "shall"; changed "must" to "shall" (twice);
611.382 (d)	141.132 (d)	Changed "(DBPP)" to "(DBP)"; changed "Subpart H" to "Subpart B"; changed "must" to "shall" (four times); changed "Subpart H" to "Subpart B"; changed "must" to "shall"
611.382 (e)	141.132 (e)	Changed "must" to "shall"
611.382 (f)	141.132 (f)	Changed "must" to "shall" (twice); changed "State" to "Agency"; changed "30" to "thirty"; changed "Subpart H" to "Subpart B"; changed "must" to "shall"; changed "State" to "Agency" (twice)
611.383	141.133	Changed "must" to "shall"; changed "State" to "Agency"; changed "must" to "shall"; changed "will" to "shall"; changed "must" to "shall"; changed "State" to "Agency"; changed "12" to "twelve"; changed "must" to "shall"; changed "State" to "Agency"; changed "must" to "shall" (three times); changed "must" to "shall" (three times); changed "(DPBP)" to "(DPB) precursors"; changed "12" to "twelve" (twice); added violation "of a NPDWR"
611.384	141.134	Changed "must" to "shall"; changed "State" to "Agency"; changed "10" to "ten"; changed "must" to "shall"; changed "State" to "Agency"; changed "10" to "ten"; added "(DPBs)"; changed "must" to "shall"; changed "3" to "three" in table under (b); added the body of footnote number 1 under the table; added Board Note; changed "must" to "shall"; changed "12" to "twelve" (twice); changed "State" to "Agency" in footnote; added Board Note; added "(DBP)"; changed "must" to "shall"; changed "State" to "Agency" in footnote; added Board Note
611.385 (a)	141.135 (a)	Changed "Subpart H" to "Subpart B"; changed "must" to "shall"; changed "Subpart H" to "Subpart B"; changed "must" to "shall" (twice); changed "State" to "Agency"; changed "must" to "shall"; abbreviated "NPDWR"

611.385 (b)	141.135 (b)	Changed "must" to "shall"; changed "State" to "Agency"; changed "are required" to "shall"; changed "Subpart H" to "Subpart B"; changed "State" to "Agency"; added "If the PWS cannot achieve the Step 1 TOC removal requirement due to water quality parameters or operational constraints, the Agency shall approve the use of the Step 2 TOC removal requirement."; changed "State" to "Agency" (three times); changed "must" to "shall"; changed "State" to "Agency"; changed "as" to "at"; placed Alternate enhanced coagulation level in quotations; changed "State" to "Agency" (twice); changed "must" to "shall"; changed "State" to "Agency"; added "If the TOC removal is consistently less than 0.3 mg/L of TOC per 10 mg/L of incremental alum dose (as aluminum) at all dosages of alum (or equivalent addition of iron coagulant), the Agency shall grant the waiver of enhanced coagulation requirements."
611.385 (c)	141.135 (c)	Changed "Subpart H" to "Subpart B"; changed "must" to "shall" (twice); changed "12" to "twelve"; did not include parenthetical federal text in (c)(ii); changed "12" to "twelve" (twice); changed "Subpart H" to "Subpart B"
611.385 (d)	141.135 (d)	Added "disinfection byproduct"; did not include "The Administrator identifies" and added "are"
611.684	141.30 (d)	Did not include the change to the federal text
611.686	141.30 (f)	Did not include the change to the federal text
611.688	141.30 (h)	Added new section "611.688 Applicable Dates"; replaced "paragraphs (a) through (g) of this section" with "Sections 611.680 through 611.686" (twice); replaced subpart H with "Subpart B"; changed this Section is no longer applicable to "Sections 611.680 through 611.688 are no longer applicable."
611.740	141.170	Changed "subpart P" to "Subpart R"; changed "subpart H" to "Subpart B"; added "(MCLs)" (twice); changed "must" to "shall"; changed "are not permitted" to "shall not"; changed "beginning" to "after"
611.741	141.171	Changed "must" to "shall" (twice); changed "State must" to "Agency shall"; deleted "and/";

611.742 (a)	141.172 (a)	Changed "must" to "shall"; changed "must" to "shall" (three times); changed "must" to "shall"; changed "those" to "that"; changed "must" to "shall"; changed "State" to "Agency" (twice); changed "must" to "shall"; changed "State" to "Agency"; changed "must" to "shall"; changed "those" to "that"; changed "State" to "Agency" (twice); changed "must" to "shall" (three times); changed "State" to "Agency"; changed "must" to "shall" (twice)
611.742 (b)	141.172 (b)	Changed "must" to "shall"; added "The Agency shall determine the period of the disinfection profile."; changed "must" to "shall"; changed "12" to "twelve"; changed "must" to "shall" (four times); changed "those" to that"; changed "State" to "Agency" (twice); changed "must" to "shall"; changed "are" to "is"; changed "These" to "The"; added "If the Agency determines that the operational data is substantially equivalent, the Agency shall approve the request."; changed "State" to "Agency"; changed "those" to "that"; changed "State" to "Agency"; changed "must" to "shall"; changed "these" to "the"; added "If the Agency determines that the operational data is substantially equivalent, such systems may use these additional yearly disinfection profiles to develop a benchmark under the provisions of subsection (c) of this Section."; changed "must" to "shall" (five times); changed "State" to "Agency"; changed "must" to "shall" (five times); changed "State" to "Agency"; changed "must" to "shall"; changed "State" to "Agency";
611.742 (c)	141.172 (c)	Changed "must" to "shall"; changed "State" to "Agency" (twice); changed "must" to "shall"; changed "must" to "shall" (twice); changed "must" to "shall"; changed "State" to "Agency"; changed "must" to "shall"; changed "State" to "Agency"
611.743	141.173	Changed "subpart H" to "Subpart B"; changed "must" to "shall";
611.743 (a)	141.173 (a)	Changed "State" to "Agency"
611.743 (b) 611.744	141.173 (b)	Changed "State" to "Agency"; deleted "and/"; changed "State" to "Agency" (twice); changed "must" to "shall" (twice); changed "may not" to "shall not" Changed "must" to "shall" (three times); changed
011./77	171.1/7	Changed must to shan (unce times), changed

		"15" to "fifteen"; changed "must" to "shall"; added
		"shall conduct grab sampling"
611.745	141.175	Changed "must" to "shall"; changed "State" to "Agency"; changed "must" to "shall"; changed "State" to "Agency";
(11.745 (a)	141 175 (a)	- ·
611.745 (a)	141.175 (a)	Changed "10" to "ten"; changed "includes" to "is"; deleted "by the State"
611.745 (b)	141.175 (b)	Changed "must" to "shall" (twice); changed "10" to "ten"; changed "State" to "Agency"; changed "15" to "fifteen"; changed "must" to "shall" (twice); changed "7" to "seven"; changed "must" to "shall" (twice); changed "7" to "seven"; changed "must" to "shall" (twice); changed "7" to "seven"; changed "15" to "fifteen"; changed "must" to "shall" (twice); changed "14" to "fourteen"; changed "15" to "fifteen"; changed "must" to "shall" (twice); changed "State" to "Agency" (twice); changed "30" to "thirty"; changed "State" to "Agency"; changed "90" to "ninety"
611.851	141.32	Added "MRDLs" to heading; did not include the remainder of the federal text;
611.851 (a)	141.32 (a)	Added "or MRDLs of disinfectants"; did not include the remainder of the federal text; added new subsection (a)(1)(E) "Violation of the MRDL for chlorine dioxide as defined in Section 611.313 and determined according to Section 611.383 (c)(2)."
611.853	141.32 (c)	Abbreviated and added "MRDL" to section; did not include the remainder of the federal text;
611.881	141.151	Capitalized "Subpart" (twice); added abbreviation "(CWSs)"; abbreviated "CWSs"; capitalized "Subpart"; placed "customers" in quotation marks and removed italics; abbreviated "CWS"; capitalized "Subpart"; placed "detected" in quotation marks and removed italics; changed the federal citations for contaminants to the applicable Illinois citations; did not include the remainder of the federal text of subsections (e) and (f)
611.882	141.152	Changed Section heading "Effective dates" to "Compliance dates"; did not include the federal text of subsection (a); abbreviated "CWS" (twice); changed "must" to "shall" (twice); abbreviated "CWS" (twice); changed "must" to "shall"; did not include date of April 19, 1999 as such date has passed

611.883	141.153	Abbreviated "CWS"; changed "must" to "shall";
011.003	111.133	abbreviated "CWS"; changed "primacy agency" to
		"Agency" (twice); changed "operator" to
		"supplier"; did not include definition of "MCLG";
		changed "as close as possible to the MCLGs as
		feasible using" to "considering"; abbreviated
		"CWS"; changed "a variance or exemption" to
		"relief from a NPDWR"; changed definition of
		"Variance s and Exemptions" to "Variances,
		Adjusted Standards, and Site-specific Rules";
		"deleted "or EPA"; changed "which" to "that";
		changed "EPA" to "USEPA"; changed "sub-
		section" to "subsection"; changed "by-products" to
		"byproducts"; abbreviated "CWS"; deleted "EPA
		and State"; changed "5" to "five" (twice); did not
		include the federal text of (d)(4)(ii); deleted
		"and/"; changed "should" to "must" (twice);
		changed "40" to "forty" (twice); changed
		"operator's" to "supplier's"; changed "should" to
		"must"; changed "operator" to "supplier" (twice);
		changed "system" to "CWS"; abbreviated "CWS";
		changed "should" to "must" (twice); changed
		"systems could" to "a CWS may"; changed
		"system" to "CWS" (twice); changed "must" to
		"shall"; changed "system" to "CWS" (four times);
		did not include the federal text "EPA strongly
		encourages" and added the requirement "the report must include"; added "an" NPDWR;
		changed "system" to "CWS"; changed "subpart H"
		to "Subpart B"; capitalized "Part"; changed
		"systems" to "CWSs"; changed "subpart I" to
		"Subpart G"; did not capitalize "acrylamide and
		epichlorohydrin"; changed "variance, and
		exemption" to "variance, adjusted standard, site-
		specific rule"; changed "Variance and Exemption"
		to "Variances, adjusted standards, and site-specific
		rules" (three times); changed system" to "CWS";
		changed "variance, and exemption" to "variance,
		adjusted standard, site-specific rule" (twice);
		changed "systems" to "CWSs"; did not italicize
		listed contaminants; changed "EPA" to "USEPA";
		changed "FDA" to "United States Food and Drug
		Administration (USFDA)"; changed
		"Environmental Protection Agency's" to
		"USEPA"; abbreviated "CWS"; changed "Primacy

Agency" to "Agency"; did not include federa "(e.g., time and place of regularly scheduled meetings)"; changed "systems" to "the CWS" changed "they deem" to "it deems" 611.884 Added "the USEPA"; changed "system" to "CWS"; changed "must" to "shall"; added "th following language"; deleted "such as"; chan	board
"CWS"; changed "must" to "shall"; added "tl	
"EPA" to "USEPA"; changed "Primacy Ager to "Agency"; changed "system" to "CWS"; changed "must" to "shall"; added "the follow language"; deleted "such as"; changed "Prima Agency" to "Agency"; changed "Systems" to CWS"; changed "must" to "shall"; added "the following language"; deleted "such as"; added "USEPA"; changed "Primacy Agency" to "Agency"; changed "Systems" to "A CWS"; changed "must" to "shall"; added "the follow language"; deleted "such as"; added "USEPA changed "primacy Agency" to "Agency"	ing acy o "A e ed
611.884 (e) 141.154 (e) Changed "must" to "shall"; added "the"	
Abbreviated "CWS"; changed "must" to "shat changed "system" to "CWS"; changed "must" "shall"; did not include the remainder of the fit text of "good faith effort"; changed "system" "CWS"; abbreviated "CWS"; changed "prima agency" to "Agency"; changed "primacy agency" to "Agency"; changed "primacy agency" to "Agency"; changed "primacy agency" to "Agency"; changed "system" to "CWS"; abbreviated "CWS"; changed "must" to "shall changed "primacy agency" to "Agency"; abbreviated "CWS"; changed "must" to "shall abbreviated "CWS"; changed "must" to "shall abbreviated "CWS (three times); deleted the federal text referencing tribes in subsection (schanged "must" to "shall"; changed "5" to "fit of the changed "must" to "shall"; changed "must" to "shall the changed "mu	t" to federal ' to acy all"; nged II";
611.Appendix A 141.32 (e)(10) Changed "subpart P" to Subpart R"	
611.Appendix A 141.32 (e)(76) Abbreviated "USEPA"; changed "EPA" to "USEPA" (twice)	
611.Appendix A 141.32 (e)(77) Abbreviated "USEPA"; changed "EPA" to "USEPA" (twice)	
611.Appendix A 141.32 (e)(78) Abbreviated "USEPA"; changed "EPA" to "USEPA" (twice); changed "paragraph (e) 7 "Section" in Note; changed EPA to "USEPA"	
611.Appendix A 141.32 (e)(79) Added "(DBPs)"; abbreviated USEPA; change	ged

		EPA to "USEPA" (twice);
611.Appendix A	141.32 (e)(80)	Abbreviated "USEPA"; changed "EPA" to "USEPA"
611.Appendix A	141.32 (e)(80)	Abbreviated "USEPA"; changed "EPA" to "USEPA"
611.Appendix F	Appendix A to Subpart O	Did not include federal information or column "MCLG in CCR units"
611.Appendix G	Appendix B to Subpart O	Did not include federal information or column "MCLG"
611.Appendix H	Appendix C to Subpart O	

Board Amendments Not Federally Derived

Section	Revision(s)
611.101 Definitions	Updated CFR edition cited to all definitions
611.101 "Best available technology"	Changed U.S. EPA to "USEPA"
611.101 "U.S. EPA" or "USEPA"	Added "or "USEPA""
Section 611.111 and 611.111 (a)	Added "Relief Equivalent to SDWA" in section heading;
	added Section 1415"(a)"; added "to describe how the
	Board grants State relief"; added "to that available from
	USEPA under"; added "See Section 611.Table H.
	SDWA Section 1415 variances do not require ultimate
	compliance within five years in every situation.
	Variances under Sections 35-37 of the Act do require
	compliance within five years in every case.
	Consequently, a PWS may have the option of seeking
	state regulatory relief equivalent to an SDWA Section
	1415 variance through one of three procedural
	mechanisms: a variance under Sections 35-37 of the Act
	and 35 Ill. Adm. Code 104; a site-specific rule under
	Sections 27-28 of the Act and 35 Ill. Adm. Code 102; or an adjusted standard under Section 28.1 of the Act and
	35 Ill. Adm. Code 106."; changed "may" to "will";
	changed "supplier" to "PWS"; added " a site-specific rule
	or an adjusted standard"; changed "a NPDWR in this
	Part" to "an MCL or a treatment technique pursuant to
	this Section"; changed "supplier" to "PWS"; deleted
	"variance"; added "102, 104, or 106 as applicable";
	deleted remainder of text in (a)(1); added "If a State
	requirement does not have a federal counterpart, the"
	and deleted "The"; changed "a variance" to "relief";
	deleted "additional"; deleted "in this Part";

(11 111 (h)	Changed " abouting of all-transaction 11
611.111 (b)	Changed "showing of arbitrary or unreasonable
	hardship" to "justification for relief under this Section";
	changed "supplier" to "PWS"; changed "that" to "the
	following"; added "and alternative sources"; changed
	"supplier" to "PWS"; added "or that the treatment
	technique is not necessary to protect the health of
	persons served"; deleted "or other requirement";
	changed "The system has applied BAT as identified in
	Subpart G of this Part." to "The PWS will install or has
	installed the best available technology (BAT) (as
	identified in Subpart G of this Part), treatment technique,
	or other means which the Agency finds available.";
	deleted "as defined in subsection (g) below"
611.111 (c)	Added "In any order granting relief under this Section,";
, ,	changed "supplier" to "PWS"; changed "other
	requirement" to "treatment technique"; changed
	"variance" to "relief"; changed "supplier" to "PWS";
	changed "or other requirement, during the period ending
	on the date compliance with such requirement is
	required" to "or treatment technique with respect to
	which the relief is granted"
611.111 (d)	Added "Schedule of compliance"; deleted "A schedule of
011.111 (d)	compliance will require compliance with each MCL or
	other requirement with respect to which the variance was
	granted as expeditiously as practicable"; added the
	remainder of the text in (d) (1) and (2)
611.111 (e)	Changed "provide notice and opportunity" to "hold at
	least one"; added "In addition the Board will accept
	comments as appropriate pursuant to"; deleted "as
	provided in"; added "102" and "104"
611.111 (f)	Changed "a variance" to "relief"; changed "demonstrate"
011.111 (1)	to "prove"; added "From the residual disinfectant
	concentration (RDC) requirements of Sections
	611.241(c) and 611.242(b)."
611 111 (a)	
611.111 (g)	Added "The Agency shall promptly send USEPA the
	Opinion and Order of the Board granting a variance
	pursuant to this Section. The Board may reconsider and
	modify a grant of variance, or variance conditions, if
	USEPA notifies the Board of a finding pursuant to
	Section 1416 of the SDWA."; deleted remainder of text
Z11 111 /1\	in (g)
611.111 (h)	Added "In addition to the requirements of this Section,";
	added "611.131 may"; changed "determinations made"
	to "relief granted"; added "and (B) in Board Note;
	changed "U.S. EPA" to "USEPA"

Caption 611 112 and 611 112 (a)	Added "Delief Equivalent to CDWA", above a
Section 611.112 and 611.112 (a)	Added "Relief Equivalent to SDWA"; changed "Variances" to "Exemptions" in section heading; changed "as a State" to "to describe how the Board grants State relief"; added "to that available from USEPA under"; deleted "of"; added "See 611.Table H. SDWA Section 1416 exemptions do not require ultimate compliance within five years in every situation. Variances under Sections 35-37 of the Act do require compliance within five years in every case. Consequently, a PWS may have the option of seeking state regulatory relief equivalent to an SDWA Section 1416 exemption through one of three procedural mechanisms: a variance under Sections 35-37 of the Act and 35 Ill. Adm. Code 104; a site-specific rule under Sections 27-28 of the Act and 35 Ill. Adm. Code 102; or an adjusted standard under Section 28.1 of the Act and 35 Ill. Adm. Code 106."; changed "may" to "will"; changed "supplier" to "PWS"; added ", site-specific rule, or an adjusted standard"; deleted "any requirement respecting"; added "pursuant to this Section"; deleted "requirement of an NPDWR in this Part"; changed "supplier" to "PWS"; deleted "variance"; added "102" and "or 106 as applicable"; deleted "except as modified or supplemented by this Section"; added "If a State requirement does not have a federal counterpart"; changed "a variance" to "relief"; deleted "additional";
611.112 (b)	deleted "in this Part" Changed "showing of arbitrary or unreasonable hardship" to "justification for relief under this Section"; changed "supplier" to "PWS"; changed "that" to "the following"; changed "supplier" to "PWS" (three times);
	changed "variance" to "relief";
611.112 (c)	Added "In any order granting relief under this Section"; changed "supplier" to "PWS"; changed "variance" to "relief"; changed "supplier" to "PWS"; deleted "during the period ending on the date when compliance is required"; added "with respect to which relief is granted"
611.112 (d)	Changed "variance" to "relief" (three times); changed "supplier" to "PWS"; changed "standard" to "NPDWR"; changed "supplier" to "PWS"; changed "standard" to "NPDWR"; changed "supplier" to "PWS" (three times); changed "a variance under subsections (d)(1)(A) or (d)(1)(B) above" to "relief"; changed "supplier" to "PWS"
611.112 (e)	Changed "provide notice and opportunity for a" to "hold

	at least one"; added "In addition the Board will accept
	comments as appropriate pursuant to"; deleted "as
	provided in"; added "102" and ", or 106"
611.112 (f)	Changed "U.S. EPA" to "USEPA" (twice)
611.112 (g)	Changed "a variance" to "relief"; changed "demonstrate" to "prove"
611.112 (h)	Added "In addition to the requirements of this Section";
011.112 (II)	added "or 611.131 may"; changed "determinations
	made" to "relief granted"; in Board Note changed
	"1994" to "1998" (twice) and "U.S. EPA" to "USEPA"
611.160	
011.100	Added "For purposes of compliance with Subpart R of
	this Part, the comprehensive performance evaluation
	must consist of at least the following components:
	Assessment of plant performance; evaluation of major
	unit processes; identification and prioritization of
	performance limiting factors; assessment of the
	applicability of comprehensive technical assistance; and
	preparation of the CPE report."; added "Agency
	requirements that a PWS conduct a CCP or any followup
	recommendations made in writing by the Agency that
	result as part of the CCP are appealable by a PWS
	pursuant to Section 40 of the Act."
611.310	Added "Maximum Contaminant Levels" to heading;
	placed "MCLs" in parenthesis; changed "U.S. EPA" to
	"USEPA" (three times)
611.851	Changed "supplier" to "PWS"; updated citation to
	corresponding federal provision;
611.232 (f)	Updated citation to corresponding federal provision

The rule text is contained in a separate order adopted today.

IT IS SO ORDERED.

I, Dorothy Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion was adopted on the 6th day of May 1999 by a vote of 7-0.

Dorothy M. Gunn, Clerk Illinois Pollution Control Board