# ILLINOIS POLLUTION CONTROL BOARD January 24, 2013

IN THE MATTER OF:	)	
SDWA UPDATE, USEPA AMENDMENTS	)	R13-2
(January 1, 2012 through June 30, 2012, July	)	(Identical-in-Substance
2, 2012, and July 25, 2012)	)	Rulemaking - Public Water Supply)

Adopted Rule. Final Order.

OPINION OF THE BOARD (by J.A. Burke):

#### **SUMMARY OF THIS ACTION**

The Board today adopts amendments to the Illinois regulations that are "identical in substance" to drinking water regulations adopted by the United States Environmental Protection Agency (USEPA). The amendments involved in this docket incorporate into the Illinois drinking water regulations amendments in response to five USEPA actions.

All of the federal actions involved in this docket relate to analytical methods approved for use in demonstrating compliance. This includes the following: (1) May 2, 2012 corrections to a prior approval of analytical methods; (2) May 18, 2012 revisions to analytical methods developed for purposes of the Clean Water Act (33 U.S.C. §§ 1251 *et seq.* (2010)), some of which are incorporated by reference for drinking water purposes; and (3) summary approvals of alternative equivalent methods for drinking water monitoring.

Three of the USEPA actions occurred in the identical-in-substance update period of January 1, 2012 through June 30, 2012, on May 2, 2012, May 18, 2012, and June 28, 2012. The Board has added two additional USEPA actions that occurred after the end of the update period, on July 2, 2012 and July 25, 2012. Both of these later actions corrected an action that occurred within the update period: the action of May 2, 2012. Neither correction will affect the amendments that occurred during the period January 1, 2012 through June 30, 2012. Nevertheless, the Board has added consideration of them to this docket to ensure complete consideration of the May 2, 2012 amendments.

Sections 7.2 and 17.5 of the Environmental Protection Act (Act) (415 ILCS 5/7.2 and 17.5 (2010)) provide for quick adoption by the Board of regulations that are identical in substance to federal regulations that USEPA adopts to implement Sections 1412(b), 1414(c), 1417(a), and 1445(a) of the federal Safe Drinking Water Act (SDWA) (42 U.S.C. §§ 300g-1(a), 300g-3(c), 300g-6(a), and 300j-4(a) (2006)). The USEPA National Primary Drinking Water Regulations (NPDWRs) implement Sections 1412(b), 1414(c), 1417(a), and 1445(a) of the federal SDWA (42 U.S.C. §§ 300g-1(a), 300g-3(c), 300g-6(a), and 300j-4(a) (2006)). The federal SDWA regulations are found at 40 C.F.R. 141 through 143. Section 17.5 also provides that Title VII of the Act and Section 5 of the Illinois Administrative Procedure Act (APA) (5 ILCS 100/5-35 and 5-40 (2006)) do not apply to the Board's adoption of identical-in-substance regulations.

This opinion supports an accompanying order adopted today.

The Board presently expects that these adopted amendments will be filed with the Office of the Secretary of State and become effective pursuant to Section 7.2 of the Act (415 ILCS 5/7.2) (2010)) within two weeks of the date of this opinion and accompanying order, well in advance of the statutory due date of May 2, 2013.

#### **USEPA ACTIONS INCLUDED IN THIS DOCKET**

## **USEPA Amendments During the Period January 1, 2012 Through June 30, 2012**

The <u>R13-2 docket</u> includes two sets of amendments that USEPA adopted in the period <u>January 1, 2012 through June 30, 2012</u>, as follows:

#### May 2, 2012 (77 Fed. Reg. 26072)

<u>Description of the USEPA action</u>: USEPA adopted the third installment of the Unregulated Contaminants Monitoring Rule (UCMR 3). USEPA implements the UCMRs, including UCMR 3, with or without the assistance of the state, but not requiring any state to incorporate UCMR elements into the state program. Included with the UCMR 3 rule was a series of updates to analytical methods for regulated contaminants (nitrate, nitrite, and orthophosphate), which were not related to the UCMR.

<u>Necessary Board action in response</u>: The Board has ensured completion of the analytical methods updates for regulated contaminants (nitrate, nitrite, and orthophosphate) that are not related to the UCMR 3 rules.

#### June 28, 2012 (77 Fed. Reg. 38523)

<u>Description of the USEPA action</u>: USEPA approved alternative equivalent analytical methods for use in demonstrating compliance with the drinking water standards. USEPA added 10 alternative methods for analyzing a variety of organic, inorganic, and microbiological contaminants.

<u>Necessary Board action in response</u>: The Board has amended the corresponding segments of 35 Ill. Adm. Code 611 to add the newly approved alternative equivalent methods to appropriate segments of the Illinois drinking water regulations.

#### **Later SDWA (Drinking Water) Amendments of Interest**

The Board engages in ongoing monitoring of federal actions. When the Board observes an action outside the nominal timeframe of a docket that requires expedited consideration, the Board will expedite consideration of those amendments. Federal actions that could warrant

expedited consideration include those that directly affect the amendments involved in this docket, those for which compelling reasons would warrant consideration as soon as possible, and those for which the Board has received a request for expedited consideration.

As of the date of this opinion and accompanying order, the Board has identified two USEPA actions since June 30, 2012 that affect amendments that occurred during the period January 1, 2012 through June 30, 2012. Those actions, and their impact on the present amendments, are described as follows:

#### July 2, 2012 (77 Fed. Reg. 39182)

<u>Description of the USEPA action</u>: USEPA made a minor correction to the May 2, 2012 *Federal Register* discussion of the UCMR 3.

<u>No necessary Board action in response</u>: No Board action was necessary based on this correction. This correction was limited to alteration of the *Federal Register* discussion, and did not affect any segment of the rules that is involved in this docket. The Board notes the July 2, 2012 USEPA correction and observes that no action has been necessary based on that correction.

## July 25, 2012 (77 Fed. Reg. 43523)

<u>Description of the USEPA action</u>: USEPA made a minor correction to the May 2, 2012 *Federal Register* discussion of the UCMR 3.

<u>No necessary Board action in response</u>: No Board action was necessary based on this correction. This correction was limited to alteration of the *Federal Register* discussion, and did not affect any segment of the rules that is involved in this docket. The Board notes the July 25, 2012 USEPA correction and observes that no action has been necessary based on that correction.

The Board has not identified any further federal action since October 18, 2012 that fulfills the criteria for expedited consideration.

# Other Federal Actions Having a Direct Impact on the Illinois SDWA (Drinking Water) Regulations

In addition to the amendments to the federal wastewater pretreatment and SDWA regulations, amendments to certain other federal regulations occasionally have an effect on the Illinois drinking water rules. Most notably, 35 Ill. Adm. Code 611.102 includes the incorporation of a limited number of federal regulations by reference. These are the following federal regulations, including a brief description of each:

Federal Provision

Incorporated by Reference Subject Matter of the Incorporated Federal Provision

40 C.F.R. 3.2	Requirements for submission of required reports in an electronic format.
40 C.F.R. 3.3	Requirements for submission of required reports in an electronic format.
40 C.F.R. 3.10	Requirements for submission of required reports in an electronic format.
40 C.F.R. 3.2000	Requirements for submission of required reports in an electronic format.
40 C.F.R. 136.3(a)	Listing of analytical procedures approved for purposes of the federal Clean Water Act.
40 C.F.R. 136, Appendix B	A method for determination of a method detection limit for purposes of the federal Clean Water Act.
40 CFR 142.20(b)(1)	Describing the information the State must submit to USEPA to document any grant of relief from a federal National Primary Drinking Water Standard.

As of June 30, 2012, USEPA had amended one of these federal regulations. That USEPA amendment is described as follows:

#### May 18, 2012 (77 Fed. Reg. 29758)

<u>Description of the USEPA action</u>: USEPA revised the testing procedures in 40 C.F.R. 136 approved for analyses under the Clean Water Act (33 U.S.C. §§ 1251 *et seq.* (2010)). Included were new and revised USEPA methods and new and revised methods published by voluntary consensus standard bodies, like ASTM Internationals and the Standard Methods Committee.

<u>Necessary Board action in response</u>: Many of the methods of 40 C.F.R. 136 are incorporated by reference in Section 611.102(c). The Board has updated the incorporations by reference.

Updating the incorporations by reference of segments of 40 C.F.R. 136 is considered more fully in the segment of discussion that begins on page 7 of this opinion.

Additionally, the Board has used this opportunity to update all references to the *Code of Federal Regulations* to the most recent version available (July 1, 2012).

#### **PUBLIC COMMENTS**

The Board adopted a proposal for public comment in this matter on October 18, 2012. A Notice of Proposed Amendment appeared in the November 9, 2012 issue of the *Illinois Register*, at 36 Ill. Reg. 15599.

The Board allowed public comment on the proposed amendments for at least 45 days

after Notice of Proposed Amendment appeared in the *Illinois Register*, until after December 24, 2012. The Board received one set of written public comments on the proposal to date. That set of comments is described as follows:

PC 1 Illinois EPA's Comments, Joanne M. Olson, Assistant Counsel, Division of Legal Counsel, Agency, dated December 21, 2012 (received December 24, 2012)

By PC 1, the Agency transmitted a number of suggested revisions from USEPA Region 5. The Board has made a number of revisions to the amendments in response to the Agency-USEPA comments, and declined to make a number of others. Discussion of PC 1 and the Agency-USEPA comments begins on page 28 of this opinion.

The Board further received suggestions for revisions from JCAR. The Board has made a number of revisions to the amendments in response to the JCAR suggestions, and declined to make a number of others.

Table 4, which begins on page 63 of this opinion and order outlines the revisions made by the Board. Table 5, which begins on page 66, indicates the various suggestions that the Board has not followed.

#### **DISCUSSION**

The first segment of discussion begins with a description of the amendments undertaken in direct response to the federal actions involved in this proceeding. This includes discussion of the Board's responses to the federal actions. This first segment of discussion summarily outlines the types of changes that the Board routinely makes when adapting USEPA text into Illinois rules. As is explained in this first segment of discussion, all changes to the literal text of the underlying federal amendments are itemized in tables towards the end of this document.

The second segment of discussion describes the various non-substantive amendments that are not directly derived from the federal action, but which the Board has included in this update docket as a routine, necessary matter, to ensure compliance with the substance of the federal regulations and the unique requirements of the Illinois regulatory system. The second segment broadly describes the miscellaneous amendments without detail. The discussion, however, includes specific discussion of individual changes where the Board believes that more detail is warranted. As is explained below (beginning on page 30 of this opinion), all of the various amendments not directly derived from the federal action are itemized in a table towards the end of this document.

#### **Discussion of the Federal Action**

#### **Analytical Methods Corrections--Section 611.611**

USEPA adopted the third installment of the Unregulated Contaminant Monitoring Rule (UCMR 3) on May 2, 2012 (77 Fed. Reg. 26072). The UCMR 3 requires selected suppliers to monitor their water for contaminants for which USEPA has not established a national primary

drinking water regulation (NPDWR). Since the UCMR 3 does not involve an NPDWR, the UCMR would not normally require Board attention. *See* 415 ILCS 5/17.5 (2010). USEPA, however, used the opportunity of the UCMR3 to use its authority to summarily approve alternative equivalent analytical methods (*see* 42 U.S.C. § 300f(1) (2010)) to correct earlier approvals of an analytical method without discussion. *See* 77 Fed. Reg. at 26072.

USEPA approved "Test Method for Determination of Dissolved Inorganic Anions in Aqueous Matrices Using Capillary Ion Electrophoresis and Chromate Electrolyte' (D6508, Rev. 2) by Waters Corporation" for use relative to fluoride, nitrate, nitrite, and orthophosphate in 2007. 72 Fed. Reg. 11200, 02 (Mar. 12, 2007); *see* 72 Fed. Reg. at 11219, 21-22. When incorporating this method into the Illinois requirements, the Board noted difficulty finding the method from the Waters Corporation and corrected the method source to ASTM International, as ASTM Method D6508-00(2005). *See* SDWA Update, USEPA Amendments (January 1, 2007 through June 30, 2007), R08-7, SDWA Update, USEPA Amendments (July 1, 2007 through December 31, 2007), R08-13 (Dec. 18, 2008) (consol.), slip op. at p. 11. The Board appended explanatory Board notes to each appearance of the method in the regulations, at 35 Ill. Adm. Code 611.611(a)(13)(F) (relative to fluoride), (a)(18)(E) (relative to nitrate), (a)(19)(E) (relative to nitrite), and (a)(20)(G) (relative to orthophosphate).

With the UCMR 3, USEPA partially corrected the method designation "D6508, Rev. 2" to "D6508-00" and the method source to ASTM International. USEPA corrected the entries as to nitrate, nitrite, and orthophosphate, but did not do so with regard to fluoride. *See* 77 Fed. Reg. at 26096-97.

Since the Board corrected the method name to the standard ASTM International designation "ASTM D6508-00(2005)" in each of 35 Ill. Adm. Code 611.611(a)(13)(F), (a)(18)(E), (a)(19)(E), and (a)(20)(G), no further correction is necessary in this docket. The Board, however, added Board notes to each of these provisions when making the original corrections in 2008. *See* SDWA Update, USEPA Amendments (January 1, 2007 through June 30, 2007), R08-7, SDWA Update, USEPA Amendments (July 1, 2007 through December 31, 2007), R08-13 (Dec. 18, 2008) (consol.), slip or. at pp. 184, 91, 93, 95. The notes appended to subsections (a)(18)(E), (a)(19)(E), and (a)(20)(G), relative to nitrate, nitrite, and orthophosphate, are not longer necessary. The Board notes, however, that USEPA did not similarly correct the entries for this method for fluoride in ¶ 14 (corresponding with subsection (a)(14)(F) in the Illinois rule). The Board note is retained at that location.

For the foregoing reasons, the Board is now removing the explanatory Board notes from each of 35 Ill. Adm. Code 611.611(a)(18)(E), (a)(19)(E), and (a)(20)(G), relating to nitrate, nitrite, and orthophosphate. The Board will retain the explanatory Board note appended to 35 Ill. Adm. Code 611.611(a)(13)(F), relative to fluoride, since USEPA has not yet corrected ASTM Method D6508-00(2005) as to that contaminant.

On July 2, 2012 (at 77 Fed. Reg. 39182) and July 25, 2012 (at 77 Fed. Reg. 43523), USEPA corrected the preamble discussion of the UCMR 3. Neither correction affected the adopted amendments. Thus, the Board needs do no more than note the existence of these corrections.

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Any person interested in the substance of the USEPA actions should review the *Federal Register* notice of May 2, 2012. The federal revisions that were not necessary in this docket are listed in Table 1, which begins on page 30 of this opinion.

The Board requested comment relative to the methods corrections that accompanied the May 2, 2012 UCMR 3. Specifically, the Board requested comment relative to retaining the explanatory Board note relative to fluoride that is appended to 35 Ill. Adm. Code 611.611(a)(18)(E) until USEPA corrects corresponding ¶ 13 in 40 C.F.R. 141.23(k)(1) table. Segments of PC 1, which conveys Agency-USEPA comments, relate to the UMCR amendments. The Board's responses to the Agency-USEPA comments are summarized in Tables 4 and 5, which begin on page 63 of this opinion. Board observations relative to PC 1 appear at page 28 of this opinion.

#### **Clean Water Act Analytical Methods Updates--Section 611.102**

USEPA updated the Clean Water Act analytical methods in 40 C.F.R. 136 on June 24, 2012 (77 Fed. Reg. 29758). Although 40 C.F.R. 136 does not directly relate to the NPDWRs, segments of the NPDWRs reference and rely on portions of part 136:

40 C.F.R. Provision	35 Ill. Adm. Code Segment	40 C.F.R. 136 Citation
141.24(f)(17)(i)(E)	611.646(q)(1)(E)	136, appendix B
141.24(f)(17)(ii)(C)	611.646(q)(2)(C)	136, appendix B
141.24(f)(20)	611.646(t)(1)	136, appendix B
141.89(a)(1)(iii)	611.359(a)(3)	136, appendix B
141.704(b)	611.1004(b)	136.3(a)
141.704(b)(2)	$611.1004(b)(2)^1$	136.3(a)

In two other segments of the regulations, the Board added incorporations by reference of appendix B to 40 C.F.R. 136 that do not have a direct counterpart in the corresponding federal regulations. Those two incorporations by reference are described as follows:

611.609(a)(3) Board note	Used to aid definition of "method detection limit" for distinction from the definition of "detection limit."
611.646(a) "method detection limit" Board note	Used to aid definition of "method detection limit," added by the Board for the purposes of Section

<sup>1</sup> This reference designates a specific analytical method, as it appears in 40 C.F.R. 136.3(a). The Board is deleting this reference to 40 C.F.R. 136 in favor of direct incorporation of that method by reference. See the entry for this provision in the table that begins on page 47 of this opinion.

611.646(q) and (t) (corresponding with 40 C.F.R. 141.24(f)(17) and (f)(20)), relative to laboratory certification criteria.

For this reason, 40 C.F.R. 136.3(a) and appendix B are incorporated by reference in 35 Ill. Adm. Code 611.102(c). The USEPA amendments to the Clean Water Act analytical methods makes it necessary to update those incorporations by reference, for the purposes of implementation of the affected NPDWRs.

The Board has updated the incorporation by reference for each of 40 C.F.R. 136.3(a) and appendix B to the 2012 edition of the *Code of Federal Regulations*. This edition includes the May 18, 2012 amendments to the Clean Water Act analytical methods.

Any person interested in the substance of the USEPA actions should review the *Federal Register* notice of May 18, 2012. The Board requested comment on updating the Clean Water Act analytical methods by updating the incorporations by reference of segments of 40 C.F.R. 136. None of the comments received directly related to this incorporation by reference.

# <u>Approvals of Alternative Equivalent Analytical Methods--Sections 611.102, 611.611, 611.645, 611.720, and 611.1004</u>

USEPA approved 10 alternative equivalent methods on June 28, 2012 (77 Fed. Reg. 38523). The USEPA approval designates new methods as acceptable for use in demonstrating compliance with the NPDWRs. The methods were developed by USEPA and voluntary consensus standards organizations. The newly approved methods are described as follows:

USEPA used the expedited procedure of section 1401(1) of SDWA (42 U.S.C. § 300f(1) (2010)) for approval of the alternative equivalent methods. The Board considers the June 24, 2011 USEPA action separately in the following segments of this discussion.

The added methods and the drinking water quality parameters for which USEPA approved them are the following:

Alternative Equivalent Method Contaminant
Standard Methods, 21st ed., Method 3125 uranium

Gas chromatography-electron capture detection (GC-ECD)

Standard Methods Online, Method 31120 B-09 mercury Gas chromatography-electron capture detection (GC-ECD)

ASTM Method D859-10

High-performance liquid chromatography (HPLC) with post-column derivatization and fluorescence detection

silica

ASTM Method D1179-10 B

High-performance liquid chromatography (HPLC) with post-column derivatization and fluorescence detection

fluoride

ASTM Method D5673-10

Atomic absorption, hydride technique

uranium

ASTM Method D6239-09

Atomic absorption, furnace technique

uranium

USEPA OGWDW Methods, Method 536, ver. 1.0

Determination of Triazine Pesticides and Their

Degradates in Drinking Water by Liquid

Chromatography Electrospray Ionization Tandem Mass

Spectrometry (LC/ESI-MS/MS)

atrazine simazine

USEPA OGWDW Methods, Method 523, ver. 1.0

Determination of Triazine Pesticides and Their

Degradates in Drinking Water by Gas

Chromatography/Mass Spectrometry (GC/MS)

atrazine simazine

USEPA NERL Method 525.3, ver. 1.0

Determination of Total Semivolatile Organic Chemicals in Drinking Water by Solid Phase Extraction and Capillary Column Gas Chromatography/Mass

Spectrometry (GC/MS)

alachlor atrazine

benzo(a)pyrene

chlordane

di(2-ethylhexyl)adipate di(2-ethylhexyl)phthalate

endrin heptachlor

heptachlor epoxide hexachlorobenzene

hexachlorocyclopentadiene

lindane

methoxychlor

PCBs (as alachlors) pentachlorophenol

simazine toxaphene

USEPA OGWDW Methods, Method 1623.1

Cryptosporidium and Giardia in Water by

Filtration/IMS/FA

Cryptosporidium

The Board updated the methods in the appropriate provisions of the Illinois drinking water regulations to add the several newly approved alternative equivalent methods. The Board has undertaken to incorporate the federal changes as near in substance as possible, but has found it necessary to deviate from the federal changes in some regards.

Structural differences exist between the federal regulations and their Illinois counterparts. These differences have required alteration of the way the information is presented. Despite these significant differences in structure, the Board does not intend any substantive differences between the USEPA-approved analytical methods and those set forth in the Illinois regulations.

The federal regulations list most of the approved analytical methods in a tabular format. Each tabular column corresponds with a method's source. The column headings and individual method entries include footnotes to indicate the full title and source of each listed method. *E.g.*, 40 C.F.R. 141.23(k)(1), 141.24(e)(1), 141.25(a), and appendix A to subpart C of 40 C.F.R. 141 (2012) (corresponding with 35 Ill. Adm. Code 611.611(a), 611.645, and 611.720(a)). The Illinois rules deviate from this structure and presentation of methods in several ways.

Initially, the Illinois rules define a short-form reference name for each method, in 35 Ill. Adm. Code 611.102(a). The Illinois rules use this short-form reference name to refer to individual methods throughout the substantive requirements. *E.g.*, 35 Ill. Adm. Code 611.611, 611.645, and 611.720.

Second, the Illinois rules further deviate from the federal structure relative to analytical methods for inorganic chemical water quality parameters. The Board changed the federal tabulated listings of approved methods for inorganic chemical parameters listed by USEPA in 40 C.F.R. 141.23(k)(1) to a standard regulatory paragraph format in corresponding 35 Ill. Adm. Code 611.611(a).

Third, the Illinois rules incorporate analytical methods by reference in a different manner than has USEPA. The Illinois rules present a centralized listing of incorporations by reference in 35 Ill. Adm. Code 611.102. This incorporation by reference provision lists the approved methods by source. The Illinois rules further indicate where each method is used in the body of the substantive provisions.

Finally, the Illinois rules include all analytical methods that USEPA has approved for a single water quality parameter in a single place. USEPA has listed the methods that it has approved by rulemaking in the substantive monitoring requirements, in 40 C.F.R. 141.21(f)(3) and (f)(6); 141.23(k)(1); 141.24(e)(1); 141.25(a); 141.74(a)(1) and (a)(2); 141.131(b)(1), (c)(1), and (c)(2); 141.132(b)(3)(ii)(B); 141.402(b); 141.704(b); and 143.4(b) (corresponding with 35 Ill. Adm. Code 611.526(c) and (f); 611.611(a); 611.645, 611.720(a); 611.531; 611.381(b)(1), (c)(1), and (c)(2); 611.382(b)(3)(B)(ii); 611.802(c); 611.1004; and 611.612(f), respectively). USEPA has listed the approved alternative equivalent methods separately from the methods approved by rulemaking, in appendix A to subpart C of 40 C.F.R 141.

The Board has set forth all alternative equivalent methods in the appropriate substantive provisions—together with the methods that USEPA approved by rulemaking. To distinguish the

methods that USEPA approved by rulemaking from those that USEPA approved as alternative equivalent methods using the alternative summary procedure, the Board has added notes in the rules to indicate the methods that USEPA has approved using the expedited procedure.

Any person interested in the substance of the USEPA actions should review the *Federal Register* notice of June 28, 2012. The federal revisions that were not necessary in this docket are listed in Table 1, which begins on page 30 of this opinion. The changes that the Board has found necessary to make in the text of the federal expedited approvals (besides conversion of format) are indicated in Table 2 (which begins on page 33 of this opinion).

Request for Comments on the Board's Action. The Board requested public comment on the incorporation of the USEPA June 28, 2012 summary approval of alternative equivalent methods into the Illinois regulations. Segments of PC 1, which conveys Agency-USEPA comments, relate to the summary approval of alternative equivalent methods. The Board's responses to the Agency-USEPA comments are summarized in Tables 4 and 5, beginning on page 63 of this opinion. Board observations relative to PC 1 appear at page 28 of this opinion.

### **Corrective Amendments**

The Board routinely examines federal amendments and the base text of rules open for amendments to find any areas that need correction or clarification. JCAR and the Office of the Secretary of State also routinely examine the text and suggest corrections and clarifications. Sometimes suggestions arise from the Illinois Environmental Protection Agency, USEPA, or members of the regulated community. The Board often makes revisions as a result.

The revisions thus made are not directly derived from federal amendments. The Board is ever mindful of the limited discretion authorized in the context of an identical-in-substance proceeding. The Board is limited to (1) "those changes that are necessary for compliance with the Illinois Administrative Code"; (2) "technical changes that in no way change the scope or meaning of any portion of the regulations"; (3) "USEPA rules that are not applicable to persons or facilities in Illinois"; (4) "things which are outside the Board's normal functions"; and (5) "apparent typographical and grammatical errors." *See* 415 ILCS 5/7.2(a), (a)(1), (a)(2), and (a)(7) (2010). Thus, the Board will only make minor, non-substantive corrections and clarifications in this context. These corrections are non-substantive in effect.

The Board is including a number of corrections and clarifications in this docket. The Board has cataloged a small number of necessary corrections and clarifications since the last SDWA update docket, <u>SDWA Subtitle C Update</u>, <u>USEPA Amendments (January 1, 2011 through June 30, 2011)</u>, R12-4 (Apr. 19, 2012). This opinion and order does not include specific discussion of most of the particular corrective amendments in detail. All corrections are itemized in Table 3, which begins on page 42 of this opinion. The following segments briefly discuss only the more significant of the corrections.

The Board requested that the Illinois Environmental Protection Agency (Agency), the Joint Committee on Administrative Rules (JCAR), USEPA and the regulated community review

the tables and the text of the corrections in the proposal for public comment and comment as necessary. The Board received no comments on those corrections.

The Board requests ongoing assistance of the Agency, JCAR, and the regulated community in the process of spotting and correcting errors or omissions in the rules. The Board requests that interested persons submit suggestions for the correction of any errors of which they become aware. The Board will catalog suggestions for revisions for consideration in a future proceeding.

#### Removal of Past Effective Dates and Obsolete Text.

The existing text of several rules includes a number of past effective dates and obsolete provisions. These are associated with several federal rules. As part of the Board's effort to update and correct the Illinois identical-in-substance rules on an ongoing basis, the Board is removing recitations of past effective dates and obsolete provisions in this proceeding.

When USEPA revises or supersedes a federal rule in a way that Board adoption of a corresponding Illinois rule will occur before the effective date of that underlying USEPA change, the Board does three things to accommodate the delay in the revisions made. First, the Board adds a statement of the delayed effective date to the newer requirements. Second, the Board prefaces the existing requirements with an eclipse date. Third, the Board often adds explanatory language, whether parenthetically within the text of the affected rule or in an appended Board note, where the Board believes that this is necessary to enhance clarity. The individual discussions of the past effective dates involved here provide examples of each type of addition.

Removal of the Effective Date and Obsolete Text from Adoption of the Arsenic Rule and the New Source Rule Clarifications. USEPA adopted the arsenic rule on January 22, 2001 (at 66 Fed. Reg. 6976). That rule changed the maximum contaminant level (MCL) for arsenic to  $0.01 \text{ mg/}\ell$ . See 40 C.F.R. 141.62(b) (2012). USEPA gave the arsenic rule an effective date of January 23, 2006. See 40 C.F.R. 141.6(j) and 141.60(b)(4) (2012). USEPA added the limiting words "until January 23, 2006" to the recitation of the pre-existing arsenic standard of  $0.05 \text{ mg/}\ell$ . See 40 C.F.R. 141.11(a) (2012).

Together with the arsenic rule, USEPA included clarifications of the requirements by which a new source of drinking water complies with the rule (new suppliers and existing suppliers that use a new raw water source). USEPA delayed the deadline for complying with the clarified requirements until January 22, 2004 for inorganic, volatile organic, and synthetic organic chemical contaminants. *See* 40 C.F.R. 141.6(k), 141.23(c)(9), 141.24(f)(22), and (h)(20) (2012); 66 Fed. Reg. 6976, 6990.

 $<sup>^2</sup>$  USEPA revised the arsenic standard to 0.010 mg/ $\ell$  on March 25, 2003 to clarify the significant digits of the standard. *See* 68 Fed. Reg. 14502, 03 (Mar. 25, 2003). The board adopted this change in <u>SDWA Update</u>, <u>USEPA Amendments (January 1, 2003 through June 30, 2003)</u>, R04-3 (Mar. 4, 2004), slip. op. at p. 3.

The Board adopted the arsenic rule in 2002. *See SDWA Update, USEPA Amendments (January 1, 2001 through June 30, 2001; Arsenic Rule)*, R02-5 (Feb. 21, 2002). To do so, the Board made the following changes in the Illinois rules:

- Changed the statement relative to analytical requirements for the old MCL as follows for enhanced clarity in 35 Ill. Adm. Code 611.300(a): "analyses <u>and determination of compliance with the 0.05 mg/l MCL</u> for arsenic are to be performed" (addition underlined);
- Added the "until January 23, 2006" limitation to the "old MCL" for arsenic in 35 Ill. Adm. Code 611.300(b);
- Added an explanation that the subsection would become a State-only provision upon expiration of the old MCL for arsenic in the Board note appended to 35 Ill. Adm. Code 611.300(b);
- Added the revised MCL for arsenic to the listing in 35 Ill. Adm. Code 611.301(b), appending the parenthetical "(effective January 23, 2006)" to the MCL;
- Added the method detection limits for arsenic to the table in 35 Ill. Adm. Code 611.600(d), including footnote 6, which recited the future effective date together with the then-existing standard that was applicable until that date;
- Added recitations of the February 22, 2002 effective date for the additions of arsenic to the monitoring requirements in 35 Ill. Adm. Code 611.601(d)(1), 611.603, and 611.606(a);<sup>3</sup>

<sup>3</sup> The federal amendments were generally effective on March 23, 2001, except that major segments of the arsenic rule and clarifications of the new source rules had delayed effective dates as described above. *See* 40 C.F.R. 141.6(c), (j), and (k) (2012); 66 Fed. Reg. at 6976. USEPA, however, twice extended the effective date, ultimately until February 22, 2002. *See* 66 Fed. Reg. 28342 (May 22, 2001); 66 Fed. Reg. 16134 (Mar. 23, 2001). The Board expressly added the February 22, 2002 effective date to these three provisions of the arsenic rule, although USEPA had not included them in the text of corresponding 40 C.F.R. 141.23(a)(5), (c), and (f)(1) (2012). (On the date of the Board vote to adopt the amendments, this was a future effective date.) SDWA Update, USEPA Amendments (January 1, 2001 through June 30, 2001; Arsenic Rule), R02-5 (Feb. 21, 2002), slip op. at pp. 8-10, 16. The Board removed the February 22, 2002 past effective date from 35 Ill. Adm. Code 611.603 and 611.606(a) in 2003 and from 35 Ill. Adm. Code 611.601(d)(2) in 2004. *See* SDWA Update, USEPA Amendments (January 1, 2003 through June 30, 2003), R04-3 (Mar. 4, 2004), slip. or. at p. 124, slip op. at p. 14; SDWA Update, USEPA Amendments (July 1, 2002 through December 31, 2002), R03-15 (Oct. 2, 2003), slip. or. at pp. 246, 52, slip op. at pp. 54, 55.

- Added recitations of the January 22, 2004 effective date for the clarified new source compliance requirements in 35 Ill. Adm. Code 611.603(i), 611.609(a) and (b), 611.646(o) and (v), and 611.648(k) and (t); and
- Retained recitations of the pre-January 22, 2004 requirements for the new source compliance requirements in 35 Ill. Adm. Code 611.646(o) and 611.648(k), prefaced with "until January 22, 2004"; and
- Added recitations of the July 1, 2002 and January 22, 2006 effective dates for the changed consumer confidence report requirements relative to arsenic in 35 Ill. Adm. Code 611.884(b) and (f); 611.Appendix A, notes 8 & 9; and 611.Appendix B, note 11. See SDWA Update, USEPA Amendments (January 1, 2001 through June 30, 2001; Arsenic Rule), R02-5 (Feb. 21. 2002), slip or. at pp. 56, 57, 60, 96, 98, 100, 103, 104-05, 106, 120, 126-27, 129, 133-35, 138, 152, 156, 175, 180, 184, 198.

In 2009, USEPA removed USEPA Environmental Metals Methods, Method 200.7 for arsenic from 40 C.F.R. 141.23(k)(1) table & note 15. *See* 74 Fed. Reg. 30953, 57 (June 29, 2009). The Board made a corresponding change in 35 Ill. Adm. Code 611.611(a)(3)(A) in the appropriate update docket. *See* SDWA Update, USEPA Amendments (January 1, 2009 through June 30, 2009), R10-1, SDWA Update, USEPA Amendments (July 1, 2009 through December 31, 2009), R10-17, SDWA Update, USEPA Amendments (January 1, 2010 through June 30, 2010), R11-6 (Dec. 2, 2010) (consol.), slip or. at p. 136.

To complete the amendments made in <u>SDWA Update</u>, <u>USEPA Amendments</u> (<u>January 1</u>, <u>2001 through June 30, 2001</u>; <u>Arsenic Rule</u>), R02-5 (Feb. 21. 2002) and to enhance the clarity of the arsenic MCL, the Board is removing the recitations of the past effective date for the arsenic rule. This involves the following revisions to the Illinois rules:

- Remove the statement relative to analytical requirements for the old MCL for arsenic from 35 Ill. Adm. Code 611.300(a);
- Remove the recitation of the old MCL for arsenic, including the expiration date, from 35 Ill. Adm. Code 611.300(b);

<sup>4</sup> These two subsections included separate January 22, 2004 effective dates for both the arsenic rule and the new system compliance clarifications. *See* 35 Ill. Adm. Code 611.609(a) and (b); 40 C.F.R. 141.6(j) and (k), 141.23(j)(1) and (j)(2); 66 Fed. Reg. at p. 6976.

<sup>&</sup>lt;sup>5</sup> The Board actually restored the pre-existing provision relative to reduced monitoring. *See* SDWA Update, USEPA Amendments (January 1, 2001 through June 30, 2001; Arsenic Rule), R02-5 (Feb. 21, 2002), slip or. at p. 134, slip op. at p. 51. The Board had deleted the original provision of 35 Ill. Adm. Code 611.648(k) (corresponding with 40 C.F.R. 141.24(h)(11)) in error when USEPA removed only 40 C.F.R. 141.24(h)(11)(iii) in 2000. *See* SDWA Update, USEPA Amendments (January 1, 2000 through June 30, 2000; Arsenic Rule), R01-7 (Jan. 4, 2001), slip or. at p. 102-03, slip op. at p. 14; 65 Fed. Reg. 25982, 6022 (May 4, 2000).

- Change the explanation in the Board notes appended to 35 Ill. Adm. Code 611.300(a) and (b) to statements that the each is an additional State requirement;
- Remove the parenthetical "(effective January 23, 2006)" from the revised MCL for arsenic in 35 Ill. Adm. Code 611.301(b); and
- Remove footnote 6, which states a transition on the past effective date, from arsenic and the end of the table of detection limits in 35 Ill. Adm. Code 611.600(d).
- Remove the recitations of the January 22, 2004 compliance deadline for the clarified new source rule from 35 Ill. Adm. Code 611.603(i);
- Remove the recitations of the January 22, 2004 compliance deadline relative to monitoring for arsenic in 35 Ill. Adm. Code 611.609(a) and (b);<sup>7</sup>
- Remove the parenthetical "(effective January 23, 2006)" from the laboratory certification requirements relative to the revised MCL for arsenic in 35 Ill. Adm. Code 611.611(c);
- Remove the obsolete introductory clause "except for arsenic, for which analyses must be made in accordance with Section 611.611" and its offsetting comma from the analytical requirements applicable to the old MCLs in 35 Ill. Adm. Code 611.612(f);
- Remove the recitations of the January 22, 2004 compliance deadline for the clarified new source rule from 35 Ill. Adm. Code 611.646(o) through (o)(5) and (v) and 611.648(k) through (k)(5) and (t), together with the obsolete provisions in 35 Ill. Adm. Code 611.646(o)(6) and (o)(7) and 611.648(k)(6) through (k)(7);
- Remove the obsolete arsenic public health effects notification language requirement from 35 Ill. Adm. Code 611.884(f);
- Remove the obsolete language from the statement of the arsenic MCL, "0.05 until January 23, 2006 or 0.010 effective January 23, 2006" (deletions indicated by overstrike) and the parenthetical "(effective January 26, 2006)" from the MCLG for arsenic from 35 Ill. Adm. Code 611.Appendix A;
- Remove obsolete endnotes 8 and 11 relative to arsenic (and 9 relative to uranium), renumber endnotes 10 and 12 through 22 as endnotes 8 through 19, correct ¶ B.2. by

<sup>&</sup>lt;sup>6</sup> This necessitates renumbering footnotes 7 through 9 as footnotes 6 through 8 in other entries for arsenic and cyanide and at the end of the table.

<sup>&</sup>lt;sup>7</sup> Additionally, moved the final statement from subsection (a) to appear as a final subsection (a)(4), which corresponds with the order of the statements in corresponding 40 C.F.R. 141.23(i)(1).

adding a reference to "611.603" as the counterpart for 40 C.F.R. 141.23(f)(3), as cited in corresponding appendix A to Subpart Q of 40 C.F.R. 141, and remove obsolete citations from ¶ B.2. to the old arsenic MCL at 35 Ill. Adm. Code 611.612(a) and (b); and

• Remove endnotes 11 and 17 and renumber endnotes 12 through 16 and 18 through 23 as endnotes 11 through 21 in 35 Ill. Adm. Code 611.Appendix H, .

Removal of the Past Effective Date and Obsolete Text from Adoption of the Radionuclides Rule. USEPA adopted the radionuclides rule on December 7, 2000 (at 65 Fed. Reg. 76708). That rule changed the MCLs for various parameters relative to radionuclide content of drinking water. USEPA removed the existing standards for radionuclides in their entirety effective December 3, 2003. See 40 C.F.R. 141.15 and 141.16 (2003) (effective date note); 65 Fed. Reg. at 76745 (removing 40 C.F.R. 141.15 and 141.16). USEPA replaced the old MCLs for radionuclides with new standards effective December 3, 2003. See 40 C.F.R. 141.66 (2012).

The Board adopted the radionuclides rule in 2001. *See SDWA Update, USEPA Amendments (July 1, 2000 through December 31, 2000; Radionucides)*, R01-20 (Oct. 4, 2001). To do so, the Board made the following changes in the Illinois rules:

- Added "effective December 8, 2003," to the new standards for radionuclide parameters in 35 Ill. Adm. Code 611.330(d), (e), and (f);
- Added "the following provisions apply until December 8, 2003:" as a preamble statement before the old MCLs in 35 Ill. Adm. Code 611.331;
- Added "effective December 8, 2003" as a preamble statement and "by December 31, 2007" relative to compliance monitoring in 35 Ill. Adm. Code 611.731(a);
- Added "effective December 8, 2003" as a preamble statement relative to compliance monitoring in 35 Ill. Adm. Code 611.731(b), (c), (d), and (e);
- Added a reference to "December 31, 2007" as the deadline for collecting four consecutive quarterly samples in 35 Ill. Adm. Code 611.731(b)(1);

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 $<sup>^8</sup>$  The standards removed were for radium-226, radium-228, combined radium, gross alpha particle activity, beta particle and photon activity from man-made radionuclides. *See* 40 C.F.R. 141.15 and 141.16 (2003).

<sup>&</sup>lt;sup>9</sup> The effective date for some of the monitoring requirements was December 31, 2007. *See* 40 C.F.R. 141.26(a)(1) and (a)(2)(i) (2012) (relative to gross alpha particle activity, radium-226, radium-228, uranium, and beta particle and photon activity.

- Added references to "June 2000 and December 8, 2003" as the period during which samples collected under the existing rule could be grandfathered in 35 Ill. Adm. Code 611.731(b)(2)(A), (b)(2)(C), and (b)(2)(D);
- Added "until December 8, 2003" as a preamble statement before the existing compliance monitoring requirements in 35 Ill. Adm. Code 611.731(f), (g), and (h);
- Added "effective December 8, 2003" as a preamble statement relative to compliance determination in 35 Ill. Adm. Code 611.732(a), (b), (c), (d), (e), and (f);
- Added "until December 8, 2003" as a preamble statement before the existing compliance determination requirements in 35 Ill. Adm. Code 611.731(g), (h), (i), and (j).

The Board later incompletely removed the transitional aspects of the radionuclides rule amendments <sup>10</sup> in <u>SDWA Update</u>, <u>USEPA Amendments</u> (<u>January 1</u>, <u>2003 through June 30</u>, <u>2003</u>), R04-3 (Mar. 4. 2004). The Board removed two recitations of the past effective date from 35 Ill. Adm. Code 611.330(f) and repealed 35 Ill. Adm. Code 611.311. The Board, however, left recitations of the past effective date at 35 Ill. Adm. Code 611.330(d), (e), and (f). *See* <u>SDWA Update</u>, <u>USEPA Amendments</u> (<u>January 1</u>, <u>2003 through June 30</u>, <u>2003</u>), R04-3 (Mar. 4. 2004), slip op. at p. 6, slip or at pp. 79-80, 83.

To complete the amendments made in <u>SDWA Update</u>, <u>USEPA Amendments</u> (<u>July 1</u>, <u>2000 through December 31, 2000; Radionucides</u>), R01-20 (Oct. 4, 2001), as modified in <u>SDWA Update</u>, <u>USEPA Amendments</u> (<u>January 1, 2003 through June 30, 2003</u>), R04-3 (Mar. 4. 2004), and to enhance the clarity of the radionuclides rule, the Board is removing the recitations of the past effective date in the following Illinois rules:

<sup>10</sup> The Board also removed several unrelated past effective dates and obsolete provisions: 35 III. Adm. Code 611.130(a), 611.211(b)(6), 611.232(f), 611.310, 611.640, 611.683 through 611.688, Appendix G to 35 Ill. Adm. Code 611, ¶ G.1. and endnote 14, and Appendix H to 35 Ill. Adm. Code 611, ¶ 80 and endnote 19 (re an old MCL for total trihalomethanes); 35 Ill. Adm. Code 611.230, 611.240(e), and 611.250 (re past effective dates for surface water filtration requirements); 35 Ill. Adm. Code 611.311(a) and (c) (recitations of a past effective date for MCLs for several organic chemical contaminants); 35 Ill. Adm. Code 611.601(d)(2) (a recitation of a past effective date for arsenic monitoring); 611.646(r) and 611.648(n) (expired provisions relative to grandfathering data); 611.882(c)(1) (a past effective date for initiating consumer confidence reporting); Appendix G to 35 Ill. Adm. Code 611, endnote 7 (relative to the interim enhanced surface water treatment rule); Appendix G to 35 Ill. Adm. Code 611, endnote 13 (relative to the disinfection and disinfectant byproducts rule); and Appendix G to 35 Ill. Adm. Code 611, ¶ F.4 and endnotes 11 and 12 and Appendix H to 35 Ill. Adm. Code 611, ¶ 79 and endnote 17 (relative to the old MCL for uranium). See SDWA Update, USEPA Amendments (January 1, 2003 through June 30, 2003), R04-3 (Mar. 4, 2004), slip op. at p. 6, slip or. at pp. 52-53, 59-60, 62-63, 74-76, 78, 80, 83, 124, 154, 160-61, 164-67, 183, 218, 220-21, 234, and 239.

- Remove the recitation of the past effective date from 35 Ill. Adm. Code 611.330(d), (e), and (f).
- Remove "effective December 8, 2003" and "by December 31, 2007" from 35 Ill. Adm. Code 611.731(a);
- Remove "effective December 8, 2003" from 35 Ill. Adm. Code 611.731(b), (c), (d), and (e);
- Retain "December 31, 2007" as the deadline for collecting four consecutive quarterly samples, but change the present modal "must collect" to present imperative participle "is required to have collected" to indicate the past date in 35 Ill. Adm. Code 611.731(b)(1);
- Retain "between June 2000 and December 8, 2003" in 35 Ill. Adm. Code 611.731(b)(1)(A), (b)(1)(B), and (b)(1)(C);
- Remove the obsolete compliance monitoring requirements from 35 Ill. Adm. Code 611.731(f), (g), and (h);
- Remove "effective December 8, 2003" from 35 Ill. Adm. Code 611.732(a), (b), (c), (d), (e), and (f);
- Remove the obsolete provisions from 35 Ill. Adm. Code 611.732(g), (h), (i), and (j).

Removal of the Past Effective Dates and Obsolete Text from Adoption of the Stage 2 DDBR. USEPA adopted the stage 2 disinfectants and disinfection byproducts rule (Stage 2 DDBR) on January 4, 2006 (at 71 Fed. Reg. 388). That Stage 2 DDBR established new MCLs and monitoring requirements for total trihalomethanes (TTHM), haloacetic acids (HAA5), chlorites, and bromates. *See* 40 C.F.R. 141.64 and 141.131 through 141.135 (2012). The Stage 2 DDBR included multiple delayed effective dates, as follows:

- The laboratory performance evaluation (PE) sample requirements changed on April 1, 2007. *See* 40 C.F.R. 141.131(b)(2)(ii) and (b)(2)(iii) (2012). USEPA added the limiting words "until March 31, 2007" to the recitation of the pre-existing provisions. *See* 40 C.F.R. 141.131(b)(2)(ii) (2012). USEPA prefaced the new requirements with "beginning April 1, 2007." *See* 40 C.F.R. 141.131(b)(2)(iii) (2012).
- The requirements for reporting TTHM, HAA5, and chlorite monitoring results were effective on April 1, 2007. *See* 40 C.F.R. 141.131(b)(2)(iv) (2012). USEPA prefaced the new requirements with "beginning April 1, 2007." *See* 40 C.F.R. 141.131(b)(2)(iv) (2012).
- The requirements for reduced monitoring changed on April 1, 2008. *See* 40 C.F.R. 141.132(b)(1)(iii) and (b)(3)(ii) (2012). USEPA added the limiting words "until March 31, 2009" to the recitation of the pre-existing provisions. *See* 40 C.F.R.

141.132(b)(3)(ii)(A) (2012). USEPA prefaced the new requirements with "beginning April 1, 2009." *See* 40 C.F.R. 141.132(b)(1)(iii) and 141.132(b)(3)(ii)(B) (2012).

- USEPA staged the deadlines for completion of the mileposts for initial distribution system evaluations (IDSEs), depending on the population served and whether the system is part of a combined distribution system, between October 1, 2006 and July 1, 2010. *See* 40 C.F.R. 141.600(c)(1) table (2012).
- USEPA further used the staged the deadlines for the IDSE mileposts for the deadlines for submission of data needed for 40/30 certification. See 40 C.F.R. 141.603(a) table (2012).
- USEPA staged the deadlines for compliance with the new MCLs for TTHM, HAA5, maximum disinfectant residuals for chlorine and chloramine, depending on the population served, whether the system is part of a combined distribution system, and whether monitoring for *Cryptosporidium* is required, between April 1, 2012 and October 1, 2014. *See* 40 C.F.R. 141.620(c) table (2012).
- The chlorine and chloramines disinfectant residual monitoring requirements for consecutive systems changed on April 1, 2009. *See* 40 C.F.R. 141.624 (2012).

The Board adopted the Stage 2 DDBR in 2007. *See* SDWA Update, USEPA Amendments (January 1, 2006 through June 30, 2006), R07-2, SDWA Update, USEPA Amendments (July 1, 2006 through December 31, 2006), (July 26, 2007) (consol.). In adopting the Stage 2 DDBR, the Board did not recite the past effective date or obsolete provision relating to laboratory PE samples or reporting TTHM, HAA5, and chlorite monitoring results. *See* 35 Ill. Adm. Code 611.381(b)(2)(B), (b)(2)(C) and (b)(2)(D); SDWA Update, USEPA Amendments (January 1, 2006 through June 30, 2006), R07-2, SDWA Update, USEPA Amendments (July 1, 2006 through December 31, 2006), (July 26, 2007) (consol.), slip op. at pp. 35-36 (summary listing of deviations from the federal text). The Board, however, recited the past deadlines for completion of IDSE mileposts, rendering those deadlines in past perfect modal, in an attempt to clarify that the dates are past. *See* 35 Ill. Adm. Code 611.920(c)(1)(A) and (c)(1)(B); SDWA Update, USEPA Amendments (January 1, 2006 through June 30, 2006), R07-2, SDWA Update, USEPA Amendments (July 1, 2006 through December 31, 2006), (July 26, 2007) (consol.), slip op. at p. 62 (summary listing of deviations from the federal text).

The bulk of the effective dates and deadlines in the Stage 2 DDBR, remained future dates at the time the Board adopted the Stage 2 DDBR. The Board found it necessary to accommodate the following future effective dates:

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<sup>&</sup>lt;sup>11</sup> This is a certification that the system had no individual sample exceed 40 μg/ $\ell$  for TTHM and that no individual sample exceed 30 μg/ $\ell$  for HAA5 during an eight-consecutive-quarter period. *See* 40 C.F.R. 141.603(a) (2012); 35 Ill. Adm. Code 611.923(a).

- Retained the federal future effective date and eclipsed requirements for reduced monitoring in 35 Ill. Adm. Code 611.382(b)(1)(C), (b)(3)(B)(i), and (b)(3)(B)(ii);
- Retained the appropriate federal future deadlines relative to the IDSE mileposts in 35 III. Adm. Code 611.920(c)(1)(A) through (c)(1)(D);
- Retained the recitation of the federal future deadlines for the IDSE mileposts in 35 III. Adm. Code 611.923(a)(1) through (a)(4), as those deadlines determine the data set needed for 40/30 certification; <sup>12</sup>
- Retained the federal future effective date for chlorine and chloramines disinfectant residual monitoring requirements in 35 Ill. Adm. Code 611.924;
- Retained the federal future effective date for compliance with the new MCLs for TTHM, HAA5, maximum disinfectant residuals for chlorine and chloramines disinfectant residual monitoring requirements in 35 Ill. Adm. Code 611.970(c)(1) through (c)(4); and
- Retained the federal future effective date for compliance with the chlorine and chloramines disinfectant residual monitoring requirements for consecutive systems in 35 Ill. Adm. Code 611.974 (2012). *See* SDWA Update, USEPA Amendments (January 1, 2006 through June 30, 2006), R07-2, SDWA Update, USEPA Amendments (July 1, 2006 through December 31, 2006), (July 26, 2007) (consol.), slip op. at p. 11, slip or. at pp. 87, 141-42, 155, 156, and 160-61.

To complete the amendments made in <u>SDWA Update</u>, <u>USEPA Amendments</u> (<u>January 1</u>, <u>2006 through June 30, 2006</u>), R07-2, <u>SDWA Update</u>, <u>USEPA Amendments</u> (<u>July 1, 2006</u>) through <u>December 31, 2006</u>), (July 26, 2007) (consol.) and enhance the clarity of the Stage 2 DDBR, the Board is revising the recitations of the past effective dates. This involves the following revisions to the Illinois rules:

- Remove the past federal effective dates from 35 III. Adm. Code 611.382(b)(1)(C) and (b)(3)(B)(ii) and the obsolete text relative of 35 III. Adm. Code 611.382(b)(3)(B)(ii), moving the remaining text from 35 III. Adm. Code 611.382(b)(3)(B)(ii) to appear as 35 III. Adm. Code 611.382(b)(3)(B);
- Retain the past effective dates to clearly show when compliance was required, but change the past perfect modal "must have [verb infinitive]" in 35 Ill. Adm. Code 611.920(c)(1)(A), (c)(1)(B), and (c)(1)(C) (first sentence) to the present imperative combined with the past participle "is required to have [past participle]," since the use of "must" in a past modal can be read in a epistemic, rather than the intended deontic, sense;

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<sup>&</sup>lt;sup>12</sup> The Board could have shifted the language to past-tense in subsections (a)(1) and (a)(2), but did not do so. As is explained immediately below, the Board is now making that change.

• Retain the past effective dates to clearly show when compliance was required, but change the future modal "must further complete . . . and submit" in 35 III. Adm. Code 611.920(c)(1)(C) (second sentence) to the present imperative combined with the past participle "is required to have completed . . . and submitted," since the compliance deadlines are now past dates;

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- Retain the past effective dates to clearly show when compliance was required, but change the past-perfect modals "must either have submitted . . . or must have obtained or have been subject to" to the present imperatives combined with the past participles "is required to have either submitted . . . or obtained or been subject to" and the future modal "must further complete . . . and submit" to present imperatives combined with the past participles "is further required to have completed . . . and submitted" in 35 Ill. Adm. Code 611.920(c)(1)(D), since the compliance deadlines are now past dates;
- Change the future modals "must submit . . . or must obtain or be subject to" to the present imperatives combined with the past participles "is required to have either submitted . . . or obtained or been subject to" and the future modal "must further complete . . . and submit" to present imperatives combined with the past participles "is further required to have completed . . . and submitted" in 35 Ill. Adm. Code 611.920(c)(1)(E), since the underlying compliance deadlines are now past dates;
- Change future "is due" to past-tense "was due"; the future negative "does not" to past-tense "did not"; the future participle "has not yet completed" to past "had not yet completed"; and future modal "may consider" to past "could consider"; the future modals "must [verb infinitive]" to the present imperatives combined with the past participles "is required to have [past participle]" in 35 Ill. Adm. Code 611.920(c)(1)(F), since the underlying compliance deadlines are now past dates;
- Change future modal "must submit" to the present imperatives combined with the past participle "is required to have submitted" in 35 Ill. Adm. Code 611.920(c)(1)(G), since the underlying compliance deadlines are now past dates;
- Change future modal "must [verb infinitive]" to the present imperatives combined with the past participles "is required to have either [past participle]"; the future negative "does not" to past-tense "did not"; the future participle "has not yet completed" to past "had not yet completed"; and future modal "may consider" to past "could consider" in 35 Ill. Adm. Code 611.920(c)(1)(H), since the underlying compliance deadlines are now past dates;
- Retain the past effective dates to clearly show when compliance was required, but change the future "is due" to past "was due"; "based" to past-tense "was based"; and "beginning" to past-tense "that began" in 35 Ill. Adm. Code 611.923(a)(1), (a)(2), (a)(3), and (a)(4); 13

<sup>&</sup>lt;sup>13</sup> The Board did not similarly change "is based" to past-tense "was based" in subsection (a)(5), since this provision describes a present requirement without reliance on a past effective date. *See* 35 Ill. Adm. Code 611.923(a)(5).

- Retain the past effective dates to clearly show when compliance was required, but change the future modal "must comply" to the present imperatives combined with the past participles "is required to have complied" in 35 Ill. Adm. Code 611.970(c)(1) and (c)(2); and
- Retain the federal future effective dates and the future modals "must comply" for compliance with the new MCLs for TTHM, HAA5, maximum disinfectant residuals for chlorine and chloramines disinfectant residual monitoring requirements in 35 Ill. Adm. Code 611.970(c)(3), (c)(4), and (c)(5).
- Remove the recitation of the federal future effective date for compliance with the chlorine and chloramines disinfectant residual monitoring requirements for consecutive systems, including the parenthetical "unless the supplier is required to comply earlier by the Agency" in 35 Ill. Adm. Code 611.974.

Removal of the Past Effective Dates and Obsolete Text from Adoption of the LT2SWTR. USEPA adopted the long-term 2 surface water treatment rule (LT2SWTR) on January 5, 2006 (at 71 Fed. Reg. 388). That LT2SWTR established new treatment techniques, monitoring, reporting, and public notification requirements applicable to systems that use surface water or groundwater under the influence of surface water as a raw water source. The purpose of the LT2SWTR is protection of human health against microbial contamination of drinking water, including against *Cryptosporidium* and *Giardia lamblia*. *See* 40 C.F.R. 141.211 and 141.700 through 141.723 (2012). The LT2SWTR included a number of delayed effective dates, as follows:

- The deadline for a supplier to notify persons on its water system of its failure to complete source water monitoring is 30 days after a failure to collect three months of monitoring by the deadline in 40 C.F.R. 141.701(c). See 40 C.F.R. 141.211(a) (2012).
- USEPA staged the deadlines for a supplier to begin the first round of source water monitoring, depending on the population served, whether the system is part of a combined distribution system, and whether monitoring for *Cryptosporidium* is required, between October 1, 2006 and April 1, 2010. For the second round, the deadlines are staged on the same bases between April 1, 2015 and April 1, 2019. *See* 40 C.F.R. 141.701(c) table (2012).
- The deadline for a supplier to report grandfathered monitoring data is two months after the deadline for beginning the first round of monitoring in 40 C.F.R. 141.701(c). *See* 40 C.F.R. 141.707(f)(2) (2012).
- The deadline for a supplier to report its initial bin classification is six months after the deadline for completing the first round of monitoring in 40 C.F.R. 141.701(c). *See* 40 C.F.R. 141.710(e)(1) (2012).

- The deadline for a supplier to report its bin classification is six months after the deadline for completing the second round of monitoring in 40 C.F.R. 141.701(c). *See* 40 C.F.R. 141.710(e)(2) (2012).
- The deadline for a supplier to calculate and report its mean *Cryptosporidium* level is six months after the deadline for completing the first and second rounds of monitoring in 40 C.F.R. 141.701(c). *See* 40 C.F.R. 141.712(a)(1) and (a)(2) (2012).
- USEPA staged the deadlines for a supplier to comply with *Cryptosporidium* treatment, depending on the population served, between April 1, 2012 and October 1, 2014. *See* 40 C.F.R. 141.713(c) table (2012).
- The deadline for a supplier to notify the state of use of an uncovered finished water tank was April 1, 2008. *See* 40 C.F.R. 141.714(b) (2012).
- The deadline for a supplier to cease or continue use of an uncovered finished water tank was April 1, 2009. *See* 40 C.F.R. 141.714(c) (2012).
- The deadline for a supplier to notify the state that the supplier intends to seek watershed control credits is two years before the applicable deadline for compliance with the *Cryptosporidium* treatment requirements of 40 C.F.R. 141.713. *See* 40 C.F.R. 141.716(a)(1) (2012).
- The deadline for a supplier to submit a watershed control plan to the state is one year before the applicable deadline for compliance with the *Cryptosporidium* treatment requirements of 40 C.F.R. 141.713. *See* 40 C.F.R. 141.716(a)(2) (2012).
- The deadline for a supplier to change its intake location or procedure or timing of water withdrawal is the applicable deadline for compliance with the *Cryptosporidium* treatment requirements of 40 C.F.R. 141.713. *See* 40 C.F.R. 141.716(b)(4) (2012).

The Board adopted the LT2SWTR in 2007. *See* <u>SDWA Update, USEPA Amendments</u> (<u>January 1, 2006 through June 30, 2006</u>), R07-2, <u>SDWA Update, USEPA Amendments (July 1, 2006 through December 31, 2006</u>), (July 26, 2007) (consol.). In adopting the Stage 2 DDBR, the Board recited the then-only past effective dates of October 1, 2006 and April 1, 2007 together with all other effective dates, which were future dates. The bulk of the effective dates and deadlines in the LT2SWTR remained future dates at the time the Board adopted the LT2SWTR. The Illinois LT2SWTR included the following effective dates:

- Retained the federal deadline in 35 Ill. Adm. Code 611.911(a) for a supplier to notify persons on its water system of its failure to complete source water monitoring 30 days after a failure to collect three months of monitoring by the deadline as required by 35 Ill. Adm. Code 611.1001(c);
- Retained the staged deadlines for a supplier to begin the first and second rounds of source water monitoring in 35 Ill. Adm. Code 611.1001(c);

- Retained the federal deadline in 35 III. Adm. Code 611.1007(f)(2) for a supplier to report grandfathered monitoring data two months after the deadline for beginning the first round of monitoring as required by 35 III. Adm. Code 611.1001(c);
- Retained the federal deadline in 35 Ill. Adm. Code 611.1010(e)(1) for a supplier to report its initial bin classification six months after the deadline for completing the first round of monitoring as required by 35 Ill. Adm. Code 611.1001(c);
- Retained the federal deadline in 35 Ill. Adm. Code 611.1010(e)(2) for a supplier to report its bin classification six months after the deadline for completing the second round of monitoring as required by 35 Ill. Adm. Code 611.1001(c);
- Retained the federal deadline in 35 Ill. Adm. Code 611.1012(a)(1) and (a)(2) for a supplier to report its mean *Cryptosporidium* levels within six months of completing the first and second rounds of monitoring as required by 35 Ill. Adm. Code 611.1001(c);
- Retained the federal deadline for a supplier to comply with *Cryptosporidium* treatment requirements 35 Ill. Adm. Code 611.1013(c);
- Retained the federal deadline for a supplier to notify the state of use of an uncovered finished water tank in 35 Ill. Adm. Code 611.1014(b);
- Retained the federal deadline for a supplier to cease or continue use of an uncovered finished water tank in 35 Ill. Adm. Code 611.1014(c);
- Retained the federal deadline for a supplier to notify the state that it intends to seek watershed control credits in 35 Ill. Adm. Code 611.1016(a)(1);
- Retained the federal deadline for a supplier to submit a watershed control plan to the state in 35 Ill. Adm. Code 611.1016(a)(2); and
- Retained the federal deadline for a supplier to change its intake location or procedure or timing of water withdrawal in 35 Ill. Adm. Code 611.1016(b)(4).

To complete the amendments made in <u>SDWA Update</u>, <u>USEPA Amendments</u> (January 1, 2006 through June 30, 2006), R07-2, <u>SDWA Update</u>, <u>USEPA Amendments</u> (July 1, 2006 through December 31, 2006), R07-11 (July 26, 2007) (consol.) and enhance the clarity of the LT2SWTR, the Board is revising the recitations of the past effective dates. This involves the following revisions to the Illinois rules:

• No change in the deadline in 35 Ill. Adm. Code 611.911(a) for a supplier to notify persons on its water system of its failure to complete source water monitoring 30 days after a failure to collect three months of monitoring by the deadline as required by 35 Ill. Adm. Code 611.1001(c);

- Retain the past effective date to clearly show when compliance was required, but change the modal "must begin" in 35 Ill. Adm. Code 611.1001(c)(1), (c)(2), (c)(3), (c)(4), and (c)(5), relative to the first round of monitoring only, to the present imperative combined with the past participle "is required to have begun";
- Retain the future effective dates in 35 Ill. Adm. Code 611.1001(c)(1), (c)(2), (c)(3), (c)(4), and (c)(5) that recite when compliance with the second round of source water monitoring will be required;
- Change the present-tense modals "is required to [verb infinitive]" to the present imperatives combined with the past participles "is required to have [past participle]" and the present imperative "is required to complete" to the present imperative combined with past participles "is required to have completed" in 35 Ill. Adm. Code 611.1012(a)(1) for a supplier to complete the initial round of source water monitoring within six months as required by 35 Ill. Adm. Code 611.1001(c);<sup>14</sup>
- Retain the past effective dates to clearly show when compliance with *Cryptosporidium* treatment was required, but change the modal "must comply" in 35 Ill. Adm. Code 611.1013(c)(1) and (c)(2) to the present imperative combined with the past participle "is required to have complied";
- Retain the future effective dates in 35 Ill. Adm. Code 611.1013(c)(3) and (c)(4) that recite when compliance with *Cryptosporidium* treatment will be required;
- Retain the future effective date in 35 Ill. Adm. Code 611.1014(b) and (c) (which recite when notification of use of an uncovered finished water storage facility or cessation of use without fulfilling specified conditions was required, respectively), but change the modals "must [verb infinitive]" to the present imperatives combined with the past participles "is required to have [past participle]";
- Retain the future federal deadlines for a supplier to notify the state that it intends to seek watershed control credits in 35 Ill. Adm. Code 611.1016(a)(1); and
- Retain the future federal deadlines for a supplier to submit a proposed watershed control plan to the state in 35 Ill. Adm. Code 611.1016(a)(2).

# **Correction to Appendices and Tables.**

The Board is using this opportunity to make corrections to various of the appendices and tables attached to Part 611. Some of the corrections relate to Administrative Code format. Others relate to removal of past effective dates, discussed above beginning on page 12. Others repair errors in the text.

<sup>&</sup>lt;sup>14</sup> The deadline for the initial round is past, but that for the second round has not. For that reason, the language of subsection (a)(2) remains unchanged.

Corrected Administrative Code Format. The codification requirements of the Illinois Administrative Code require that the designations for appendices and tables appear in capital letters. See 1 Ill. Adm. Code 100.310(a)(4)(A). Over the last few years, the Code Unit of the Office of Secretary of State has required that the entire title for an item of supplementary material appear in all capital letters. While the Board does not read the codification regulations to require such, <sup>15</sup> the Board has been converting the titles of appendices, tables, and illustrations to all capital letters.

At the request of JCAR staff, the Board changed the entries for supplementary materials in the table of contents for Part 611 to all capital letters in 2008. *See* SDWA Update, USEPA Amendments (January 1, 2007 through June 30, 2007 and June 3, 2008), R08-7, SDWA Update, USEPA Amendments (July 1, 2007 through December 31, 2007), R08-13 (Dec. 18, 2008) (consol.), slip or. at p. 9, slip op. at pp. 53-54. The titles in the actual text of the supplementary materials have not yet been changed to all capital letters, as they were not involved in the 2008 or subsequent amendments, with one exception: the Board corrected Appendix F to all capital letters in the most recent SDWA update, R12-4. *See* SDWA Update, USEPA Amendments (January 1, 2011 through June 30, 2011), R12-4 (Apr. 19, 2012); SDWA Update, USEPA Amendments (January 1, 2009 through June 30, 2009), R10-1, SDWA Update, USEPA Amendments (July 1, 2009 through December 31, 2009), R10-17, SDWA Update, USEPA Amendments (January 1, 2010 through June 30, 2010), R11-6 (Dec. 2, 2010) (consol.).

The Board uses this opportunity to complete the format change and harmonize the format of the headings for the supplementary materials and their appearance in the table of contents for Part 611. The Board changes the headings format for the following supplementary materials:

611.APPENDIX A	Regulated Contaminants
611.APPENDIX B	Percent Inactivation of G. Lamblia Cysts
611.APPENDIX C	Common Names of Organic Chemicals
611.APPENDIX D	Defined Substrate Method for the Simultaneous Detection of Total Coliforms and Eschericia Coli from Drinking Water
611.APPENDIX E	Mandatory Lead Public Education Information for Community

<sup>&</sup>lt;sup>15</sup> The requirement for marking supplementary materials is that they be "be labeled with a capital letter." 1 Ill. Adm. Code 100.310(a)(4)(A). The examples given in the rule do not appear in all capital letters. 1 Ill Adm. Code 100.310(a)(4)(C) (showing "Illustration', 'Appendix', 'Table', or 'Exhibit'" as examples). This is to be contrasted with the requirements for major subdivisions of the Administrative Code, which expressly requires that the headings appear "all in capital letters" (*see* 1 Ill. Adm. Code 100.300(c)(1) and 100.310(a)(1)) and gives examples in all capital letters (*see* 1 Ill. Adm. Code 100.300(c)(1) and (c)(3) and 100.310(a)(1) ("TITLE," "SUBTITLE," "CHAPTER," "SUBCHAPTER," "PART," and "SUBPART")).

# Water Systems

611.APPENDIX G	NPDWR Violations and Situations Requiring Public Notice
611.APPENDIX H	Standard Health Effects Language for Public Notification
611.APPENDIX I	Acronyms Used in Public Notification Regulation
611.TABLE A	Total Coliform Monitoring Frequency
611.TABLE B	Fecal or Total Coliform Density Measurements
611.TABLE C	Frequency of RDC Measurement
611.TABLE D	Number of Lead and Copper Monitoring Sites
611.TABLE E	Lead and Copper Monitoring Start Dates
611.TABLE F	Number of Water Quality Parameter Sampling Sites
611.TABLE G	Summary of Section 611.357 Monitoring Requirements for Water Quality Parameters
611.TABLE H	CT Values (mg·min/ $\ell$ ) for Cryptosporidium Inactivation by Chlorine Dioxide
611.TABLE I	CT Values (mg·min/ $\ell$ ) for Cryptosporidium Inactivation by Ozone
611.TABLE J	UV Dose Table for Cryptosporidium, Giardia lamblia, and Virus Inactivation Credit
611.TABLE Z	Federal Effective Dates

# Removal of Past Effective Dates and Obsolete Language and Correction of Errors in the Text. Of these appendices, only five are open for other amendments (not including routine updates to citations to federal regulations). The following table briefly describes the nature of

the other amendments:

611.Appendix A	Removed obsolete provisions and past effective dates relative to the arsenic rule.
611.Appendix B	Corrected a row heading.
611.Appendix G	Removed obsolete provisions and past effective dates relative to the arsenic rule and renumbered the remaining endnotes.
611.Appendix H	Removed obsolete provisions and past effective dates relative to

the arsenic rule and renumbered the remaining endnotes.

611. Table Z Corrected federal effective dates and citations to federal rules.

Foregoing discussions consider the revisions that remove obsolete language and past effective dates, as are involved in Appendices A, G, and H. (See the discussion that begins on page 12 of this opinion.) No discussion of the corrected row heading in Appendix B is required. With regard to the corrected federal effective dates and citations to federal rules in Table Z, explanation follows.

The Board observed two discrepancies in the effective date of federal rules given in Table Z and the dates given in the federal regulations. The effective date given for the Phase I VOCs in the federal regulations is January 9, 1989. *See* 40 C.F.R. 141.60(a)(1) (2012). Table Z recited July 9, 1989, which the Board corrects in this docket to the date set forth in the federal regulations. The effective date in Table Z for the Phase V VOCs is January 17, 1994. This agrees with the date given in 40 C.F.R. 141.60(a)(3), except as to endrin. The date given in 40 C.F.R. 141.60(a)(3) for endrin is August 17, 1992. The Board removed endrin from the existing entry for Phase V SOCs and created a second entry for endrin alone, using the August 17, 1992 date included in the federal regulation.

The Board's review of Table Z indicated an inconsistency in the citations to federal regulations regarding drinking water contaminants. In the entries for fluoride, Phase I VOCs, Phase II IOCs, Phase II SOCs, Phase II SOCs, Phase II SOCs, Phase II SOCs, Phase V IOCs, Phase V VOCs, Phase V SOCs, the citations direct attention to the federal provision that recites the effective dates. The entries for the lead and copper rule, the consumer confidence rule, the interim enhanced surface water treatment rule, the public notification rule, the filter backwash rule, the disinfection/disinfectant byproducts rule, the long term 1 enhanced surface water treatment rule, the radionuclides rule, the arsenic rule, the stage 2 disnifection/disinfectant byproducts rule, the long term 2 enhanced surface water treatment rule, and the groundwater rule cite to the location of the substantive provisions in the federal regulations. The Board has changed all citations to the effective date provisions to citations to the substantive regulations throughout Table Z.

Request for Comments on the Corrective Amendments. The Board requested public comment on the various corrective amendments included in this docket. Specifically, the Board requested comments on the removals of past effective dates and obsolete text relating to various rules, including the arsenic rule, the radionuclides rule, Stage 2 DDBR, and LT2SWTR. The Board further specifically requested comment on the corrections to the appendices and tables to Part 611, including the revised format of the headings, the corrected row heading in Appendix B, and the corrected federal effective dates and citations to federal rules in Table Z. Segments of PC 1, which conveys Agency-USEPA comments, relate to the corrective amendments. The Board's responses to the Agency-USEPA comments are summarized in Tables 4 and 5, which begin on page 63 of this opinion.

<u>USEPA Use of Table 2 As a "Cross-Walk."</u> The Board observes that USEPA appears to be using Table 2 of the October 18, 2012 opinion in a way that was not intended by the Board.

Many of the USEPA comments conveyed by the Agency refer to Table 2 as the "cross-walk." That is not the function that the Board intended for Table 2.

To aid its review of State program elements, USEPA requires the State to compile and submit a "cross-walk" table. The cross-walk indicates the location in the State program of each required element of the federal regulations. While Table 2 indicates correlations between the State rules and their federal counterparts, Table 2 includes only those provisions in which the Board has not followed the exact literal language of the federal regulation. Table 2 does not include every federally required element.

#### **General Revisions and Deviations from the Federal Text**

Incorporating the federal rules into the Illinois system requires some unavoidable deviation from the federal text. This deviation arises primarily through differences between the federal and state regulatory structure and systems. Some deviation also arises through errors in and problems with the federal text itself. The Board adapts the federal text to the Illinois rules and regulatory scheme and corrects errors found in the text in the course of these routine update rulemakings.

In addition to the amendments derived from federal amendments, the Board often finds it necessary to alter the text of various passages of the existing rules as provisions are opened for update in response to USEPA actions. This involves correcting deficiencies, clarifying provisions, and making other changes that are necessary to establish a clear set of rules that closely parallel the corresponding federal requirements within the codification scheme of the Illinois Administrative Code.

The Board updates the citations to the Code of Federal Regulations to the most recent version available. As discussed above, the most recent versions of the *Code of Federal Regulations* available to the Board is the July 1, 2012 edition for USEPA regulations (Title 40). Thus, the Board has updated all citations to Title 40 to the 2012 edition of the *Code of Federal Regulations*, adding references to later amendments using their appropriate *Federal Register* citation, where necessary.

The Board substituted "or" for "/" in most instances where this appeared in the federal base text, using "and" where more appropriate. The Board further used this opportunity to make a number of corrections to punctuation, grammar, spelling, and cross-reference format throughout the opened text. The Board changed "who" to "that" and "he" or "she" to "it," where the person to which the regulation referred was not necessarily a natural person, or to "he or she," where a natural person was evident; changed "which" to "that" for restrictive relative clauses; substituted "must" for "shall"; capitalized the section headings and corrected their format where necessary; and corrected punctuation within sentences.

In addition, the federal rules have been edited to establish a uniform usage throughout the Board's regulations. For example, with respect to "shall," "will," and "may," "must" is used when an action is required by the rule, without regard to whether the action is required of the subject of the sentence or not. "Shall" is no longer used, since it is not used in everyday

language. Thus, where a federal rule uses "shall," the Board substitutes "must." This is a break from our former practice where "shall" was used when the subject of a sentence has a duty to do something. "Will" is used when the Board obliges itself to do something. "May" is used when choice of a provision is optional. "Or" is used rather than "and/or," and denotes "one or both." "Either . . . or" denotes "one but not both." "And" denotes "both."

JCAR has requested that the Board refer to the United States Environmental Protection Agency in the same manner throughout all of our bodies of regulations—*i.e.*, air, water, drinking water, RCRA Subtitle D (municipal solid waste landfill), Resource Conservation and Recovery Act (RCRA) Subtitle C (hazardous waste), underground injection control (UIC), etc. The Board has decided to refer to the United States Environmental Protection Agency as "USEPA." The Board will continue this conversion in future rulemakings as additional sections become open to amendment. The Board will further convert "EPA" used in federal text to "USEPA," where USEPA is clearly intended.

As is described in the following segment, the Board has assembled tables to aid in the location of these alterations to the text.

# <u>Tabulations of Deviations from the Literal Text of the Federal Amendments</u> and Miscellaneous Board Housekeeping Amendments

The tables below list numerous corrections and amendments that do not literally follow the current federal amendments. Table 1 (beginning immediately below) lists a number of federal amendments that the Board has not included in this docket. Table 1 gives a brief explanation why the Board has declined to make each. Table 2 (beginning immediately after Table 1 on page 33) includes deviations made in the adopted amendments from the verbatim text of the federal amendments. Table 3 (beginning immediately after Table 2 on page 42) contains corrections and clarifications that the Board has made in the base text involved in today's amendments. The amendments listed in Table 3 are not directly derived from the current federal amendments. Table 4 (beginning on page 63 below) is a listing of revisions made to the text of the amendments from that proposed and set forth in the Board's opinion and order of October 18, 2012. Table 4 indicates the changes made, as well as the source that suggested each of the changes. Table 5 (on page 66 below) indicates suggested revisions that the Board has not made in adopting these amendments. Each entry gives a brief explanation why the Board did not incorporate the suggested change. Some of the entries in these tables are discussed further in appropriate segments of the general discussion beginning at page 4 of this opinion. No further discussion appears elsewhere in this opinion for most of the deviations and revisions outside of these summary listings.

# Table 1: Federal Amendments That Are Not Necessary in This Docket

Provision Citations	
40 C.F.R./	USEPA Amendment/
35 Ill. Adm. Code	Explanation Why Not Made in This Docket

Appendix A to	Change the citation in table heading "40 CFR 141.23(k)(1)" to
Subpart C of 40 C.F.R. 141, relative to 141.23(k)(1) table, heading/ 611.611(a)	capitalized "40 CFR 141.23(K)(1)."/ The Illinois regulations are structured in a way that this citation does not appear, obviating the change. Further, this capitalization in the citation is likely an inadvertent error.
141.23(k)(1) table, ¶ 18, ion chromatography/ 611.611(a)(18)(A), ion chromategraphy	Change the listing to individually list each volume title for the list of approved methods./ The Board has organized the incorporation by reference individually by volume. Thus, the individual Standard Methods are already listed by the volumes in which they appear. USEPA's changed wording of the exclusion of Methods 3111 B, 3111D, 3113 B, and 3114 B from the 20th edition makes it unclear which edition is intended. List footnote 4 twice./ This double listing is likely an inadvertent error.
141.23(k)(1) table, ¶ 18, capillary ion electrophoresis and note 23/ 611.611(a)(18)(E)	Correct the source of Method D6508-00(2005) to Standard Methods Online./ The Board corrected the source attribution for the method upon initial adoption in SDWA Update, USEPA Amendments (January 1, 2007 through June 30, 2007), R08-7, SDWA Update, USEPA Amendments (July 1, 2007 through December 31, 2007), R08-13 (Dec. 18, 2008) (consol.), slip op. at p. 11.
141.23(k)(1) table, ¶ 19, capillary ion electrophoresis and note 23/ 611.611(a)(19)(E)	Correct the source of Method D6508-00(2005) to Standard Methods Online./ The source attribution for the method was corrected upon initial adoption in SDWA Update, USEPA Amendments (January 1, 2007 through June 30, 2007), R08-7, SDWA Update, USEPA Amendments (July 1, 2007 through December 31, 2007), R08-13 (Dec. 18, 2008) (consol.), slip op. at p. 11.
141.23(k)(1) table, note 3/ 611.102(b), ASTM	Add the ASTM volume numbers to the methods references./ Listing the individual ASTM Standards volumes in which the individual methods appear is not necessary, since the method designation includes all information needed to specifically identify the edition of the methods incorporated by reference.
141.23(k)(1) table, note 4/ 611.102(b), AWWA	Change the listing to individually list each volume title./ The individual Standard Methods are already listed by the individual volumes in which the methods appear. USEPA's changed wording of the exclusion of Methods 3111 B, 3111D, 3113 B, and 3114 B from the 20th edition makes it unclear which edition is intended. List footnote 4 twice./ This double listing is likely an inadvertent error.

141.23(k)(1) table, note 5/ 611.102(b), USGS	Move the document source and contact information from the end of the entry to the beginning./ The structure of the Illinois rule already places the source in front of the document description.
141.23(k)(1) table, note 6/ 611.102(b), NTIS	Add the formal name "National Technical Information Service" and place the abbreviated name "NTIS" in parentheses./ The Illinois rule already identifies both the abbreviated and formal names of the source. In addition to updating the source mailing and website addresses, updated and retained the telephone numbers for the source. See the explanations relative to 611.102(b) in Tables 2 and 3.
141.23(k)(1) table, note 7/ 611.102(b), Analytic Technology, Inc.	Remove the space after the opening quotation mark before the document title, "Standard Method in Drinking Water."/ This error, which originated in the March 12, 2007 federal amendments (at 72 Fed. Reg. 11200), was not copied when the federal amendments incorporated into the Illinois regulations in SDWA Update, USEPA Amendments (January 1, 2007 through June 30, 2007 and June 3, 2008), R08-7, SDWA Update, USEPA Amendments (July 1, 2007 through December 31, 2007), R08-13 (Dec. 18, 2008) (consolidated).
141.23(k)(1) table, note 19/ 611.102(b), NTIS	See the explanation relative to 141.23(k)(1) table, note 6 in this table and the entries for 611.102(b), NTIS in Tables 2 and 3.
Appendix A to Subpart C of 40 C.F.R. 141, relative to 141.24(e)(1) table, heading/ 611.611(a)	Change the citation in table heading "40 CFR 141.23(e)(1)" to capitalized "40 CFR 141.23(E)(1)."/ The Illinois regulations are structured in a way that this citation does not appear, obviating the change. Further, this capitalization in the citation is likely an inadvertent error.
Appendix A to Subpart C of 40 C.F.R. 141, relative to 141.25(a) table, heading/ 611.720(a)	Change the citation in table heading "40 CFR 141.25(a)" to capitalized "40 CFR 141.25(A)."/ The Illinois regulations are structured in a way that this citation does not appear, obviating the change. Further, this capitalization in the citation is likely an inadvertent error.

Appendix A to Subpart C of 40 C.F.R. 141, relative to 141.704(a) table, heading/ 611.1004(a)	Change the citation in table heading "40 CFR 141.704(a)" to capitalized "40 CFR 141.704(A)."/ The Illinois regulations are structured in a way that this citation does not appear, obviating the change. Further, this capitalization in the citation is likely an inadvertent error.
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Table 2: Deviations from the Text of the Federal Amendments

Illinois Section	40 C.F.R. Section	Revision(s)
611.102(a), "USEPA NERL Method 200.5 (rev. 4.2)"	JCAR, Board	Corrected the em-dash in "Inductively Coupled Plasma—Atomic Emission Spectrometry" to an en-dash in "Inductively Coupled Plasma-Atomic Emission Spectrometry." See the entry in Table 5 below.
611.102(a), "USEPA NERL Method 525.3 (ver. 1.0)"	Appendix A to Subpart C of 40 C.F.R. 141, note 24, relative to 141.24(e)(1) table	Added a short-form definition for the newly approved alternative equivalent method.
611.102(a), "USEPA OGWDW Methods"	Appendix A to Subpart C of 40 C.F.R. 141, notes 25 and 26, relative to 141.24(e)(1) table, and note 27, relative to 141.704(a)	Added references to the newly approved methods 523 (ver. 1), 536 (ver. 1), and 1623.1 to the short-form definition of "USEPA OGWDW Methods."
611.102(b), AWWA, "Standard Methods, 21st ed.," "Method 3125"	Appendix A to Subpart C of 40 C.F.R. 141 and note 1, relative to 141.23(k)(1) table, uranium by ICP-MS	Added a listing for the newly approved alternative equivalent method.
611.102(b), ASTM, "ASTM Method D859- 10"	Appendix A to Subpart C of 40 C.F.R. 141 and note 4, relative to 141.23(k)(1) table, silica by colorimetric	Added a listing for the newly approved alternative equivalent method.

611.102(b), ASTM, "ASTM Method D1179-10 B"	Appendix A to Subpart C of 40 C.F.R. 141 and note 4, relative to 141.25(a) table, fluoride by manual electrode	Added a listing for the newly approved alternative equivalent method.
611.102(b), ASTM, "ASTM Method D5673-10"	Appendix A to Subpart C of 40 C.F.R. 141 and note 4, relative to 141.25(a) table, uranium by ICP-MS	Added a listing for the newly approved alternative equivalent method.
611.102(b), ASTM, "ASTM Method D6239-09"	Appendix A to Subpart C of 40 C.F.R. 141 and note 1, relative to 141.25(a) table, uranium by alpha- liquid-scintillation spectrometry	Added a listing for the newly approved alternative equivalent method.
611.102(b), NTIS, "USEPA Environmental Inorganic Methods	141.23(k)(1) table, note 6	The Illinois rule already identifies both the abbreviated and formal names of the source. Did not change "Doc. No." to "Technical Report." See the explanations relative to 141.23(k)(1) table, note 6 in Table 1.
611.102(b), NTIS, "USEPA Organic and Inorganic Methods	141.23(k)(1) table, note 19	See the explanation relative to 141.23(k)(1) table, note 6 in this table and in Table 1.
611.102(b), Standard Methods Online	141.23(k)(1) table, note 22	The Standard Methods Organization is a collaboration of the American Public Health Association, the American Water Works Association, and the Water Environment Federation. Since access to Standard Methods Online occurs via the Internet, identification of the American Public Health Association and a street address is not necessary.

611.102(b), Standard	Appendix A to Subpart	Added a listing for the newly approved
Methods Online, Method 3112 B-09	C of 40 C.F.R. 141 and note 3, relative to 141.23(k)(1) table, mercury by manual cold vapor	alternative equivalent method.
611.102(b), USEPA, NSCEP, "USEPA OGWDW Methods, Method 523, ver 1.0"	Appendix A to Subpart C of 40 C.F.R. 141 and note 26, relative to 141.24(e)(1) table, atrazine and simazine by solid-phase extraction-GC/MS	Added a listing for the newly approved alternative equivalent method from an alternative source.
611.102(b), USEPA, OGWDW, "USEPA OGWDW Methods, Method 523, ver 1.0)"	Appendix A to Subpart C of 40 C.F.R. 141 and note 26, relative to 141.24(e)(1) table, atrazine and simazine by solid-phase extraction-GC/MS	Added a listing for the newly approved alternative equivalent method.
611.102(b), USEPA, OGWDW, "USEPA OGWDW Methods, Method 536, ver 1.0)"	Appendix A to Subpart C of 40 C.F.R. 141 and note 25, relative to 141.24(e)(1) table, atrazine and simazine by LC/ESI-MS/MS	Added a listing for the newly approved alternative equivalent method.
611.102(b), USEPA, OGWDW, "USEPA OGWDW Methods, Method 1623.1)"	Appendix A to Subpart C of 40 C.F.R. 141 and note 27, relative to 141.704(a), Cryptosporidium by filtration/immunomagnetic separation/immunofluorescence assay microscopy	Added a listing for the newly approved alternative equivalent method.

611.102(b), USEPA, ORD, "USEPA NERL Method 525.3, ver 1.0)"	Appendix A to Subpart C of 40 C.F.R. 141 and note 24, relative to 141.24(e)(1) table, alachlor, atrazine, benzo(a)pyrene, chlordane, di(2-ethylhexyl)adipate, di(2-ethylhexyl)phthalate, endrin, heptachlor, heptachlor epoxide,	Added a listing for the newly approved alternative equivalent method.
	hexachlorobenzene, lindane, methoxychlor, PCBs (as alachlors), pentachlorophenol, simazine, and toxaphene by solid- phase extraction/GC/- MS	
611.102(b), USGS	141.23(k)(1) table, note 5	Deleted "Books and Open File Reports Section," rather than "Information Services," as appeared in the federal text. Retained the listing of methods available from each reference and separated each into a separate listing for each source document.
611.102(b), Waters Corp.	141.23(k)(1) table, note 8	The different structure of the Illinois rule does not require changing the comma after "Method B-1011" to a period. Retained the toll-free number, "800-252-4752," but changed the phone number to "508-478-2000," instead of "508-482-2963," as did USEPA. Replaced the fax number with a web address for the source.

611.611(a)	141.23(k)(1) table column headings	Changing "EPA" to "EPA method" in column 3 is not necessary because the existing Illinois naming convention uses more specific methods designations that include the word "method"; did not change "SM Online" to lower-case "SM online" because the Illinois rules use the proper name "Standard Methods Online."
611.611(a) Board note	141.23(k)(1) table, note 13	Added "Standard Methods" offset by a comma before "Method 3120 B," to identify the source.
611.611(a)(13)(B)	Appendix A to Subpart C of 40 C.F.R. 141, relative to fluoride in the table at 40 C.F.R. 141.23(k)(1)	Retained the ionic charge marking in "Method 4500-F <sup>-</sup> B" to signify fluoride, as opposed to fluorine.
611.611(a)(13)(C)(i)	Appendix A to Subpart C of 40 C.F.R. 141, relative to fluoride in the table at 40 C.F.R. 141.23(k)(1)	Changed "D 1179-04, 10 B" to two distinct entries: "D1179-04 B" and "D1179-10 B."
611.611(a)(13)(C)(ii)	Appendix A to Subpart C of 40 C.F.R. 141, relative to fluoride in the table at 40 C.F.R. 141.23(k)(1)	Retained the ionic charge marking in "Method 4500-F <sup>-</sup> C" to signify fluoride, as opposed to fluorine.
611.611(a)(13)(E)(i)	Appendix A to Subpart C of 40 C.F.R. 141, relative to fluoride in the table at 40 C.F.R. 141.23(k)(1)	Retained the ionic charge marking in "Method 4500-F <sup>-</sup> E" to signify fluoride, as opposed to fluorine.
611.611(a)(16)(A)(iv)	Appendix A to Subpart C of 40 C.F.R. 141, relative to mercury in the table at 40 C.F.R. 141.23(k)(1)	Retained the existing paragraph narrative format of the Illinois rule, changing "SM Online" in the column heading and "3112 B-09" in the row to "Standard Methods Online, Method 3112 B-09."

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611.611(a)(18)(A), ion chromatography	141.23(k)(1) table, ¶ 18, ion chromatography	The altered structure of the Illinois rules obviates the comma in "300.0 <sup>6</sup> , 300.1 <sup>19</sup> ."
611.611(a)(20) parenthetical	141.23(k)(1) table, ¶ 20, note 12	Did not remove the parenthetical in response to USEPA deletion of footnote 12 from the word "orthophosphate" in the first column, believing that USEPA erred by the deletion. Filtration or digestion before analysis can convert other forms of phosphorus into orthophosphate, possibly leading to improper analyses.
611.611(a)(20)(C), colorimetric, phosho- molybdate	141.23(k)(1) table, ¶ 20, colorimetric phoshomolybdate; automated-segmented flow; automated discrete	Did not combine all three USGS methods into a combined listing. The Board left the designation for USGS Method I-1601-85 as "colorimetric, phosphomolybdate," since that description matches the method title.
611.611(a)(20)(D), colorimetric, phosho- molybdate, automated- segmented flow	141.23(k)(1) table, ¶ 20, colorimetric phoshomolybdate; automated-segmented flow; automated discrete	See the explanation in the entry for 611.611(a)(20)(C), colorimetric, phoshomolybdate in this table. Left the designation for USGS Method I-2601-90 as "colorimetric, phosphomolybdate, automated-segmented flow," since that description matches the method title.
611.611(a)(20)(E), colorimetric, phosho- molybdate, automated discrete	141.23(k)(1) table, ¶ 20, colorimetric phoshomolybdate; automated-segmented flow; automated discrete	See the explanation in the entry for 611.611(a)(20)(C), colorimetric, phoshomolybdate in this table. Left the designation for USGS Method I-2598-85 as "colorimetric, phosphomolybdate, automated discrete," since that description matches the method title.
611.611(a)(20)(F), ion chromategraphy	141.23(k)(1) table, ¶ 18, ion chromatography	See the explanation in the entry for 611.611(a)(18)(A), ion chromatography in this table.
611.611(a)(23)(C)	Appendix A to Subpart C of 40 C.F.R. 141, as to silica in the table at 40 C.F.R. 141.23(k)(1)	Changed "D859-05, 10" to two distinct entries: "D859-05" and "D859-10."

	T	Г
611.645(b), alachlor	Appendix A to Subpart C of 40 C.F.R. 141, as to 141.24(e)(1) table, alachlor by solid phase extraction-GC/MS and note 24	Added the newly-approved alternative equivalent method, retaining the existing format that does not use the method description from Appendix A to Subpart C of 40 C.F.R. 141, and which adds the method into the text of the affected rule.
611.645(b), atrazine	Appendix A to Subpart C of 40 C.F.R. 141, as to 141.24(e)(1) table, atrazine by solid phase extraction-GC/MS and notes 24 and 26 and by LC/ESI-MS/MS and note 25	Added the newly-approved alternative equivalent methods. See the explanation in the entry for 611.645(b), alachlor in this table.
611.645(b), benzo(a)-pyrene	Appendix A to Subpart C of 40 C.F.R. 141, as to 141.24(e)(1) table, benzo(a)pyrene by solid phase extraction- GC/MS and note 24	See the explanation in the entry for 611.645(b), alachlor in this table.
611.645(b), chlordane	Appendix A to Subpart C of 40 C.F.R. 141, as to 141.24(e)(1) table, chlordane by solid phase extraction- GC/MS and note 24	See the explanation in the entry for 611.645(b), alachlor in this table.
611.645(b), di(2-ehtyl-hexyl)adipate	Appendix A to Subpart C of 40 C.F.R. 141, as to 141.24(e)(1) table, di(2-ehtylhexyl)adipate by solid phase extraction-GC/MS and note 24	See the explanation in the entry for 611.645(b), alachlor in this table.
611.645(b), di(2-ehtyl-hexyl)phthalate	Appendix A to Subpart C of 40 C.F.R. 141, as to 141.24(e)(1) table, di(2-ehtylhexyl)- phthalate by solid phase extraction-GC/MS and note 24	See the explanation in the entry for 611.645(b), alachlor in this table.

611.645(b), endrin	Appendix A to Subpart C of 40 C.F.R. 141, as to 141.24(e)(1) table, endrin by solid phase extraction-GC/MS and note 24	See the explanation in the entry for 611.645(b), alachlor in this table.
611.645(b), heptachlor	Appendix A to Subpart C of 40 C.F.R. 141, as to 141.24(e)(1) table, heptachlor by solid phase extraction- GC/MS and note 24	See the explanation in the entry for 611.645(b), alachlor in this table.
611.645(b), heptachlor epoxide	Appendix A to Subpart C of 40 C.F.R. 141, as to 141.24(e)(1) table, heptachlor epoxide by solid phase extraction- GC/MS and note 24	See the explanation in the entry for 611.645(b), alachlor in this table.
611.645(b), hexachlorobenzene	Appendix A to Subpart C of 40 C.F.R. 141, as to 141.24(e)(1) table, hexachlorobenzene by solid phase extraction- GC/MS and note 24	See the explanation in the entry for 611.645(b), alachlor in this table.
611.645(b), hexachloro-cyclopentadiene	Appendix A to Subpart C of 40 C.F.R. 141, as to 141.24(e)(1) table, hexachlorocyclopentadiene by solid phase extraction-GC/MS and note 24	See the explanation in the entry for 611.645(b), alachlor in this table.
611.645(b), lindane	Appendix A to Subpart C of 40 C.F.R. 141, as to 141.24(e)(1) table, lindane by solid phase extraction-GC/MS and note 24	See the explanation in the entry for 611.645(b), alachlor in this table.

611.645(b), methoxy-chlor	Appendix A to Subpart C of 40 C.F.R. 141, as to 141.24(e)(1) table, methoxychlor by solid phase extraction-GC/MS and note 24	See the explanation in the entry for 611.645(b), alachlor in this table.
611.645(b), PCBs (as arochlors)	Appendix A to Subpart C of 40 C.F.R. 141, as to 141.24(e)(1) table, PCBs (as arochlors) by solid phase extraction- GC/MS and note 24	See the explanation in the entry for 611.645(b), alachlor in this table.
611.645(b), penta- chlorophenol	Appendix A to Subpart C of 40 C.F.R. 141, as to 141.24(e)(1) table, pentachlorophenol by solid phase extraction- GC/MS and note 24	See the explanation in the entry for 611.645(b), alachlor in this table.
611.645(b), simazine	Appendix A to Subpart C of 40 C.F.R. 141, as to 141.24(e)(1) table, simazine by solid phase extraction-GC/MS and notes 24 and by LC/ESI-MS/MS and note 25	See the explanation in the entry for 611.645(b), atrazine in this table.
611.645(b), toxaphene	Appendix A to Subpart C of 40 C.F.R. 141, as to 141.24(e)(1) table, toxaphene by solid phase extraction-GC/MS and note 24	See the explanation in the entry for 611.645(b), alachlor in this table.
611.720(a)(5)(C)	Appendix A to Subpart C of 40 C.F.R. 141, as to 141.25(a) table, "naturally occurring: uranium" "ICP-MS"	Added the newly-approved alternative equivalent methods, retaining the existing format that does not use the method description from Appendix A to Subpart C of 40 C.F.R. 141, and which adds the method into the text of the affected rule; changed "D5673-05, 10" to two distinct entries: "D5673-05" and "D5673-10."

611.720(a)(5)(C)(v)	Appendix A to Subpart C of 40 C.F.R. 141, as to "naturally occurring: uranium," "alpha liquid scintillation spectrometry" in 141.25(a) table	Added the newly-approved alternative equivalent method, retaining the existing format that does not use the method description from Appendix A to Subpart C of 40 C.F.R. 141, and which adds the method into the text of the affected rule.
611.1004(a)	Appendix A to Subpart C of 40 C.F.R. 141, as to <i>Cryptosporidium</i> in 141.704(a)	Added the newly-approved alternative equivalent method, retaining the existing format of adding methods from Appendix A to Subpart C of 40 C.F.R. 141 into the text of the affected rule.

Table 3: Board Housekeeping Amendments

Section	Source	Revision(s)
611.102(a), "USGS Methods" Board note	Board	Added a reference to the explanation of availability of the USGS methods across three separate volumes published at different times.
611.102(b), AWWA, "Standard Methods, 20th ed.," "Method 3125"	Board	Added a listing for the method added to 35 Ill. Adm. Code 611.720(a)(5) but previously inadvertently omitted from the incorporations by reference in SDWA Update, USEPA Amendments (January 1, 2004 through June 30, 2004, August 25, 2004), R05-6 (Jan. 20, 2005).
611.102(b), "ASTM," "ASTM Method D2907-91 A or B"	Board	Changed "Method D2907-91" to "Method D2907-91 A or B."
611.102(b), "ASTM," "ASTM Method D3859-98 A and B"	Board	Corrected "D3859-98 A" to D3859-98 A and B"; added "& 'Method B—Atomic Absorption, Graphite Furnace."
611.102(b), "ASTM," "ASTM Method D3859-03 A and B"	Board	Corrected "D3859-03 A" to D3859-03 A and B"; added "& 'Method B—Atomic Absorption, Graphite Furnace."

611.102(b), "ASTM," "ASTM Method D3859-08 A and B"	Board	Corrected "D3859-03 A" to D3859-03 A and B."
611.102(b), "ASTM," "ASTM Method D5673-03"	Board	See the explanation in the entry for 611.102(a), "USEPA NERL Method 200.5 (rev. 4.2)" above in Table 4 below. See the entry in Table 5 below.
611.102(b), "ASTM," "ASTM Method D5673-05"	Board	See the explanation in the entry for 611.102(a), "USEPA NERL Method 200.5 (rev. 4.2)" above in Table 4 below. See the entry in Table 5 below.
611.102(b), ASTM Board note	Board	Added explanation of the on-line availability of ASTM methods, together with a cautionary explanation that the latest version of an ASTM method may not be approved for use under the SDWA regulations.
611.102(b), "Bran & Luebbe"	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available (twice).
611.102(b), NTIS, "USEPA Technical Notes" Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.102(b), NTIS	Board	Updated the telephone numbers for the source. See the explanation relative to 141.23(k)(1) table, note 6 in Tables 1 and 2.
611.102(b), Standard Methods Online Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.102(b), USEPA, NSCEP Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.102(b), USEPA, OGWDW, "USEPA OGWDW Methods, Method 1623 (99)"	Board	Corrected "Sections 611.1007" to singular "Section 611.1007."

611.102(b), USGS	Board	Changed plural "Methods" to singular "Method," created a separate entry for "Methods for Determination of Inorganic Substances in Water and Fluvail Sediments." and moved the appropriate entries into that separate entry; corrected the date for "Methods for Determination of Radioactive Substances in Water and Fluvail Sediments" from "1997" to "1977." 16
611.102(b), USGS Board note	Board	Added explanation of the on-line availability of USGS Methods. Added explanation of availability of the USGS methods in three separate volumes.
611.102(c), "40 CFR 3.2"	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.102(c), "40 CFR 3.3"	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.102(c), "40 CFR 3.10"	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.102(c), "40 CFR 3.2000"	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.102(c), "40 CFR 136.3(a)"	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.102(c), "Appendix B to 40 CFR 136"	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.102(c), "40 CFR 142.20(b)(1)"	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.300(a)	Board	Removed the parenthetical "except that analyses pursuant to Section 611.600 through 611.611," and its off-setting comma, relating to an obsolete MCL for arsenic.
611.300(a) Board note	Board	Reworded the statement to indicate former derivation and that the provision is now an additional State requirement.

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<sup>&</sup>lt;sup>16</sup> Book 5 does not appear to have been dated. The 1977 date is derived from the information given on the USGS Publications Warehouse website. The appended "-76" that appears on each method designation, however, indicates the version date for the method.

611.300(b)	Board	Removed the entry for the obsolete MCL for arsenic.
611.300(b) Board note	Board	Reworded the statement of derivation to indicate that the provision is now an additional State requirement.
611.300(d) Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.300(e) Board note	Board	Corrected "the requirements of this subsection are an additional State requirement" to singular "this subsection is an additional State requirement."
611.301(b), arsenic	Board	Removed the parenthetical statement of a past effective date.
611.301(d) Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.301 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.311(a), dichloromethane	Board	Moved the MCL "0.005" from the second column into the third column to correct the entry format.
611.311 Board note	Board	Updated the explanation of the USEPA stay of the MCLs for the aldicarbs by adding the latest status indicated by USEPA in its Spring 2007 Semiannual Regulatory Agenda; changed present-tense "Board removes" to the past participle "Board has removed."
611.330(d)	Board	Removed the statement of a past effective date.
611.330(e)	Board	Removed the statement of a past effective date.
611.330(f)	Board	Removed the statement of a past effective date.
611.330 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.359(a)(1)	JCAR	Omitted the unnecessary ending conjunction "and."
611.359(a)(3)	Board	Renumbered the subsection from (a)(2)(C) to more closely follow the structure of corresponding 40 C.F.R. 611.89(a)(3).

611.359(a)(4)	Board	Renumbered the subsection from (a)(2)(d) to more closely follow the structure of corresponding 40 C.F.R. 611.89(a)(4).
611.359(a) Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available, including deletion of an obsolete <i>Federal Register</i> citation.
611.359(b) Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.359 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.382(b)(1)(C)	Board	Removed the parenthetical, and its offsetting comma, that recites the obsolete past effective date, "beginning mo later than April 1, 2008."
611.382(b)(3)(B)	Board	Removed the obsolete language of subsection (b)(3)(B)(i) and introductory statement of subsection (b)(3)(B)(ii) and moved the remaining text of subsection (b)(3)(B)(ii) into this subsection.
611.382(b)(3)(B)(i)	Board	Removed this obsolete subsection.
611.382(b)(3)(B)(ii)	Board	Removed the obsolete introductory statement from this subsection and moved the rest of the text into subsection (b)(3)(B) into this subsection.
611.382 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.600(d), arsenic	Board	Removed former endnote marking "6" in the second column and changed endnote markings "7" to "6" and "8" to "7" in the fourth column.
611.600(d), cyanide	Board	Changed endnote marking "9" to "8" in the third column.
611.600(d), note 6	Board	Removed the obsolete endnote 6; renumbered former endnote 7 to endnote 6.
611.600(d), note 7	Board	Removed the obsolete endnote 6; renumbered former endnote 8 to endnote 7.
611.600(d), note 8	Board	Removed the obsolete endnote 6; renumbered former endnote 9 to endnote 8.

611.600 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available (three times), including deletion of an obsolete <i>Federal Register</i> citation.
611.603(a) Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.603(b) Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.603(c) Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.603(d) Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.603(e) Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.603(f)(1) Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.603(f)(2) Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.603(g) Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.603(h) Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.603(i)	Board	Removed the statements of a past effective date (two).
611.603(i) Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.609(a)	Board	Removed the parenthetical statements of the January 22, 2004 past effective date (two); moved the final sentence "if a system fails to collect number of samples collected" into new subsection (a)(4) to correspond with treatment of the three preceding sentences and subsections (a)(1) through (a)(3).
611.609(a)(4)	Board	See the explanation in the entry for 611.609(a) in this table.

611.609(b)	Board	Removed the statements of the January 22, 2004 past effective date (two).
611.609 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.611(a)(13) Board note	Board	Added explanation of addition of ASTM Method D1179-10 B as an alternative equivalent method for fluoride.
611.611(a)(16)(ii)	Board	Removed the unnecessary ending conjunction "or."
611.611(a)(16)(iii)	Board	Changed the ending period to a semicolon.
611.611(a)(16) Board note	Board	Added explanation of addition of Standard Methods Online, Method 3112 B-09 as an alternative equivalent method for mercury.
611.611(a)(18)(E) Board note	Board	Removed the now-unnecessary explanation of Board correction of an apparent USEPA error, since USEPA has corrected the source for this method.
611.611(a)(19)(E) Board note	Board	Removed the now-unnecessary explanation of Board correction of an apparent USEPA error, since USEPA has corrected the source for this method.
611.611(a)(20)(G) Board note	Board	Removed the now-unnecessary explanation of Board correction of an apparent USEPA error, since USEPA has corrected the source for this method.
611.611(a)(23) Board note	Board	Added explanation of addition of ASTM Method D859- 10 as an alternative equivalent method for silica.
611.611(b)	Board	Removed the parenthetical statement of the January 22, 2004 past effective date.
611.611(c)	Board	Removed the parenthetical statement of the January 23, 2006 past effective date.
611.611 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.612(f)	Board	Removed the obsolete introductory statement, and its offsetting comma, "except for arsenic, for which Section 611.611."
611.612 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available (twice).

611.641(a)(1)	Board	Changed "shall" to "must."
611.641(a)(2)	Board	Changed "shall" to "must."
611.645(b), "dalapon"	JCAR	Added the ending semicolon after "and 557."
611.645(b), "oxamyl"	Board	Added a comma before "or 20th ed." to offset the final element of a series.
611.645(b) Board note	Board	Added explanation of addition of USEPA OGWDW Methods, Method 523 (ver. 1.0) and Method 536 (ver. 1.0) as approved alternative methods for atrazine and simazine and USEPA NERL Methods, Method 525.3 as an approved alternative method for alachlor, atrazine, benzo(a)pyrene, chlordane, di(2-ethylhexyl)adipate, di(2-ethylhexyl)phthalate, endrin, heptachlor, heptachlor epoxide, hexachlorobenzene, hexachlorocyclopentadiene, lindane, methoxychlor, PCBs (as aroclors), pentachlorophenol. simazine, and toxaphene.
611.645 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.646(a) "detection limit" Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.646(a) "method detection limit" Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.646(c) Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.646(g) Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.646(j) Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available (twice).
611.646(o)	Board	Removed the statement of the January 22, 2004 past effective date.
611.646(o)(1)	Board	Removed the statement of the January 22, 2004 past effective date.

611.646(o)(2)	Board	Removed the statement of the January 22, 2004 past effective date.
611.646(o)(3)	Board	Removed the statement of the January 22, 2004 past effective date.
611.646(o)(4)	Board	Removed the statement of the January 22, 2004 past effective date.
611.646(o)(5)	Board	Removed the statement of the January 22, 2004 past effective date.
611.646(o)(6)	Board	Removed the obsolete provision.
611.646(o)(7)	Board	Removed the obsolete provision.
611.646(v)	Board	Removed the statement of the January 22, 2004 past effective date.
611.646 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.648(c) Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.648(k)	Board	Removed the statement of the January 22, 2004 past effective date.
611.648(k)(1)	Board	Removed the statement of the January 22, 2004 past effective date.
611.648(k)(2)	Board	Removed the statement of the January 22, 2004 past effective date.
611.648(k)(3)	Board	Removed the statement of the January 22, 2004 past effective date.
611.648(k)(4)	Board	Removed the statement of the January 22, 2004 past effective date.
611.648(k)(5)	Board	Removed the statement of the January 22, 2004 past effective date.
611.648(k)(6)	Board	Removed the obsolete provision.
611.648(k)(7)	Board	Removed the obsolete provision.

611.648(t)	Board	Removed the statement of the January 22, 2004 past effective date.
611.648 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.720(a)(5)(C)(iii)	Board	Removed the now unnecessary ending conjunction "or."
611.720(a)(5)(C)(iv)	Board	Added the ending conjunction "or."
611.720(a)(5) Board note	Board	Corrected "ASTM D5673-05" to the standardized format "ASTM Method D5673-05"; added explanation of addition of Standard Methods, 21st ed., Method 3125 and ASTM Methods D5673-10 and D6329-09 as approved alternative methods for uranium.
611.720(c)(1) Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.720(c)(2) Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.720 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.731(a)	Board	Removed the statement of the December 8, 2003 and December 31, 2007 past effective dates.
611.731(b)	Board	Removed the statement of the December 8, 2003 past effective date.
611.731(b)(1)	Board	Changed the modal "must collect" to present imperative participle "must have collected."
611.731(c)	Board	Removed the statement of the December 8, 2003 past effective date.
611.731(d)	Board	Removed the statement of the December 8, 2003 past effective date.
611.731(e)	Board	Removed the statement of the December 8, 2003 past effective date.
611.731(f)	Board	Removed the obsolete provision.
611.731(g)	Board	Removed the obsolete provision.

611.731(h)	Board	Removed the obsolete provision.
611.731 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.732(a)	Board	Removed the statement of the December 8, 2003 past effective date.
611.732(b)	Board	Removed the statement of the December 8, 2003 past effective date.
611.732(c)	Board	Removed the statement of the December 8, 2003 past effective date.
611.732(d)	Board	Removed the statement of the December 8, 2003 past effective date.
611.732(e)	Board	Removed the statement of the December 8, 2003 past effective date.
611.732(f)	Board	Removed the statement of the December 8, 2003 past effective date.
611.732(g)	Board	Removed the obsolete provision.
611.732(h)	Board	Removed the obsolete provision.
611.732(i)	Board	Removed the obsolete provision.
611.732(j)	Board	Removed the obsolete provision.
611.732 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.884(f)	Board	Removed the obsolete provision.
611.884 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available, including deletion of an obsolete <i>Federal Register</i> citation.
611.920(c)(1)(A)	Board	Changed the "must either have submitted or must have obtained or have been subject to" to "is required to have either submitted or obtained or been subject to"; changed "must further complete and submit" to "is further required to have completed and submitted."

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611.920(c)(1)(B)	Board	Changed the "must either have submitted or must have obtained or have been subject to" to "is required to have either submitted or obtained or been subject to"; changed "must further complete and submit" to "is further required to have completed and submitted."
611.920(c)(1)(C)	Board	Changed the "must have submitted or must obtain or be subject to" to "is required to have either submitted or obtained or been subject to"; changed "must further complete and submit" to "is further required to have completed and submitted."
611.920(c)(1)(D)	Board	Changed the "must submit or must obtain or be subject to" to "is required to have either submitted or obtained or been subject to"; changed "must further complete and submit" to "is further required to have completed and submitted."
611.920(c)(1)(E)	Board	Changed the "must submit or must obtain or be subject to" to "is required to have either submitted or obtained or been subject to"; changed "must further complete and submit" to "is further required to have completed and submitted."
611.920(c)(1)(F)	Board	Changed "is due" to "was due"; changed "the Agency does not approve that it has not yet completed" to "the Agency did not approve that is had not yet completed"; changed "the supplier must implement , and it must complete" to "the supplier is required to have implemented , and it is required to have completed."
611.920(c)(1)(G)	Board	Changed "must submit" to "is required to have submitted."

611.920(c)(1)(H)	Board	Changed "the supplier must comply" to present imperative participle "the supplier must have collected"; changed "the Agency does not approve that it has not yet completed" to "the Agency did not approve that it had not yet completed"; added "as approved" after "submitted to the Agency," previously omitted by inadvertent error in SDWA Update, USEPA  Amendments (January 1, 2007 through June 30, 2007 and June 3, 2008, R08-7 SDWA Update USEPA  Amendments (July 1, 2007 through December 31, 2007), R08-13 (Dec. 18, 2008) (consol.), slip. or. at p. 235; changed "the supplier must implement" to "is required to have implemented."
611.920 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.923(a)(1)	Board	Changed "is due" to "was due"; changed "is based" to "was based"; changed "beginning" to "that began."
611.923(a)(2)	Board	Changed "is due" to "was due"; changed "is based" to "was based"; changed "beginning" to "that began."
611.923(a)(3)	Board	Changed "is due" to "was due"; changed "is based" to "was based"; changed "beginning" to "that began."
611.923(a)(4)	Board	Changed "is due" to "was due"; changed "is based" to "was based"; changed "beginning" to "that began."
611.923	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.970(c)(1)	Board	Changed "must comply" to "is required to have complied."
611.970	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.974	Board	Removed the obsolete past effective date and language "beginning April 1, 2009, unless by the Agency."
611.974	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.1001(c)(1)	Board	Changed "must begin" to "is required to have begun."
611.1001(c)(2)	Board	Changed "must begin" to "is required to have begun."

611.1001(c)(3)	Board	Changed "must begin" to "is required to have begun."
611.1001(c)(4)	Board	Changed "must begin" to "is required to have begun."
611.1001(c)(5)	Board	Changed "must begin" to "is required to have begun."
611.1001 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.1004(a)	Board	Removed the second instance of "USEPA OGWDW Methods, Method" to create a single series "USEPA OGWDW Methods, Method 1623 (05), 1623.1, or 1622 (05)."
611.1004(b)(2)	Board	Removed the superfluous parenthetical "as listed in 40 CFR 136.3(a)" and its offsetting commas.
611.1004 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.1012(a)(1)	Board	Changed "must calculate" to "is required to have calculated"; changed "must report" to "is required to have reported"; changed "is required to complete" to "is required to have completed."
611.1012 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.1013(c)(1)	Board	Changed "must comply" to "is required to have complied."
611.1013(c)(2)	Board	Changed "must comply" to "is required to have complied."
611.1013 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.1014(b)	Board	Changed "must notify" to "is required to have notified."
611.1014(c)	Board	Changed "must meet" to "is required to have met"; changed "must be in compliance" to "is required to have been in compliance."
611.1014 Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
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611.Appendix A heading	Board	Corrected the format from "611.Appendix A" to uppercase "611.APPENDIX A," as required by 1 Ill. Adm. Code 100.350(b).
611.Appendix A, "inorganic contaminants," arsenic	Board	Removed the obsolete statement "0.05 until January 23, 2006" and statement of past effective date from the MCL; removed the parenthetical past effective date from the MCLG.
611.Appendix A Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.Appendix B	Board	Corrected the format from "611.Appendix B" to uppercase "611.APPENDIX B," as required by 1 Ill. Adm. Code 100.350(b).
611.Appendix B, Table 1.1	Board	Corrected the first row, first column heading from "\( \leq 0.41\)" to "\( \leq 0.4\)."
611.Appendix B, Table 1.2 preamble	JCAR	Corrected the spelling "inctivation" to "inactivation."
611.Appendix B Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.Appendix C	Board	Corrected the format from "611.Appendix C" to uppercase "611.APPENDIX C," as required by 1 Ill. Adm. Code 100.350(b).
611.Appendix C Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.Appendix D	Board	Corrected the format from "611.Appendix D" to uppercase "611.APPENDIX D," as required by 1 Ill. Adm. Code 100.350(b).
611.Appendix D Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.Appendix E	Board	Corrected the format from "611.Appendix E" to uppercase "611.APPENDIX E," as required by 1 Ill. Adm. Code 100.350(b).

611.Appendix E, ¶ 2	JCAR, Board	Changed the double dashes to em-dashes in "contamination like dirt and dust that rarely affect an adult." to em-dashes preceded and followed by spaces in "contamination—like dirt and dust—that rarely affect an adult." See the entry in Table 5 below and the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" in Table 4.
611.Appendix E Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.Appendix G	Board	Corrected the format from "611.Appendix G" to uppercase "611.APPENDIX G," as required by 1 Ill. Adm. Code 100.350(b).
611.Appendix G, ¶ I.A.10.	Board	Changed the endnote number "22" to "19" in the fourth column.
611.Appendix G, ¶ I.B.2.	Board	Removed endnote number "8" from the third column; removed the endnote number "11" in the fifth column.
611.Appendix G, ¶ I.B.11.	Board	Changed the endnote number "12" to "8" in the fourth column.
611.Appendix G, ¶ I.B.12.	Board	Changed the endnote number "12" to "8" in the fourth column.
611.Appendix G, ¶ I.G.1.	Board	Changed the endnote number "14" to "11" in the third column.
611.Appendix G, ¶ I.G.7.	Board	Changed the endnote number "15" to "12" in the fourth column.
611.Appendix G, ¶ I.G.8.	Board	Changed the endnote number "16" to "13" in the third column.
611.Appendix G, ¶ II.	Board	Changed the endnote number "17" to "14" in the heading.
611.Appendix G, ¶ III.A.	Board	Changed the endnote number "18" to "15" in the third column.
611.Appendix G, ¶ III.B.	Board	Changed the endnote number "19" to "16" in the third column.
611.Appendix G, ¶ IV.E.	Board	Changed the endnote number "20" to "17" in the first column.

611.Appendix G, ¶ IV.G.	Board	Changed the endnote number "21" to "18" in the first column.
611.Appendix G, former endnote 8.	Board	Removed the "dummy" language formerly used to correspond with an obsolete endnote in the corresponding federal regulation.
611.Appendix G, former endnote 9.	Board	Removed the "dummy" language formerly used to correspond with an obsolete endnote in the corresponding federal regulation.
611.Appendix G, former endnote 10.	Board	Renumbered the endnote from "10" to "8"
611.Appendix G, former endnote 11.	Board	Removed the "dummy" language formerly used to correspond with an obsolete endnote in the corresponding federal regulation.
611.Appendix G, former endnote 12.	Board	Renumbered the endnote from "12" to "9"
611.Appendix G, former endnote 13.	Board	Renumbered the endnote from "13" to "10"
611.Appendix G, former endnote 14.	Board	Renumbered the endnote from "14" to "11"
611.Appendix G, former endnote 15.	Board	Renumbered the endnote from "15" to "12"
611.Appendix G, former endnote 16.	Board	Renumbered the endnote from "16" to "13"
611.Appendix G, former endnote 17.	Board	Renumbered the endnote from "17" to "14"
611.Appendix G, former endnote 18.	Board	Renumbered the endnote from "18" to "15"
611.Appendix G, former endnote 19.	Board	Renumbered the endnote from "19" to "16"
611.Appendix G, former endnote 20.	Board	Renumbered the endnote from "20" to "17"
611.Appendix G, former endnote 21.	Board	Renumbered the endnote from "21" to "18"

611.Appendix G, former endnote 22.	Board	Renumbered the endnote from "22" to "19"
611.Appendix G Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.Appendix H	Board	Corrected the format from "611.Appendix H" to uppercase "611.APPENDIX H," as required by 1 Ill. Adm. Code 100.350(b).
611.Appendix H, ¶ C.9.	Board	Removed the obsolete endnote marking "11" in the first column.
611.Appendix H, ¶ C.10.	Board	Changed the endnote marking from "12" to "11" in the second column.
611.Appendix H, ¶ D.23.	Board	Changed the endnote marking from "13" to "12" in the third column.
611.Appendix H, ¶ D.24.	Board	Changed the endnote marking from "14" to "13" in the third column.
611.Appendix H, ¶ G.76.	Board	Changed the endnote marking from "15" to "14" in the third column.
611.Appendix H, ¶ G.77.	Board	Changed the endnote marking from "17" to "15" in the third column.
611.Appendix H, ¶ H.	Board	Changed the endnote marking from "18" to "16" in the heading.
611.Appendix H, ¶ H.80.	Board	Changed the endnote markings from "19, 20" to "17, 18" in the third column.
611.Appendix H, ¶ H.81.	Board	Changed the endnote marking from "21" to "19" in the third column.
611.Appendix H, ¶ H.84.	Board	Changed the endnote markings from "22" to "20" in the second column and "23" to "21" in the third column.
611.Appendix H, endnotes heading	JCAR, Board	Changed the double-dashes in "Appendix HEndnotes" to an em-dash in "Appendix H—Endnotes." See the entry in Table 5 below and the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" in Table 4.

611.Appendix H, former endnote 11	Board	Removed the obsolete endnote "11."
611.Appendix H, former endnote 12	Board	Renumbered former endnote "12" to "11."
611.Appendix H, former endnote 13	Board	Renumbered former endnote "13" to "12."
611.Appendix H, former endnote 14	Board	Renumbered former endnote "14" to "13."
611.Appendix H, former endnote 15	Board	Renumbered former endnote "15" to "14."
611.Appendix H, former endnote 16	Board	Renumbered former endnote "16" to "15."
611.Appendix H, former endnote 17	Board	Removed the "dummy" language formerly used to correspond with an obsolete endnote in the corresponding federal regulation.
611.Appendix H, former endnote 18	Board	Removed the obsolete endnote; renumbered former endnote "18" to "16."
611.Appendix H, former endnote 19	Board	Renumbered former endnote "19" to "17."
611.Appendix H, former endnote 20	Board	Renumbered former endnote "20" to "18."
611.Appendix H, former endnote 21	Board	Renumbered former endnote "21" to "19."
611.Appendix H, former endnote 22	Board	Renumbered former endnote "22" to "20."
611.Appendix H, former endnote 23	Board	Renumbered former endnote "23" to "21."
611.Appendix H Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available, including deletion of an obsolete <i>Federal Register</i> citation.
611.Appendix I	Board	Corrected the format from "611.Appendix I" to uppercase "611.APPENDIX I," as required by 1 Ill. Adm. Code 100.350(b).

611.Appendix I Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.Table A heading	Board	Corrected the format from "611.Table A" to upper-case "611.TABLE A," as required by 1 Ill. Adm. Code 100.350(b)(2).
611.Table A	JCAR	Reformatted table for enhanced readability.
611.Table A Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.Table B heading	Board	Corrected the format from "611.Table B" to upper-case "611.TABLE B," as required by 1 Ill. Adm. Code 100.350(b)(2).
611.Table B	JCAR	Reformatted table for enhanced readability.
611.Table B Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.Table C heading	Board	Corrected the format from "611.Table C" to upper-case "611.TABLE C," as required by 1 Ill. Adm. Code 100.350(b)(2).
611.Table C	JCAR	Reformatted table for enhanced readability.
611.Table C Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.Table D heading	Board	Corrected the format from "611.Table D" to upper-case "611.TABLE D," as required by 1 Ill. Adm. Code 100.350(b)(2).
611.Table D Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.Table E heading	Board	Corrected the format from "611.Table E" to upper-case "611.TABLE E," as required by 1 Ill. Adm. Code 100.350(b)(2).
611.Table E Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.
611.Table F heading	Board	Corrected the format from "611.Table F" to upper-case "611.TABLE F," as required by 1 Ill. Adm. Code 100.350(b)(2).

611.Table F Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.	
611.Table G heading	Board	Corrected the format from "611.Table G" to upper-case "611.TABLE G," as required by 1 Ill. Adm. Code 100.350(b)(2).	
611.Table G Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.	
611.Table H heading	Board	Corrected the format from "611.Table H" to upper-case "611.TABLE H," as required by 1 Ill. Adm. Code 100.350(b)(2).	
611.Table H Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available, including deletion of an obsolete <i>Federal Register</i> citation.	
611.Table I heading	Board	Corrected the format from "611.Table I" to upper-case "611.TABLE I," as required by 1 Ill. Adm. Code 100.350(b)(2).	
611.Table I Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available, including deletion of an obsolete <i>Federal Register</i> citation.	
611.Table J heading	Board	Corrected the format from "611.Table J" to upper-case "611.TABLE J," as required by 1 Ill. Adm. Code 100.350(b)(2).	
611.Table J Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available, including deletion of an obsolete <i>Federal Register</i> citation.	
611.Table Z heading	Board	Corrected the format from "611.Table Z" to upper-case "611.TABLE Z," as required by 1 Ill. Adm. Code 100.350(b)(2).	
611.Table Z, fluoride	Board	Corrected the citation "40 CFR 141.60(b)(1)" to "40 CFR 141.62(b)(1)."	
611.Table Z, Phase I VOCs	Board	Corrected the citation "40 CFR 141.60(a)(1)" to "40 CFR 141.62(a)(1) through (a)(8)"; corrected "July 9, 1989" to January 9, 1989."	
611.Table Z, Phase II IOCs	Board	Corrected the citation "40 CFR 141.60(b)(2)" to "40 CFR 141.62(b)(2) and (b)(4) through (b)(10)."	

611.Table Z, Phase II VOCs	Board	Corrected the citation "40 CFR 141.60(a)(2)" to "40 CFR 141.61(a)(9) through (a)(18)."
611.Table Z, Phase II SOCs	Board	Corrected the citation "40 CFR 141.60(a)(2)" to "40 CFR 141.61(c)(1) through (c)(18)."
611.Table Z, Phase V SOC	Board	Separated the entry for endrin from the other Phase C SOCs due to its different effective date.
611.Table Z, Phase IIB IOC	Board	Corrected the citation "40 CFR 141.60(a)(2)" to "40 CFR 141.62 (b)(3)."
611.Table Z, Phase IIB SOCs	Board	Corrected the citation "40 CFR 141.60(a)(2)" to "40 CFR 141.61(a)(9) through (a)(18)."
611.Table Z, Phase V IOCs	Board	Corrected the citation "40 CFR 141.60(b)(3)" to "40 CFR 141.61(b)(11) through (b)(15)."
611.Table Z, Phase V VOCs	Board	Corrected the citation "40 CFR 141.60(a)(3)" to "40 CFR 141.61(b)(19) through (b)(21)."
611.Table Z, Phase V SOCs	Board	Corrected the citation "40 CFR 141.60(a)(3)" to "40 CFR 141.61(c)(19) through (c)(25)"; removed endrin from the list of chemicals.
611.Table Z, Consumer Confidence Report Rule	Board	Corrected "Subpart O" to "Subpart O of this Part."
611.Table Z Board note	Board	Updated the <i>Code of Federal Regulations</i> edition to the latest version available.

Table 4: Revisions to the Text of the Proposed Amendments in Final Adoption

Section Revised	Source(s) of Revision(s)	Revision(s)
611.102(a), "USEPA NERL Method 200.5 (rev. 4.2)"	JCAR, Board	Corrected the em-dash in "Inductively Coupled Plasma—Atomic Emission Spectrometry" to an endash in "Inductively Coupled Plasma-Atomic Emission Spectrometry." See the entry in Table 5 below.
611.102(a), "USEPA OGWDW Methods"	JCAR	Moved the ending closing parenthesis after "1623 (05)" to follow "1623.1."

611.102(b), "AWWA," "Standard Methods, 20th ed.," "Method 3125"	Board	Changed "Sections 611.720" to singular "Section 611.720."
611.102(b), "AWWA," "Standard Methods, 21st ed.," "Method 3125"	JCAR	Changed "Sections 611.720" to singular "Section 611.720."
611.102(b), "ASTM," "ASTM Method D2907-91 A or B"	Board	Changed "Method D2907-91" to "Method D2907-91 A or B."
611.102(b), "ASTM," "ASTM Method D3859-98 A and B"	Board	Corrected "D3859-98 A" to D3859-98 A and B"; added "& 'Method B—Atomic Absorption, Graphite Furnace."
611.102(b), "ASTM," "ASTM Method D3859-03 A and B"	Board	Corrected "D3859-03 A" to D3859-03 A and B"; added "& 'Method B—Atomic Absorption, Graphite Furnace."
611.102(b), "ASTM," "ASTM Method D3859-08 A and B"	Board	Corrected "D3859-03 A" to D3859-03 A and B."
611.102(b), "ASTM," "ASTM Method D5673-03"	Board	See the explanation in the entry for 611.102(a), "USEPA NERL Method 200.5 (rev. 4.2)" above in this Table 4. See the entry in Table 5 below.
611.102(b), "ASTM," "ASTM Method D5673-05"	Board	See the explanation in the entry for 611.102(a), "USEPA NERL Method 200.5 (rev. 4.2)" above in this Table 4. See the entry in Table 5 below.
611.102(b), "USEPA, NSCEP," "USEPA OGWDW Methods, Method 523, ver. 1.0"	JCAR	Corrected "and ther Degradates" to "and Other Degradates"; corrected the period before "referenced in" to a comma.
611.102(b), "USEPA, OGWDW," "USEPA OGWDW Methods, Method 523, ver. 1.0"	JCAR	Removed the repeated appearance of "Method 523, ver. 1.0"; corrected "and ther Degradates" to "and Other Degradates"; corrected the period before "referenced in" to a comma.

611.102(b), "USEPA, OGWDW," "USEPA OGWDW Methods, Method 536, ver. 1.0"	JCAR	Removed the repeated appearance of "Method 536, ver. 1.0"; corrected "and ther Degradates" to "and Other Degradates"; corrected the period before "referenced in" to a comma.
611.102(b), "USEPA, ORD," "USEPA OGWDW Methods, Method 525.3, ver. 1.0"	JCAR	Removed the repeated appearance of "Method 525.3, ver. 1.0"; corrected the period before "referenced in" to a comma.
611.311 Board note	Board, JCAR	Added underlining inadvertently omitted from the added text, "In 2005, USEPA indicated (May 16, 2005)"; corrected "U.S.C. §" to "USC"; corrected "C.F.R." to "CFR." See the entry in Table 5 below.
611.359(a)(1)	JCAR	Omitted the unnecessary ending conjunction "and."
611.611(a)(13) Board note	Board, Agency (USEPA)	Corrected the citation "77 Fed. Reg. 38528," the page where the federal amendment occurs, to "77 Fed. Reg. 39523," the first page of the notice.
611.611(a)(16) Board note	Board, Agency (USEPA)	Corrected the citation "77 Fed. Reg. 38528," the page where the federal amendment occurs, to "77 Fed. Reg. 39523," the first page of the notice.
611.611(a)(23) Board note	Agency (USEPA)	Corrected the citation "77 Fed. Reg. 38528," the page where the federal amendment occurs, to "77 Fed. Reg. 39523," the first page of the notice.
611.645(b), "dalapon"	JCAR	Added the ending semicolon after "and 557."
611.645(b), "oxamyl"	Board	Added a comma before "or 20th ed." to offset the final element of a series.
611.720(a)(5) Board note (second)	JCAR, Agency (USEPA)	Corrected the spelling "ASTM Mehtods" to "ASTM Methods."
611.Appendix B, Table 1.2 preamble	JCAR	Corrected the spelling "inctivation" to "inactivation."

611.Appendix E, ¶ 2	JCAR, Board	Changed the double dashes to em-dashes in "contamination like dirt and dust that rarely affect an adult." to em-dashes preceded and followed by spaces in "contamination—like dirt and dust—that rarely affect an adult." See the entry in Table 5 below and the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" in Table 4.
611.Appendix H, endnotes heading	JCAR, Board	Changed the double-dashes in "Appendix H Endnotes" to an em-dash in "Appendix H— Endnotes." See the entry in Table 5 below and the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" in Table 4.
611.Table A	JCAR	Reformatted table for enhanced readability.
611.Table B	JCAR	Reformatted table for enhanced readability.
611.Table C	JCAR	Reformatted table for enhanced readability.

Table 5: Requested Revisions to the Text of the Proposed Amendments Not Made in Final Adoption

Section Affected	Source(s) of Request: Requested Revision(s)	Explanation
611.102(a) generally	JCAR: Change the smart quotation marks throughout to straight quotation marks (137 quoted titles).	The Board consistently uses smart quotation marks.
611.102(a), "Hach SPADNS 2 Method 10225"	JCAR: Add spaces before and after the em- dash to change "Method 10225—Spectrophoto- metric Measurement" to "Method 10225— Spectrophotometric Measurement."	The Board consistently uses the book style, rather than the word-processor style, for em-dashes, since Microsoft Word does not need spaces to allow word wrapping. <i>See</i> B. Garner, <i>The Redbook: A Manual on Legal Style</i> (2002), ¶ 1.50 at p. 30

611.102(a), "Hach TNTplus 835/836 Method 10206"	JCAR: Add spaces before and after the emdash to change "Method 10206—Spectrophotometric Measurement" to "Method 10206—Spectrophotometric Measurement."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(a), "USEPA NERL Method 200.5 (rev. 4.2)"	JCAR: Add spaces before and after the em- dash to change "Inductively Coupled Plasma—Atomic Emission Spectrometry" to "Inductively Coupled Plasma — Atomic Emission Spectro- metry."	The Board has instead corrected the em-dash to a hyphen: "Inductively Coupled Plasma-Atomic Emission Spectrometry." See the entry in Table 4 above.
611.102(a), "USEPA NERL Method 525.3 (ver. 1.0)"	Agency (USEPA): Add the web address for online availability of the new method.	This listing in subsection (a) defines the short-form name and source for the method; subsection (b) recites the more detailed availability information, including recitation of the on-line availability.
611.102(a), "USEPA Organic Methods"	JCAR: Add spaces before and after the emdash to change "Drinking Water—Supplement" to "Drinking Water—Supplement" (three times).	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(a), "USGS Methods"	JCAR: Add spaces before and after the emdash to change "Laboratory—Determination" to "Laboratory —Determination."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.

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611.102(b) generally	JCAR: Change the smart quotation marks throughout to straight quotation marks (332 quoted titles).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.102(b), AWWA, "Standard Methods, 21st ed.," "Method 3125"	Agency (USEPA): Table 2 on page 34 of the October 18, 2012 opinion lists this entry as derived from "141.25(a)."	The Board has corrected the corresponding provision designation in Table 2 to "141.23(k)(1)." No change in the text of the regulation is necessary.
611.102(b), "ASTM," "ASTM Method D511-93 A and B"	JCAR: Add spaces before and after the emdashes to change "Method A— Complexometric" to "Method A— Complexometric" and "Method B—Atomic Absorbtion" to "Method B—Atomic Absorption."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D511-03 A and B"	JCAR: Add spaces before and after the emdashes to change "Method A— Complexometric" to "Method A— Complexometric" and "Method B—Atomic Absorbtion" to "Method B—Atomic Absorption."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.

611.102(b), "ASTM," "ASTM Method D511-09 A and B"	JCAR: Add spaces before and after the emdashes to change "Method A— Complexometric" to "Method A— Complexometric" and "Method B—Atomic Absorbtion" to "Method B—Atomic Absorption."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D515-88 A"	JCAR: Add spaces before and after the emdash to change "Method A—Colorimetric" to "Method A— Colorimetric."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D1067-92 B"	JCAR: Add spaces before and after the emdash to change "Method B—Electrometric" to "Method B— Electrometric."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D1067-02 B"	JCAR: Add spaces before and after the emdash to change "Method B—Electrometric" to "Method B— Electrometric."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D1067-06 B"	JCAR: Add spaces before and after the emdash to change "Method B—Electrometric" to "Method B— Electrometric."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D1125-95 A"	JCAR: Add spaces before and after the emdash to change "Method A—Field and Routine" to "Method A — Field and Routine."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.

611.102(b), "ASTM," "ASTM Method D1179-93 B"	JCAR: Add spaces before and after the em- dash to change "Method B—Ion Selective" to "Method B—Ion Selective."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D1179-99 B"	JCAR: Add spaces before and after the em- dash to change "Method B—Ion Selective" to "Method B—Ion Selective."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D1179-04 B"	JCAR: Add spaces before and after the em- dash to change "Method B—Ion Selective" to "Method B—Ion Selective."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D1179-10 B"	JCAR: Add spaces before and after the em- dash to change "Method B—Ion Selective" to "Method B—Ion Selective."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D1179-10 B"	Agency (USEPA): Table 2 on page 34 of the October 18, 2012 opinion recites the wrong federal regulation relative to this method	The Board corrected Table 2 in this opinion, but no change in the text of the regulation is necessary.

611.102(b), "ASTM," "ASTM Method D1293-95 A or B"	JCAR: Add spaces before and after the emdashes to change "Method A—Precise Laboratory" to "Method A—Precise laboratory" and "Method B—Routine or Continuous" to "Method B— Routine or Continuous."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D1293-99 A or B"	JCAR: Add spaces before and after the emdashes to change "Method A—Precise Laboratory" to "Method A—Precise laboratory" and "Method B—Routine or Continuous" to "Method B— Routine or Continuous."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D1688-95 A or C"	JCAR: Add spaces before and after the emdashes to change "Method A—Atomic Absorption" to "Method A—Atomic Absorption" and "Method C—Atomic Absorption" to "Method C—Atomic Absorption" to "Method C—Atomic Absorption."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.

611.102(b), "ASTM," "ASTM Method D1688-02 A or C"	JCAR: Add spaces before and after the emdashes to change "Method A—Atomic Absorption" to "Method A—Atomic Absorption" and "Method C—Atomic Absorption" to "Method C—Atomic Absorption" to "Method C—Atomic Absorption."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D1688-07 A or C"	JCAR: Add spaces before and after the emdashes to change "Method A—Atomic Absorption" to "Method A—Atomic Absorption" and "Method C—Atomic Absorption" to "Method C—Atomic Absorption" to "Method C—Atomic Absorption."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D2036-98 A or B"	JCAR: Add spaces before and after the emdashes to change "Method A—Total Cyanides" to "Method A—Total Cyanides" and "Method B—Cyanides Amenable" to "Method B—Cyanides Amenable."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D2036-06 A or B"	JCAR: Add spaces before and after the emdashes to change "Method A—Total Cyanides" to "Method A—Total Cyanides" and "Method B—Cyanides Amenable" to "Method B—Cyanides Amenable."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.

611.102(b), "ASTM," "ASTM Method D2907-91 A or B"	JCAR: Add spaces before and after the emdashes to change "Method A—Direct Fluorometric" to "Method A — Direct Fluorometric" and "Method B—Cyanides Extraction" to "Method B — Extraction."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D2972-97 B or C"	JCAR: Add spaces before and after the emdashes to change "Method B—Atomic Absorption" to "Method B— Atomic Absorption" and "Method C—Atomic Absorption" to "Method C—Atomic Absorption" to "Method C—Atomic Absorption."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D2972-03 B or C"	JCAR: Add spaces before and after the emdashes to change "Method B—Atomic Absorption" to "Method B—Atomic Absorption" and "Method C—Atomic Absorption" to "Method C—Atomic Absorption" to "Method C—Atomic Absorption."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D2972-08 B or C"	JCAR: Add spaces before and after the emdashes to change "Method B—Atomic Absorption" to "Method B— Atomic Absorption" and "Method C—Atomic Absorption" to "Method C—Atomic Absorption" to "Method C—Atomic Absorption."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.

611.102(b), "ASTM," "ASTM Method D3559-96 D"	JCAR: Add spaces before and after the emdash to change "Method D—Atomic Absorption" to "Method D — Atomic Absorption."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D3559-03 D"	JCAR: Add spaces before and after the emdash to change "Method D—Atomic Absorption" to "Method D — Atomic Absorption."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D3559-08 D"	JCAR: Add spaces before and after the em- dash to change "Method D—Atomic Absorption" to "Method D — Atomic Absorption."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D3645-97 B"	JCAR: Add spaces before and after the em- dash to change "Method B—Atomic Absorption" to "Method B — Atomic Absorption."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D3645-03 B"	JCAR: Add spaces before and after the emdash to change "Method B—Atomic Absorption" to "Method B — Atomic Absorption."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.

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611.102(b), "ASTM," "ASTM Method D3645-08 B"	JCAR: Add spaces before and after the em- dash to change "Method B—Atomic Absorption" to "Method B — Atomic Absorption."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D3859-98 A"	JCAR: Add spaces before and after the em- dash to change "Method A—Atomic Absorption" to "Method A — Atomic Absorption."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D3859-03 A"	JCAR: Add spaces before and after the emdash to change "Method A—Atomic Absorption" to "Method A—Atomic Absorption."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D3859-08 A"	JCAR: Add spaces before and after the emdashes to change "Method A—Atomic Absorption" to "Method A—Atomic Absorption" and "Method B—Atomic Absorption" to "Method B—Atomic Absorption" to "Method B—Atomic Absorption."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.

611.102(b), "ASTM," "ASTM Method D3867-90 A and B"	JCAR: Add spaces before and after the emdashes to change "Method A— Automated Cadmium" to "Method A— Automated Cadmium" and "Method B— Manual Cadmium" to "Method B— Manual Cadmium."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "ASTM," "ASTM Method D5673- 03"	JCAR: Add spaces before and after the em- dash to change "Plasma—Mass Spectrometry" to "Plasma — Mass Spectrometry."	See the explanation in the entry for 611.102(a), "USEPA NERL Method 200.5 (rev. 4.2)" above in this Table 4. See the entry in Table 4 above.
611.102(b), "ASTM," "ASTM Method D5673- 05"	JCAR: Add spaces before and after the em- dash to change "Plasma—Mass Spectrometry" to "Plasma — Mass Spectrometry."	See the explanation in the entry for 611.102(a), "USEPA NERL Method 200.5 (rev. 4.2)" above in this Table 4. See the entry in Table 4 above.
611.102(b), "ASTM," "ASTM Method D5673- 10"	JCAR: Add spaces before and after the em- dash to change "Plasma—Mass Spectrometry" to "Plasma — Mass Spectrometry."	See the explanation in the entry for 611.102(a), "USEPA NERL Method 200.5 (rev. 4.2)" above in this Table 4. See the entry in Table 4 above.

611.102(b), "ASTM," "ASTM Method D6581-08 A and B"	JCAR: Add spaces before and after the emdashes to change "Method A— Chemically Suppressed" to "Method A— Chemically Suppressed" and "Method B— Electrolytically Suppressed" to "Method B— Electrolytically Suppressed."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "NTIS"	Agency (USEPA): Table 2 on page 35 of the October 18, 2012 opinion does not indicate the change of address for the NTIS.	USEPA misapprehends the function of Table 2; the table lists only ways that State text has deviated from the literal text of its federal counterpart. The change of address included in 35 Ill. Adm. Code 611.102(b), "NTIS" is literally the same as the May 2, 2012 revision to 40 C.F.R. 141.23(k)(1) table, note 6, at 77 Fed. Reg. 26072, 96. No change in the text of the regulation is necessary.
611.102(b), "NTIS," "USEPA Environmental Metals Methods"	JCAR: Add spaces before and after the em- dash to change "Samples—Supplement I" to "Samples— Supplement I."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "NTIS," "USEPA Organic Methods"	JCAR: Add spaces before and after the emdash to change "Drinking Water—Supplement" to "Drinking Water—Supplement" (three times).	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.

611.102(b), Standard Method Online, Method 3112 B-09	Agency (USEPA): Table 2 on page 35 of the October 18, 2012 opinion lists this entry as "611.102(a), Standard Method Online, Method 3112 B- 09."	The Board has corrected the name in Table 2 to "611.102(b), Standard Methods Online, Method 3112 B-09." No change in the text of the regulation is necessary.
611.102(b), "USEPA, EMSL," "USEPA Organic Methods"	JCAR: Add spaces before and after the emdash to change "Drinking Water—Supplement" to "Drinking Water—Supplement" (three times).	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), USEPA, NSCEP, "USEPA OGWDW Methods, Method 523, ver 1.0"	Agency (USEPA): Table 2 on page 35 of the October 18, 2012 opinion lists this entry as "611.102(a), USEPA, NSCEP, 'USEPA OGWDW Methods, Method 523, ver 1.0.'"	The Board has corrected the name in Table 2 to "611.102(b), USEPA, NSCEP, 'USEPA OGWDW Methods, Method 523, ver 1.0.'" No change in the text of the regulation is necessary.
611.102(b), USEPA, NSCEP, "USEPA Organic and Inorganic Methods, Method 523, ver 1.0"	Agency (USEPA): The term "NTIS" is not defined in 35 Ill. Adm. Code 611.101.	An entry exists in alphabetical order in 35 Ill. Adm. Code 611.102(b) for "NTIS." This lists the alternative availability of the method. No change in the text of the regulation is necessary.
611.102(b), "USEPA, NSCEP," "USEPA Environmental Metals Methods"	JCAR: Add spaces before and after the em- dash to change "Samples—Supplement I" to "Samples— Supplement I."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.

611.102(b), "USEPA, NSCEP," "USEPA Organic Methods"	JCAR: Add spaces before and after the emdash to change "Drinking Water—Supplement" to "Drinking Water—Supplement" (three times).	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.102(b), "USGS"	JCAR: Add spaces before and after the emdash to change "Quality Laboratory— Determination" to "Quality Laboratory— Determination."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.301(d) table, note 6	JCAR: Add spaces before and after the emdash to change "volume of water—may not be appropriate" to "volume of water — may not be appropriate."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.310 Board note	JCAR: Omit the added text that lacked underlining, "In 2005, USEPA indicated (May 16, 2005)."	The Board instead chose to add underlining to the text. See the entry in Table 4 above.
611.330(h) first table, note (c) Board note	JCAR: Change the smart quotation marks throughout to straight quotation marks (three quoted titles).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.330(h) first table, note (c) Board note	JCAR: Add spaces before and after the emdashes to change "Table 13.—Technologies" to "Table 13.—Technologies" and "Table 2.—SWTR" to "Table 2.—SWTR."	See the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.

611.330(h) second table, note 1	JCAR: Change the smart quotation marks throughout to straight quotation marks (one quoted title).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.600(d) table	JCAR: Change the hyphens in "atomic absorption-furnace technique" (14 appearances), "atomic absorption-gaseous hydride technique" (two appearances), and "atomic absorption-direct aspiration" (one appearance) to emdashes offset by spaces.	Hyphens are correct for the methods designations, not em-dashes.
611.600(d) table, notes	JCAR: Change the footnote numbers format from plain text to superscript.	The Board prefers to use standard text for the numbers in the body of the table footnotes.
611.603(f)(2)	JCAR: Change the smart quotation marks throughout to straight quotation marks (one quoted phrase twice).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.603(h)(3)	JCAR: Change the smart quotation marks throughout to straight quotation marks (one quoted phrase).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.609(a)(3) Board note	JCAR: Change the smart quotation marks throughout to straight quotation marks (two quoted phrases).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.611(a)(13)(F) Board note	JCAR: Change the smart quotation marks to straight quotation marks (one quoted title).	See the explanation in the entry for 611.102(a) generally above in this Table 4.

611.611(a)(20)(E), colorimetric, phosho- molybdate, automated discrete	Agency (USEPA): Table 2 on page 39 of the October 18, 2012 opinion lists this entry as "611.611(a)(20)(C), colorimetric, phosho- molybdate, automated discrete."	The Board has corrected the name in Table 2 to "611.611(a)(20)(E), colorimetric, phoshomolybdate, automated discrete." No change in the text of the regulation is necessary.
611.645 preamble	JCAR: Change the smart quotation marks to straight quotation marks (one quoted title).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.645(b), "oxamyl"	JCAR: Omit the comma from before the method number in "Standard Methods, 18th ed. Supplement, 19th ed. or 20th ed., Method 6610."	The Board has consistently offset the method number by a comma. See the entry in Table 4 above.
611.646(a)	JCAR: Change the smart quotation marks throughout to straight quotation marks (10 appearances of quoted defined terms).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.646(g) Board note	JCAR: Change the smart quotation marks to straight quotation marks (one quoted defined term).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.646(k)(2)(C)	JCAR: Change the smart quotation marks to straight quotation marks (two appearances of a quoted defined term).	See the explanation in the entry for 611.102(a) generally above in this Table 4.

611.646(k)(5)(A)	JCAR: Change the smart quotation marks to straight quotation marks (one quoted defined term).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.646(1)(2)(C)	JCAR: Change the smart quotation marks to straight quotation marks (two appearances of a quoted defined term).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.648(a)	JCAR: Change the smart quotation marks throughout to straight quotation marks (eight appearances of quoted defined terms).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.648(g)(2)(D)	JCAR: Change the smart quotation marks to straight quotation marks (two appearances of a quoted defined term).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.648(h)(2)(D)	JCAR: Change the smart quotation marks to straight quotation marks (two appearances of a quoted defined term).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.648(p)	JCAR: Change the smart apostrophe to a straight apostrophe in the possessive "State's."	The Board prefers to use a smart apostrophe for possessives.
611.648(r)	JCAR: Change the smart quotation marks to straight quotation marks (one quoted defined term).	See the explanation in the entry for 611.102(a) generally above in this Table 4.

611.720(a)(5)(C)	Agency (USEPA): Table 2 on page 35 of the October 18, 2012 opinion lists this entry as "611.720(a)(5)(B)."	The Board has corrected the name in Table 2 to "611.720(a)(5)(C)." No change in the text of the regulation is necessary.
611.720(b)(1)	JCAR: Change the smart quotation marks to straight quotation marks (one quoted defined term).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.731(a)	JCAR: Change the smart quotation marks to straight quotation marks (one quoted defined term).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.884(b)(1)	JCAR: Change the smart quotation marks to straight quotation marks (one quoted segment of text).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.884(b)(1)	JCAR: Change the smart apostrophe to a straight apostrophe in the possessive "USEPA's" (twice).	See the explanation in the entry for 611.648(p) generally above in this Table 4.
611.884(c)(1)	JCAR: Change the smart quotation marks to straight quotation marks (one quoted segment of text).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.1001(a)(4)(A)	JCAR: Omit the indefinite article from "a lake or reservoir source" (without using overstrike).	The indefinite article appears in the text on file, and its presence adds clarity to the language.

611.1001(a)(5)	JCAR: Change the smart apostrophe to a straight apostrophe in the possessive "Agency's."	See the explanation in the entry for 611.648(p) generally above in this Table 4.
611.1004(a)	Agency (USEPA): Table 2 on page 43 of the October 18, 2012 opinion lists this entry as "611.1007(a)."	The Board has corrected the name in Table 2 to "611.1004(a)." No change in the text of the regulation is necessary.
611.Appendix A, "copper," "health effects language"	JCAR: Change the smart apostrophe to a straight apostrophe in the possessive "Wilson's."	See the explanation in the entry for 611.648(p) generally above in this Table 4.
611.Appendix A, "fluoride," "health effects language"	JCAR: Change the smart apostrophe to a straight apostrophe in the possessive "children's."	See the explanation in the entry for 611.648(p) generally above in this Table 4.
611.Appendix B Board note	JCAR: Change "(2012)" to "(20012)."	The year "20012" is clearly erroneous.
611.Appendix C Board note	JCAR: Change the smart quotation marks to straight quotation marks (one quoted title).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.Appendix E, ¶ 1	JCAR: Change the smart apostrophe to a straight apostrophe in the possessive "system's."	See the explanation in the entry for 611.648(p) generally above in this Table 4.
611.Appendix E, ¶ 2	JCAR: Change the smart apostrophe to a straight apostrophe in the contraction "won't."	The Board prefers to use a smart apostrophe for contractions.

611.Appendix E, ¶ 2	JCAR: Change the double-dashes preceded and followed by spaces in "contamination like dirt and dust that rarely affect an adult." to em-dashes preceded and followed by spaces in "contamination—like dirt and dust—that rarely affect an adult."	The Board has instead chosen to change the double dashes to emdashes that are not preceded or followed by hyphens. See the entry in Table 4 above and the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.Appendix E, ¶ 3.A	JCAR: Change the smart apostrophe to a straight apostrophe in the possessive "person's" (twice).	See the explanation in the entry for 611.648(p) generally above in this Table 4.
611.Appendix E, ¶ 4.B.i.	JCAR: Change the smart apostrophe to a straight apostrophe in the possessive "home's" (twice) and "family's."	See the explanation in the entry for 611.648(p) generally above in this Table 4.
611.Appendix E, ¶ 4.B.v.	JCAR: Change the smart apostrophe to a straight apostrophe in the possessive "city's," "home's," and "owner's."	See the explanation in the entry for 611.648(p) generally above in this Table 4.
611.Appendix E, ¶ 4.D.i.	JCAR: Change the smart apostrophe to a straight apostrophe in the possessive "community's."	See the explanation in the entry for 611.648(p) generally above in this Table 4.
611.Appendix E, ¶ 4.D.iii.	JCAR: Change the smart apostrophe to a straight apostrophe in the possessive "child's."	See the explanation in the entry for 611.648(p) generally above in this Table 4.

611.Appendix G, ¶ I.A.4.	JCAR: Change the smart apostrophe to a straight apostrophe in the possessive "two days'."	See the explanation in the entry for 611.648(p) generally above in this Table 4.
611.Appendix G, note 2	JCAR: Change the smart quotation marks throughout to straight quotation marks (three appearances of quoted defined terms).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.Appendix G, note 3	JCAR: Change the smart quotation marks to straight quotation marks (one appearance of a quoted defined term).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.Appendix G, note 15	JCAR: Change the smart quotation marks to straight quotation marks (one quoted segment of text).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.Appendix G, note 16	JCAR: Change the smart apostrophe to a straight apostrophe in the possessive "State's."	See the explanation in the entry for 611.648(p) generally above in this Table 4.
611.Appendix H, ¶ C.16.	JCAR: Change the smart apostrophe to a straight apostrophe in the possessive "children's."	See the explanation in the entry for 611.648(p) generally above in this Table 4.
611.Appendix H, ¶ D.24.	JCAR: Change the smart apostrophe to a straight apostrophe in the possessive "Wilson's."	See the explanation in the entry for 611.648(p) generally above in this Table 4.

611.Appendix H, ¶ E.46.	JCAR: Change the optional hyphen in "hexachloropentadiene" to a hyphen in "hexachloropentadiene."	The Board ordinarily includes optional hyphens in long chemical names, to allow appropriate breaking at the end of lines; hyphens are otherwise inappropriate in chemical names.
611.Appendix H, Endnotes heading	JCAR: Change the double-dashes in "Appendix H Endnotes" to an emdash preceded and followed by spaces in "Appendix H — Endnotes."	The Board has instead chosen to change the double dashes to emdashes that are not preceded or followed by hyphens. See the entry in Table 4 above and the explanation in the entry for 611.102(a), "Hach SPDANS 2 Method 10225" above in this Table 4.
611.Appendix H, note 5	JCAR: Change the smart quotation marks to straight quotation marks (one appearance of a quoted defined term).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.Appendix H, note 7	JCAR: Change the smart quotation marks to straight quotation marks (one appearance of a quoted defined term).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.Appendix H, note 8	JCAR: Change the smart apostrophe to a straight apostrophe in the possessive "system's" (twice) and "supplier's."	See the explanation in the entry for 611.648(p) generally above in this Table 4.
611.Appendix H, note 20	JCAR: Change the smart quotation marks to straight quotation marks (one appearance of a quoted defined term).	See the explanation in the entry for 611.102(a) generally above in this Table 4.

611.Appendix H, note 21	JCAR: Change the smart quotation marks to straight quotation marks (one appearance of a quoted defined term).	See the explanation in the entry for 611.102(a) generally above in this Table 4.
611.Table C	JCAR: Change the smart apostrophe to a straight apostrophe in the possessive "day's."	See the explanation in the entry for 611.648(p) generally above in this Table 4.
611.Table G, "after installation of corrosion control"	JCAR: Remove the comma before "and inhibitor residual" (without strikeout).	The Board uses a comma to offset the final element of a series.
611.Table G, "reduced monitoring"	JCAR: Remove the comma before "and inhibitor residual" (without strikeout).	The Board uses a comma to offset the final element of a series.
611.Table J	JCAR: Change the superior column heading "UV dose (mJ/cm²)" so that is spans all four columns.	The superior column heading spans only the second through fourth columns, headed "Cryptosporidium," Giardia lamblia," and "virus," which set forth the UV dose rates.

I, John T. Therriault, Assistant Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion on January 24, 2013, by a vote of 5-0.

John T. Therriault, Assistant Clerk Illinois Pollution Control Board