ILLINOIS POLLUTION CONTROL BOARD
July 14, 1993

IN THE MATTER OF:	)	
	)	
SAFE DRINKING WATER ACT	)	R93-1
UPDATE, PHASE V RULES	)	(Identical in Substance Rules)
(7/1/92 - 12/31/92)	)	

Adopted Rule. Final Order.

OPINION OF THE BOARD (by J. Anderson):

SUMMARY OF TODAY'S ACTION

Pursuant to Section 17.5 of the Environmental Protection Act (Act), the Board today updates its regulations that are identical in substance to USEPA regulations implementing the Safe Drinking Water Act (SDWA). The Board rules are contained in 35 Ill. Adm. Code 611. The text of the rules appears in a separate order, adopted this same day.

Section 17.5 of the Act provides for quick adoption of regulations that are "identical in substance" to federal regulations; Section 17.5 provides that Title VII of the Act and Section 5 of the Illinois Administrative Procedure Act (APA) shall not apply. Because this rulemaking is not subject to Section 5 of the APA (5 ILCS 100/5-1 et seq. (Ill. Rev. Stat. 1991 ch. 127, par. 1005-1 et seq.)), it is not subject to first notice or to second notice review by the Joint Committee on Administrative Rules (JCAR).

As discussed more fully below, this rulemaking involves revisions and major additions to the Illinois SDWA rules, as originally adopted August 9, 1990, in docket R88-26 (effective September 20, 1990), and amended November 19, 1992, in docket R91-3 and R92-9 (consolidated) (effective December 1, 1992), and May 5, 1993 in docket R92-3 (effective May 18, 1993). It includes the federal Phase V amendments to the chemical contaminant rules, as adopted by USEPA on July 17, 1992.

The result of these amendments is to add MCLs and monitoring and notice requirements for five inorganic chemical contaminants (antimony, beryllium, cyanide, nickel, and thallium), three volatile organic chemical contaminants (dichloromethane, 1,2,4-trichlorobenzene, and 1,1,2-trichloroethane), and 18 synthetic organic chemical contaminants (benzo[a]pyrene, dalapon, di(2-ethylhexyl)adipate, di(2-ethylhexyl)phthalate, dinoseb, diquat, endothall, endrin, glyphosate, hexachlorobenzene, hexachloro-cyclopentadiene, oxamyl, picloram, simazine, and 2,3,7,8-TCDD (dioxin)). The discussions that follow consider and discuss these amendments in detail.

FEDERAL ACTIONS COVERED BY THIS RULEMAKING

The SDWA program was drawn from 40 CFR 141 (national primary drinking water regulations or NPDWRs), 40 CFR 142 (NPDWRs implementation), and 40 CFR 143 (national secondary drinking water regulations or NSDWRs). The nominal update period of this docket is from July 1, 1992 through December 31, 1992. On July 17, 1992, USEPA made adopted the Phase V rules. A small segment of the Phase V Rules was actually a correction to the Lead and Copper Rules. We adopted an amendment based on that correction in docket R92-3. No other federal actions occurred during this time-frame. The only federal action during the time-frame of this docket was as follows:

57 Fed. Reg. 31847 July 17, 1992 (Phase V rules)

PUBLIC COMMENTS

The Board requested public comments on the proposal for public comment. A number of issues were specifically noted to elicit comments. The Board received comments for 45 days after the Notice of Proposed Amendments for Part 611 and Notices of Proposed Repeal for Parts 604 and 605 appeared in the Illinois Register. The Notices appeared on May 28, 1993, at 17 Ill. Reg. 7621 (Part 604), 7629 (Part 611), and 7738 (Part 605). The Board now adopts amendments based on the federal amendments involved in this docket in light of the public comments received:

PC 1 Illinois Department of Commerce and Community Affairs (June 7, 1993, by Linda Brand, Manager, Regulatory Flexibility Unit)

PC 2 Illinois Environmental Protection Agency (June 25, 1993, by Stephen C. Ewart, Deputy Counsel)

PC 3 U.S. Environmental Protection Agency, Region V (July 9, 1993, by John Dalessandro, Unit Chief, Technical Support Unit, Drinking Water Section)

PC 4 Office of the Secretary of State, Administrative Code Division (July 15, 1993, by Connie Bradway)

PC 1 stated that DCCA has found the proposed amendments would have no significant impact on small businesses in Illinois. PC 2 and PC 3 offer substantive comments that the Board discusses topically below. PC 4 contains Illinois Administrative Code format and Illinois Register publication suggestions. The textual corrections requested in PC 4 and made by the Board are as follows:

1. We corrected the heading "SUBPART M" to "SUBPART N".

2. We corrected the subsection number at Section 611.611(a)(8).

In addition to the written public comments received, on July 13, 1993 the Board received informal telephone communication by staff from the Joint Committee on Administrative Rules (JCAR). JCAR staff indicated a small number of corrections to typographic errors. The Board makes the following corrections to the text of the proposed rules in response to these JCAR comments:

1. We correct the volume of the Federal Register to "57 Fed. Reg. in the Section 611.101 definition of "Phase V".

2. We correct the version of ASTM Method D3859 to that of 1984 in Sections 611.102(b) and 611.611(a)(12). (See also below discussion at page 17.)

3. We add Section 611.356 to this proceeding to make the use of "first-draw" consistent throughout subsection (b). We add Section 611.360 also to correct this same error in subsection (a)(1)(B), although JCAR did not request this change.

4. We add Section 611.359 to correct the misspelling "sampless" in subsection (b)(1)(D).

5. We corrected the heading "SUBPART M" to "SUBPART N".

6. We correct the detection limit for thallium to 0.001 mg/l in Section 611.600(d). (See also below discussion at page 17.)

SDWA REGULATORY HISTORICAL SUMMARY

The Board adopted the initial round of USEPA drinking water regulations, including the "Phase I" rules, adopted by USEPA prior to June 30, 1989, as follows:

R88-26 114 PCB 149, August 9, 1990 (14 Ill. Reg. 16517, effective September 20, 1990).

Subsequent dockets updated the regulations to include federal amendments since that time:

R90-4 112 PCB 317, June 21, 1990 (dismissal; no USEPA amendments July 1 through December 31, 1989)

R90-13 117 PCB 687, December 20, 1990 (15 Ill. Reg. 1562, effective January 22, 1991) (January 1, 1990 through June 30, 1990)

R90-21 116 PCB 365, November 29, 1990 (14 Ill. Reg. 20448, effective December 11, 1990) (Corrections to R88-26)

R91-3 137 PCB 337, November 19, 1992 (16 Ill. Reg. 19010, December 11, 1992, effective December 1, 1992) (USEPA Phase II and Coliforms--consolidated with R92-9; July 1, 1990 through January 31, 1991)

R91-15 137 PCB 627, dismissed December 3, 1992 (February 1, 1991 through May 31, 1991)

R92-3 -- PCB --, May 6, 1993 (17 Ill. Reg. 7943 (Part 605) & 7796 (Part 611), May 28, 1993, effective May 18, 1993) (USEPA Phase IIB and Lead and Copper rules; June 1, 1991 through December 31, 1991)

R92-9 137 PCB 337, November 19, 1992 (16 Ill. Reg. 19010, December 11, 1992, effective December 1, 1992) (Corrections to Phase I rules, R88-26--consolidated with R91-3)

R92-12 137 PCB 725, dismissed December 3, 1992 (January 1, 1992 through June 30, 1992)

R93-1 This docket, May 5, 1993, proposal for public comment (17 Ill. Reg. 7621 (part 604), 7738 (Part 605) & 7629 (Part 611) (May 28, 1993)) (USEPA Phase V rules; July 1, 1992 through December 31, 1992)

GENERAL DISCUSSION OF PRESENT ISSUES

This Update concerns the USEPA Phase V rules, adopted by USEPA on July 17, 1993. The Phase V rules involve instituting new MCLs for 26 contaminants. This involves five new inorganic chemical contaminants (IOCs: antimony, beryllium, cyanide, nickel, and thallium), three new volatile organic chemical contaminants (VOCs: dichloromethane, 1,2,4-trichlorobenzene, and 1,1,2-trichloroethane), and 15 new synthetic organic chemical contaminants SOCs: benzo[a]pyrene, dalapon, di(2-ethylhexyl)-adipate, di(2-ethylhexyl)phthalate, dinoseb, diquat, endothall, endrin, glyphosate, hexachlorobenzene, hexachlorocyclopentadiene, oxamyl, picloram, simazine, and 2,3,7,8-TCDD (dioxin)). Accompanying these revised MCLs are modifications to many of the monitoring requirements relating to these and the existing 48 MCLs (12 IOCs, 18 VOCs, and 18 SOCs). The following discussions consider the federal actions in greater detail.

Incidental to this rulemaking is the repeal of Parts 604 and 605 and amendment of Section 611.521. The Board repealed major segments of Parts 604 and 605 in R88-26, since the existing state

rules were inconsistent with the new federal provisions adopted in that proceeding. The remaining Sections were left applicable until the corresponding federal rules became effective as to a particular supplier. The last federal effective date is June 29, 1993, not long before the Board intends to adopt the Phase V amendments. The Board opened the issue of what to do with these provisions by suggesting alternative actions.

DETAILED SECTION-BY-SECTION-ANALYSIS

The Board adopted amendments in response to these federal actions. The following detailed section-by-section discussion focuses on the details of the actions taken.

Routine, General Amendments--All Sections

The Board has also performed a number of standard deviations from the text of the federal rules. The rationale behind many of these is discussed in the August 9, 1990 opinion and order in docket R88-26 (Phase I rules), and we will not repeat those discussions here. Others are so minor as to warrant no explanation. The standard changes are as follows:

1. Where the federal rules require an action "by" a certain date, the Board renders that as "on or before" that date.

2. We have changed various of the subsections to the active voice, rather than following the federal use of the passive voice.

3. We have updated all Board Notes to reflect the 1992 version of the Code of Federal Regulations and to reference the July 17, 1992 Federal Register action, where appropriate.

4. We have made a number of changes based on the unique attributes of the Illinois regulatory scheme and on certain sytlistic preferences, as described in the Addendum re Standardized Modifications of Federal Text at the end of this opinion.

General Housekeeping Amendments

Potential Repeal or Amendment of Existing Disinfection Rules--Parts 604 and 605 and Section 611.240

In R88-26, as part of the Phase I Rules, the Board adopted Subpart B (Filtration and Disinfection) and Subpart L (Microbiological Monitoring and Analytical Requirements) to Part 611. This meant the repeal of most of Parts 604 and 605, since those segments were inconsistent with the newer, federally-derived regulations of Part 611. However, USEPA imposed delayed effective dates as to disinfection for various suppliers, and

rather than have no standards until the effective dates of the federally-derived standards, the Board chose to have certain provisions in Parts 604 and 605 expire when the federally-derived standards became effective.

For this reason, the Board amended all remaining Sections in Parts 604 and 605, Sections 604.101, 604.102, 604.103, 604.104, 604.105, 604.401, 605.101, 605.102, and 605.109, so that they lost effect when the federally-derived standards of Subpart B to Part 611 became effective as to any particular supplier. Subpart B derived primarily from 40 CFR 141.70 through 141.73 and 141.75. In docket R92-3, the Board repealed Sections 605.101 and 605.102, rather than correct the references in Part 605 to "35 Ill. Adm. Code 611.Subpart B" to properly read "35 Ill. Adm. Code 611. Subpart L", because the federal monitoring requirements supplanting them were already in effect. Section 605.109 was left intact as effective until the standards of Subpart B of Part 611 became effective.

USEPA divided the universe of suppliers into categories and phased the effective dates for each for the disinfection requirements. The distinctions drawn are based on the supplier's raw water source and its filtration status. The distinctions drawn for the purposes of filtration requirements are primarily based on the supplier's raw water source.

Suppliers using surface water sources (SWSs) (and mixed-source systems) that did not provide filtration was to have provided disinfection treatment by December 30, 1991, unless the state had determined pursuant to 42 U.S.C. § 1412(b)(7)(C) that filtration was required (a determination that the Board is not aware was ever made in Illinois). A SWS supplier using filtration was to begin providing disinfection treatment no later than the later of June 29, 1993 or when filtration was installed. A SWS supplier that did not want to employ filtration was to have complied with the conditions for avoiding filtration by December 30, 1991 (18 months after the federal promulgation date of June 29, 1989). If the SWS failed to meet those conditions, it was to have employed both filtration and disinfection by the later of June 29, 1993 or within 18 months of the failure to meet the conditions. (40 CFR 141.72 preamble (1992); 35 Ill. Adm. Code 611.240.)

Thus, the SWSs not initially using filtration were to have begun disinfection treatment on December 30, 1991, and those initially using filtration must begin disinfection treatment by June 29, 1993. On the face of this, only those who install filtration later than 18 months before June 29, 1993 (pursuant to a 42 U.S.C. § 1412(b)(7)(C) determination) might achieve a later compliance deadline. However, the Board wonders whether any suppliers actually fall within this group.

The Board requested comment on whether there are actually any SWS suppliers in Illinois that will have a disinfection compliance deadline later than June 29, 1993 under the federally-derived rules. The Agency (PC 2) responded as follows:

> [T]he Agency has found that all existing SWS suppliers provide filtration of raw water. However, approximately twelve (12) of these SWS are expected to miss the June 29, 1993 deadline for demonstrating filtration adequacy.

For GWSs, a state determination that the raw water source was under the direct influence of groundwater was required before disinfection was required under the federal rules. A GWS that did not provide filtration, and which the state determined to be under the direct influence of surface water, was to have provided disinfection treatment by the later of December 30, 1991 or within 18 months of when the state made the determination, unless the state had determined pursuant to 42 U.S.C. § 1412(b)(7)(C) that filtration was required. GWS suppliers that were found by the state to be under the direct influence of surface water were to employ disinfection by the later of June 29, 1993 or when filtration was installed. (40 CFR 141.72 preamble (1992); 35 Ill. Adm. Code 611.240.)

In the federal phase-in, USEPA did not impose the disinfection requirements on GWS suppliers not determined to be under the direct influence of surface water. The Board saw fit to impose, as an additional state requirement, the new federally-derived disinfection requirements on those suppliers effective immediately (September 20, 1990). (The Agency may exempt any GWS supplier if it specifically determines pursuant to Section 17(b) of the Act that the GWS is from a protected aquifer. The Board interpreted this determination as equivalent to a determination that the GWS was <u>not</u> under the direct influence of surface water. This means that under the federal scheme a GWS supplier need not disinfect until an affirmative state determination requires it to do so. Under the Board's chosen scheme, and that previously imposed by Section 604.401, the GWS supplier must disinfect using the federally-derived standards until an affirmative Agency determination allows it <u>not</u> to do so.) (35 Ill. Adm. Code 611.240(g); <u>see</u> R88-26 opinion at 23-27, 114 PCB 149, 171-75.)

Therefore, as with the SWSs, all unfiltered GWSs initially found to be under the direct influence of surface water were due to have instituted disinfection treatment by December 30, 1991, or within 18 months of a state "under the influence" determination. All other GWSs (those filtered) found under the influence were to employ disinfection by June 29, 1993 or upon installation of filtration. Since Illinois interposes the Section 17(b) determination, the Illinois regulations might be read as structured to effectively presume that all GWSs are under

the direct influence of surface water, and again, the Board is unaware whether there are any GWS suppliers for whom the federally-derived disinfection requirements do not require disinfection as of June 29, 1993.

The Board requested comment on whether there are actually any GWS suppliers in Illinois that will have a disinfection compliance deadline later than June 29, 1993 under the federally-derived rules. The Agency responded (PC 2) as follows:

> No groundwater system ("GWS") suppliers in Illinois will have a disinfection compliance deadline later than June 29, 1993; however, the Agency has . . . issued 1547 Special Exception Permits ("SEP") stating that those suppliers are not under the influence of surface water. The Agency expects to receive an additional 1234 demonstrations by the June 29, 1994 deadline for groundwater under the influence of surface water demonstration.

If all SWS and GWS suppliers in Illinois are required to employ disinfection by June 29, 1993, there will be no suppliers to whom the remaining segments of Part 604 will apply after that date. On this basis, the Board requested public comments on whether we should repeal Part 604 in its entirety as part of this docket. The Agency responded that it "recommends caution in repealing Part 604 of Subtitle F in its entirety . . .", as we discuss below.

The Board noted in the proposal for public comment that Part 604 might have continued vitality if the Board were to reverse the action taken in R88-26 with regard to GWS suppliers not found to be under the direct influence of surface water. Under both the federal and state regulations, this requires a specific finding by the Agency. Notwithstanding the Section 17(b) determination that allows a GWS supplier to not employ filtration and disinfection, it was (and is) possible for the Board to impose the requirements of Part 604 on a GWS supplier until the Agency makes an express determination that the source is under the direct influence. The Part 611 disinfection requirements impose a different standard for disinfection than do those of Part 604. In both cases disinfection is required until the Agency makes a Section 17(b) determination that would make it not necessary. The Board prefers to impose a single standard for disinfection throughout the state, which means employing the deadlines chosen in R88-26, but we recognize that this imposes the federal standard for disinfection on GWS suppliers to whom the standard would never otherwise apply.

The Board requested public comments on whether we should delete Section 611.240(g) in lieu of repealing Part 604, thereby rendering Part 604 applicable to GWS suppliers for whom the

Agency has not made an "under the direct influence of surface water" determination. The Agency commented (PC 2) that would prefer that the Board incorporate the substance of Section 604.401 into Section 611.240(g), delete the existing requirement of Section 611,240(g), and repeal Part 604 in its entirety. The Agency states that the federally-derived disinfection requirements of Section 611.241 or 611.242 are more stringent than the prior Illinois requirements of Section 604.401. The Agency states that the regulations needlessly require a GWS not under the influence of surface water to meet the same standard as a surface water system.

The Board has agreed with the Agency, and we have incorporated the substance of former Section 604.401 into Section 611.240(g), with modifications. We essentially modified the existing preamble language to subsection (g) by adding the substantive requirement, "chlorinate the water before it enters the distribution system". We then added former subsections (a) through (c) from Section 604.401 as subsections (1) through (3) to Section 611.240(g). We changed "which" to "that" in subsection (g)(1) and reworded subsection (g)(2) to specify "by regulation". The Board added a Board Note to cite the existing Agency-promulgated criteria and procedures. Finally, we modified the text of former Sections 604.401(a) and (b) to aid enforceability.

First, we added "of human health and the ability of the distribution system to continue to deliver potable water that complies with the requirements of this Part" to what we codify as subsection (b)(2). The Board believes that this adds needed specificity to "adequate protection".

The Board believes that codifying former Section 604.401 at Section 611.240(g) requires further modification of Section 604.401(b) (at Section 611.240(g)(2)) to fulfill the requirements of Granite City Division of National Steel Co. v. PCB (Apr. 15, 1993), 155 Ill. 2d 149, 613 N.E.2d 719. In that case, the Illinois Supreme Court essentially held that although the authority to adopt regulatory standards of general applicability is reserved to the Board, the Agency could establish criteria by fixed procedures based on site-specific factors that apply to particular facilities where Board review of those criteria is available. (155 Ill. 2d at 172-74, 613 N.E.2d at --.) This means that a rule, like now-repealed subsection (b), that authorizes the Agency to adopt a rule that applies generally to GWS suppliers may go too far. First, it allows the Agency to write a rule of general applicability. Second, it does not result in case-by-case Board review of any challenge to the rule or its application. (See 155 Ill. 2d at 174, 613 N.E.2d at --.)

The Board does not believe that use of the former text of subsection (b) is possible. The alternative selected is to use

the SEP mechanism for Agency implementation of the disinfection requirements among the GWSs using groundwater not under the direct influence of surface water. This allows the Agency to employ site-specific considerations to implement the Board-established state-wide standard: adequate protection (of human health and of the distribution system). This further fulfills the requirements of the Granite City Steel standard in that Board review of Agency determinations is available pursuant to Section 40(a) of the Act.

This action of using the former Part 604 standard in place of the federally-derived standard of Part 611 constitutes a reversal of a former identical-in-substance action. It does not constitute adopting a state-only standard using identical-in-substance procedures. It is a reversal of the Board's action in R88-26, when we made the federally-derived standards immediately applicable to GWS suppliers using groundwater not under the direct influence of surface water.

The federal disinfection regulations involved in R88-26 provided for a phase-in of the disinfection requirements based on the supplier and its source of raw water. However, those rules would never apply at all to GWSs not under the influence of surface water. The Board and the Agency did not desire that any supplier in Illinois provide water to which it had not first applied disinfection treatment. Therefore, the Board, against the desires of the Agency, let the older Section 611.401 standards apply to each supplier until the date newer federally-derived requirements became effective. Because the Board believed that older Section 604.401 was flawed, in that it delegated too much to the Agency, we did not follow the Agency's request to leave the Section 611.401 standard intact as to these GWS suppliers. Instead, we immediately applied the newer federally-derived requirements to GWSs using water not under the influence.

The Board now agrees with the Agency's position, since we have found a way to cure the objectionable defect in the former Section 604.401. Thus, rather than discard the former Illinois rule and make a more stringent federally-derived standard apply to a group of suppliers to whom it would not otherwise apply, the Board cures the defects we perceived in the former state standard and restore it.

As to the sole remaining Section in Part 605, Section 605.109, it loses effect when the filtration and disinfection provisions of 35 Ill. Adm. Code 611.Subpart B become effective as to any particular supplier. This Section requires daily sampling and analysis for turbidity. Since this is the only provision remaining in Part 605, and since it expires when the Part 611 filtration and disinfection requirements become effective, the Board requested comment on whether there are any suppliers that

will remain subject to this provision after June 29, 1993 and, if not, whether we should repeal Part 605 in its entirety as part of this docket. The Agency responded (PC 2) that it agreed that the Board should repeal this Part in its entirety.

Potential Recodification of Subtitle F: Public Water Supplies

The pace of adoption and amendment of the federally-derived Part 611 rules has occurred rapidly since prior to the August, 1990 adoption of R88-26, the first of these several dockets. The Board has worked very hard to keep up with the fast pace of federal revisions. In the process, the text of Part 611 has grown voluminous and increasingly complex:

Part 611	Primary Drinking Water Standards
Subpart A	General (17 Sections)
Subpart B	Filtration and Disinfection (18 Sections)
Subpart C	Use of Non-Centralized Treatment Devices (2 Sections)
Subpart D	Treatment Techniques (3 Sections)
Subpart F	Maximum Contaminant Levels (7 Sections)
Subpart G	Lead and Copper (11 Sections)
Subpart K	General Monitoring and Analytical Requirements (5 Sections)
Subpart L	Microbiological Monitoring and Analytical Requirements (10 Sections)
Subpart M	Turbidity Monitoring and Analytical Requirements (1 Section)
Subpart N	Inorganic Monitoring and Analytical Requirements (15 Sections)
Subpart O	Organic Monitoring and Analytical Requirements (7 Sections)
Subpart P	THM Monitoring and Analytical Requirements (5 Sections)
Subpart Q	Radiological Monitoring and Analytical Requirements (3 Sections)
Subpart T	Reporting, Public Notification and Recordkeeping (14 Sections)

Additionally, Part 611 now includes five appendices and eight tables.

In the past, the various Parts of Subtitle F were arranged topically, and each was relatively brief:

Part 601	Introduction (5 Sections)
Part 602	Permits (20 Sections)
Part 603	Ownership and Responsible Personnel (5 Sections)
Part 604	Finished Water and Raw Water Quality (potentially repealed in this docket)

Subpart A	Bacteriological Quality (5 Sections)
Subpart B	Chemical and Physical Quality (4 Sections, repealed)
Subpart C	Radiological Quality (3 Sections, repealed)
Subpart D	Chlorination and Fluoridation (5 Sections, 4 repealed, 1 potentially repealed in this docket)
Subpart E	Raw Water (2 Sections, repealed)
Part 605	Sampling and Monitoring (10 Sections, 9 repealed, 1 potentially repealed in this docket)
Part 606	Reporting and Public Notification (repealed)
Subpart A	Reporting (3 Sections, repealed)
Subpart B	Public Notification (5 Sections, repealed)
Part 607	Operation and Recordkeeping (6 Sections, 4 repealed)

However, assuming the Board repeals Parts 604 and 605 as part of this docket, only Parts 601 (5 Sections), 602 (20 Sections), 603 (5 Sections), 607 (2 Sections), and 611 (118 Sections, five appendices, and eight tables) still viable.

This causes the Board to consider dividing the bulk of Part 611 into smaller, more manageable pieces, possibly re-using Parts 604 through 606, augmenting Part 607, and creating new Parts in some future proceeding. The pace of federal amendments has ebbed and will remain less than it has been for the past few years, as evidenced by USEPA's semiannual regulatory Agenda, published in the Federal Register on November 2, 1992:

Regulatory Title (Board Docket)	Federal Procedural Stage (Fed./State)	Federal Cite
Lead and Copper Rules (in R92-3)	Final Rule 6-7-91/ Adopted Amendments 5-6-93	56 Fed. Reg. 26547
Phase IIB Rules (in R92-3)	Final Rule 7-1-91/ Adopted Amendments 5-6-93	56 Fed Reg. 32074
Phase V Rules (in R93-3)	Final Rule 7-17-92/ Proposed Amendments 5-6-93	57 Fed. Reg. 31838
E. Coli Analytical Methods	Proposed Rule/--	Expected in 10-92 (not yet adopted by USEPA)

Radionuclides Analytical Techniques	Proposed Rule/--	Expected in 4-93
Trihalomethanes Analytical Methods	None/--	Expected in 9-93
Arsenic Rule	None/--	Expected in 11-94
Sulfate Rule	None/--	Expected in 9-95
Phase VIA (Disinfection By-products)	None/--	Expected in 6-95
Phase VIB (25 contaminants)	None/--	Expected in 6-95
Groundwater Disinfection	None/--	Expected in 9-96

This indicates that although USEPA plans some further significant amendments to its drinking water rules, those will not prompt another rapid succession of voluminous Board actions for several more months, after this present proceeding is completed.

In response to a request for public comment on possible recodification, the Agency urged caution. It felt that the Board should proceed slowly and cautiously to avoid initial confusion of USEPA and the regulated community, who are presently familiar with the present regulatory structure. As to a possible Part-by-Part subject matter organization for any such recodification, the Agency did not comment. The Board may use some future opportunity to begin a scheme of recodification of the federally-derived regulations into several Parts, but we will heed the appreciated Agency advice of caution.

The Phase V-Derived Amendments

Definitions--Sections 611.101 & 611.640

The general definitions section, Section 611.101, derives in significant part from 40 CFR 141.2. USEPA amended this provision on July 17, 1992, at 57 Fed. Reg. 31838. USEPA revised the definition of "initial compliance period" so that (1) the references to the Phase V contaminants were included and (2) the initial compliance period for suppliers serving fewer than 150 service connections begins in the first full compliance period after the effective date of a new regulation. That is January 1, 1996 through December 31, 1998 for the Phase V contaminants. Formerly, the initial compliance period was January 1, 1993 through December 31, 1995 for all suppliers, as it still remains

for suppliers serving 150 or more service connections.

The Board has adopted the federal amendment, but with significant structural changes. We have drafted the definition so that the initial compliance period begins on January 1, 1993, except for the Phase V contaminants (each listed by name) for which it begins on January 1, 1996.

The Board has made two additional amendments to Section 611.101 based on the federal Phase V Rules, but these are based on the need to add clarity rather than on any specific federal amendments. We added a definition of "Phase V", as referring to that group of chemical contaminants promulgated by USEPA on July 17, 1992, consistent with existing usage for previous federal rules. We also amended the definitions of "SOC" and "VOC" to include the respective names of the new Phase V chemical contaminants. We observed in doing so that we neglected to add the names of aldicarb, aldicarb sulfone, aldicarb sulfoxide, and pentachlorophenol to the definition of "SOC" in docket R92-3. We add them in this proceeding.

Section 611.640 does not derive from any particular federal provision. Rather, the Board derived these organic monitoring-specific terms from the need for defined, consistent use throughout Subpart O. The Phase V amendments have prompted us to delete endrin from the definition of "old MCL". they also prompted us to add definitions of "Phase V SOC" and "Phase V VOC". We have also added references to "Phase IIB SOC" (and oversight from docket R92-3), "Phase V SOC", and "Phase V VOC" to the definition of "revised MCL".

In response to a Board request with regard to our approach to the definitions amendments in Sections 611.101 and 611.640, the Agency commented. The Agency would like to have the Board delete our "old MCL" and "new MCL" usage and collapse all SOCs, VOCs, and inorganics into a single Section. The Agency comments that the regulated community is very confused about the "Phases" and "old" and "new".

The Board agrees that this structure is not the optimum one. The "old" and "new" distinction derives from the pre-existence of MCLs that the Agency proposed and the Board adopted based on older federal guidelines. This was done using the general rulemaking procedures of Section 27. To the extent our authority allows, the Board has continued to use the identical-in-substance procedures to delete these prior MCLs as they become less stringent than or inconsistent with the more recently-adopted federally-derived MCLs. These are the only legitimate bases for their deletion using the Section 7.2 identical-in-substance procedures. The continued existence of these state-only MCLs has required some form of distinction between them and the newer MCLs for the purposes of testing, monitoring, and reporting. The

Board would need to receive the proper justification for the deletion of the "old MCLs" in the course of a Section 27 rulemaking proceeding. We would need a proponent to file a rulemaking petition and present the proper record at hearing to gain that justification. Then, on the proper record and following the appropriate procedures, we would do so.

As to the use of the federal "Phase" designations, we would prefer not to delete them in that they have utility in implementation of the rules, at least at this time. We have used them because USEPA has implemented new MCLs in batches, and, especially in the case of Phase I VOCs, the monitoring deadlines and requirements vary from one Phase to the next. Further, to the extent we read the Agency comments as including the distinctions between the SOCs, the VOCs, and the inorganic chemical contaminants, the monitoring and testing problems would be worse if we did not maintain the distinctions in labelling.

Based on the Agency's comments, as well as on our own desire to make the rules as simple and straight-forward as possible, the Board will examine the prospect of dropping distinctions between the groups of contaminants to the extent possible. However, time does not allow us to do this in this proceeding. We will examine this in the near future. This will also allow us to garner further public comments as to how the Board can accomplish this objective. (See the discussions below at pages 17 and 28.)

Revisions to the Analytical Methods/Incorporations by Reference and Monitoring and Analytical Provisions--Sections 611.102, 611.510, 611.600, 611.601, 611.603, 611.609, 611.611, 611.612, 611.646, 611.647 & 611.648

Section 611.102 is the incorporations by reference Section for Part 611. There are primarily linear relationships between Subpart N and 40 CFR 141.23 and between Subpart O and 40 CFR 141.24. This means that Section 611.600 derives from 40 CFR 141.23 preamble and paragraph (a)(4)(1), Section 611.601 derives from 40 CFR 141.23(a), Section 611.603 derives from 40 CFR 141.23(c), Section 611.609 derives from 40 CFR 141.23(i), Section 611.611 derives from 40 CFR 141.23(k), major segments of Section 611.612 derive from 40 CFR 141.23(l) through (q), Section 611.646 derives from 40 CFR 141.24(f) and Section 611.638 derives from 40 CFR 141.24(h).

As part of the Phase V amendments, at 57 Fed. Reg. 31838 (July 17, 1992), USEPA amended 40 CFR 141.23 as follows (including citations to the corresponding Illinois rules):

Federal Action and Subsection or Paragraph Number	Corresponding Illinois Section
amended (a)(4)(i)	611.600(d)

added (a)(4)(iii)	611.601(c)
amended (c) preamble and (c)(1)	611.603 preamble and subsection (a)
amended (i)(1)	611.609(a)
adding a new (k)(4)	added in part to 611.611(a), with footnote 6 becoming 611.611(f)
redesignating former (k)(4) as (k)(5) and amending it	611.611(d)
redesignating former (k)(5) as (k)(6) and amending it	611.611(e)

The major thrust of these federal amendments was to add appropriate references to the five new Phase V IOCs (antimony, beryllium, cyanide, nickel, and thallium), to add methods for these contaminants, to add sample preservation techniques for them, to add laboratory acceptance limits for them, and to conform all references to the former beginning of the initial compliance period by deleting references to "January 1, 1993".

The Board has adopted amendments corresponding with those made by USEPA. We have found it necessary, however, to make additional amendments as a result of the federal actions. This is, in part, due to the scope of the federal amendments. It also relates to what we perceive as possible USEPA oversights.

We add the new federally-designated methods for each of the new IOC contaminants. This means new methods and detection limits for the IOC contaminants, antimony, beryllium, cyanide, nickel, and thallium, at Section 611.600(d), the new methods at Section 611.611(a), the sample preservation techniques at Section 611.611(d), and the laboratory certification requirements at Section 611.611(e). We add the federal references to these new IOC contaminants at Sections 611.601(d)(2); 611.603 (preamble); and 611.609(a), (d), and (e) (preambles). In rendering footnote 6 to the table of methods at amended 40 CFR 141.23(k)(4), we have added subsection (f) to Section 611.611 that outlines the sample preparation technique and added a notation to the preamble to subsection (a) to the effect that the laboratory must use that technique for designated analytical methods.

We also make changes apparently overlooked by USEPA. The Board added references to the new IOCs at Section 611.609(b) (corresponding with 40 CFR 141.23(i)(2), which USEPA did not amend). We further added similar references to the Section 611.611(e) (preamble) statement relating to provisional laboratory certification (corresponding with renumbered and amended 40 CFR 141.23(k)(6) (preamble)) because we wonder whether USEPA intended the provisional certification to apply to all of the pre-existing IOCs. We delete the method for barium at Section 611.612(f)(2) (corresponding with 40 CFR 141.23(q)(2)) because the old MCL for barium was repealed as part of the Phase

IIB amendments in R92-3.

The Board similarly has rendered the method for the state-only MCL cyanide, at Section 611.612(f)(3), inapplicable when the new federally-derived MCL becomes effective. The revised MCL for cyanide added to Section 611.301(a) will become effective on January 17, 1994. Deleting the method for cyanide in this docket before the federally-derived MCL becomes effective could render the state-only MCL virtually unenforceable.

In the course of reviewing the federal IOC analytical methods, the Board also noticed that USEPA updated several of the references for methods for the pre-existing IOCs. Thus, all references to Standard Methods in Section 611.611 (corresponding with 40 CFR 141.23(k)(4)) are now to the 17th edition and the correspondingly revised method numbers. This meant adding the federal footnote 6 sample preparation technique, already referred to, for existing methods for barium, cadmium, chromium, and selenium. The references for existing ICP method 200.7 was updated to what the Board now calls "USEPA Environmental Metals Methods: Method 200.7" for barium, cadmium, and chromium. Similarly, what the Board called "USEPA Inorganic Methods: Method 300.0" is updated and now called "USEPA Ion Chromatography Method 300.0" for nitrate and nitrite. Finally, the Board adds the federal notations to "the sample digestion technique set forth in the method" (federal footnote 9) and to "adding 2mL of 30% hydrogen peroxide" (federal footnote 10) to the existing methods for mercury and selenium, as appropriate.

The Agency responded (PC 2) to a Board request for public comments that it agrees with the way we have dealt with the IOC analytical amendments to Sections 611.600, 611.601, 611.603, 611.609, 611.611, and 611.612. Another Agency comment requests that we add ASTM Method D3859-84A for selenium. USEPA included this 1984 version of the AA-hydride method in the new listing of 40 CFR 141.23(k)(4). The Board originally proposed the 1988 version, which is the version USEPA requires for the graphite furnace method. We have added the 1984 version of the AA-hydride method to the incorporations by reference at Section 611.102(b) and correspondingly changed the methods at Section 611.611(a)(12)(A)(i). The Agency also commented that the detection limit for thallium at Section 611.600(d) should appear as 0.001 mg/L. We also made this correction.

Also a part of the Phase V amendments, at 57 Fed. Reg. 31841 (July 17, 1992), were amendments to 40 CFR 141.24, as follows (including citations to the corresponding Illinois rules):

Federal Action and Subsection or Paragraph Number	Corresponding Illinois Section

amended (f) preamble, (f)(4), and (f)(5)	611.646(d) and (e)
amended (f)(7) and (f)(10)	611.646(g), (i), and (j)
amended (f)(12)	611.646(l)
amended (f)(14)	no corresponding provision
amended (f)(15)	611.646(o)
amended (f)(16)	611.646(p)
amended (f)(17)	611.646(q)
amended (f)(18)	611.646(r)
amended (h)(10)	no corresponding provision
amended (h)(12)	611.648(l)
amended (h)(18)	611.648(r)
amended (h)(19)	611.648(s)

As for the IOCs, the major thrust of these federal amendments was to add appropriate references to the three new VOCs (dichloromethane, 1,2,4-trichlorobenzene, and 1,1,2-trichloroethane) and 15 new SOCs (benzo[a]pyrene, dalapon, di(2-ethylhexyl)adipate, di(2-ethylhexyl)phthalate, dinoseb, diquat, endothall, endrin, glyphosate, hexachlorobenzene, hexachlorocyclopentadiene, oxamyl, picloram, simazine, and 2,3,7,8-TCDD (dioxin)), to add methods for these contaminants, to add laboratory acceptance limits for them, and to conform all references to the former beginning of the initial compliance period by substituting "in the initial compliance period" for references to "January 1, 1993".

We add the new federally-designated methods for each of the new VOC contaminants. This is easier than the amendments related to IOCs and SOCs because it requires only broadening the references at the existing methods to include the Phase V VOCs. Thus, "Phase I or Phase II VOCs" now reads "Phase I, Phase II, or Phase V VOCs". Also, at subsections (d), (e), and (r)(2), "January 1, 1993" is changed to refer to the initial compliance period. We defer discussion of the SEP amendment to subsection (g) for the next segment of this opinion.

The Board foresees that this rendering that uses the federal Phase designations may become unwieldy, if it has not done so already. Therefore, we might consider just rendering these references as "VOCs" in a future docket. (See the above discussion at pages 14 and 15 of the Agency's comments in this regard.) To date, the purpose for designating the Phases was due to the separate requirements for monitoring the Phase I VOCs in Section 611.647. Since Section 611.646 also applies to Phase I VOCs, it may be possible at some future date to repeal Section 611.647 in its entirety. We hesitate, however, because the remaining subsections in Section 611.647 do not contain any time-limiting language, such as "until January 1, 1993", as did subsection (h) prior to the substantive repeal of docket R92-3. Application to "systems in operation before January 1, 1993, for purposes of initial monitoring", as stated in the preamble, is

not sufficiently clear that the Board can assume that repeal would not result in federal primacy problems.

The Board requested public comments on the way we have dealt with the VOC analytical amendments to Section 611.646. We especially requested comments on the future possibility of redesignating all VOCs together as "VOCs", by dropping the Phase designations, and on the possible repeal of Section 611.647 as having no continued future vitality in light of Section 611.646 covering the same contaminants. The Agency responded that the Board should delete the Phase designations but retain the "VOC" distinction. The Agency urged this as part of any future reorganization of Part 611. (See the discussion above at pages 14 and 15.)

We add the new federally-designated methods for each of the new SOC contaminants. This is, in part like the VOC amendments to Section 611.646, in that an update to a number of references to "Phase II SOCs" were updated to read "Phase II, Phase IIB, and Phase V SOCs". (The Phase IIB designation was overlooked in docket R92-3.) On the other hand, a number of methods updates were necessary, as for the IOCs. This means new detection limits for the SOC contaminants appear at subsection (r)(2), the new methods and added contaminants for existing methods appear at subsection (l), and the laboratory certification requirements appear at subsection (s)(2)(C). Also, at subsections (d)(1) and (n)(2), "January 1, 1993" is changed to refer to the initial compliance period.

A more detailed examination of the analytical methods assignments indicates the federal SOC methods assignments and the possible need to correct a USEPA error. Endrin, hexachlorobenzene, hexachlorocyclopentadiene, and simazine were added to existing "USEPA Organic Methods" Method 505; simazine was added to Method 507; endrin and hexachlorobenzene were added to Method 508; dalapon, dinoseb, and picloram were added to Method 515.1; di(2-ethylhexyl)adipate, di(2-ethylhexyl)phthalate, endrin, hexachlorobenzene, hexachlorocyclopentadiene, "polynuclear aromatic hydrocarbons", simazine, and toxaphene were added to Method 525.1; and oxamyl was added to Method 531.1. The Board added endrin, for the purposes of the state-only MCL to methods 505 and 508 in R91-3 (Nov. 19, 1992); therefore, we need only add this contaminant to Method 525.1.

In amending Method 525.1 to add the new contaminants, USEPA left out the language originally included in the Phase II Rules where USEPA added this provision (docket R91-3). That language uses a 1991 later-revised version of the method. In assuming that USEPA erred in deleting the language, the Board did not propose its deletion, and by public comment (PC 3), USEPA stated that the Board should refer to revision 3.0 of this method.

USEPA added six new methods for Phase V contaminants. It added what the Board has called "USEPA Dioxin and Furan Method 1613" for 2,3,7,8-TCDD (dioxin). We see no indication that this is in any way connected with the "USEPA Organic Methods", so we have kept this method separate. The rest of the new methods appear all from "USEPA Organic Methods": Method 547 for glyphosate, Method 548 for endothall, Method 549 for diquat, Methods 550 and 550.1 for benzo(a)pyrene and "other polynuclear aromatic hydrocarbons".

The Board requested comments on our approach to making the federal Phase V amendments to Section 611.648 relating to monitoring the new SOC contaminants. We especially requested comment as to whether we have properly corrected an apparent error by retaining the 1991 "revision 3.0 for method 525.1, which USEPA dropped. As noted above, USEPA responded as to method 525.1. The Agency (PC 2) stated that it concurs with the Board's approach but deferred to USEPA as to method 525.1. USEPA further commented (PC 3) on Method 1613. It conceded in its comments that USEPA Organic Methods does not include Method 1613, but USEPA suggested that it is an "organic method" and "it should not be kept separate from other U.S.EPA organic methods". The Board believes that USEPA misapprehended the purpose of the separate labels. The separate labels are used solely for the purposes of clearly indicating the identities of the documents centrally incorporated by reference at Section 611.102.

Finally, Section 611.510 derives from 40 CFR 141.40(n). USEPA amended this provision, relating to monitoring for unregulated contaminants, at 57 Fed. Reg. 31845 (July 17, 1992). The effect of the federal amendments is to delete the Phase II unregulated contaminant listings for all the IOCs, at paragraph (n)(11), and VOCs and SOCs, at paragraph (n)(12), that are now regulated and for which there are now Phase V MCLs. The Board makes the federal deletions at corresponding subsections (k) and (l). We also change the methods columns headings to read "USEPA Organic Methods" and "USEPA Inorganic Methods", respectively, in keeping with the usage established in docket R91-3 for the rest of the monitoring provisions in Part 611.

In response to a Board request for comments on our approach to the deletions from the listing of unregulated contaminants, the Agency (PC 2) and USEPA (PC 3) commented.

The Board has made a minor correction to what is now the subsection (b) preamble in response to the USEPA comments. The former language, "inorganic contaminants listed in subsection (k)", now refers to "organic" contaminants.

The Agency agreed that the Board should delete any unregulated contaminants for which USEPA has promulgated an MCL. USEPA stated that it has no objection to the Board deleting such

unregulated contaminants for which there is now an MCL. However, the Agency stated that the contaminants that USEPA has listed as unregulated contaminants and for which there is no MCL should remain listed as unregulated contaminants for monitoring every five years. The Agency specifically referred to "Phase I" unregulated contaminants, which the Board deleted in repealing Section 611.650, in docket R91-3.

In R91-3, the Board deleted the former Section 611.650 listing of (36 federal Phase I) unregulated contaminants for two reasons: because USEPA adopted MCLs for 14 of them as a result of the Phase II rules, and as a matter of general housekeeping to avoid possible conflicts with the Phase II rules because the monitoring was to have been completed by January 1, 1992. The Board received no adverse comments and followed through with the deletion, on November 19, 1992, without further discussion. In evaluating the Agency comments the Board has determined that we erred in part in that deletion.

As part of the Phase V amendments, USEPA amended 40 CFR 141.40(e) to delete all the 14 unregulated organic contaminants for which it had adopted a MCL. It also deleted two additional unregulated contaminants (dibromomethane and 1,2-dibromo-3-chloropropane). This left a list of 20 unregulated organic contaminants (chloroform, bromodichloromethane, chlorodibromo-methane, bromoform, chlorobenzene, m-dichlorobenzene, 1,1-dichloropropene, 1,1-dichloroethane, 1,1,2,2-tetrachloroethane, 1,3-dichloropropane, chloromethane, bromomethane, 1,2,3-trichloropropane, 1,1,1,2-tetrachloroethane, chloroethane, 2,2-dichloropropane, o-chlorotoluene, p-chlorotoluene, bromobenzene, and 1,3-dichloropropene). As noted in R91-3, the latest compliance date for initial monitoring for these contaminants was January 1, 1991, however, overlooked in R91-3 was the fact that federal subsection (l) requires all CWSs and NTNCWSs to repeat the monitoring at least every five years. Therefore, as noted by the Agency's comments, this is a "live" federal provision that the Board should not have deleted. We now restore it as Section 611.510(a), applicable to "Phase I" unregulated contaminants. This requires us to restructure the existing text of Section 611.510 into Section 611.510(b), applicable to "Phase V" unregulated contaminants.

In restoring the text of former Section 611.650, the Board adds counterparts to 40 CFR 141.40 (g) through (m), only partially codified in former Section 611.657, also repealed in R91-3. This includes subsection (a)(7) (corresponding with federal subsection (g)), which sets forth the methods requirements; subsection (c) (corresponding with federal subsection (h)), which sets forth the laboratory requirements; and subsection (d) (corresponding with federal subsection (l)), which sets forth the repeat analysis requirements. We do not codify the requirements of 40 CFR 141.40(i), which pertains to

the ability of suppliers to grandfather data up until a date long since expired; 141.41(j), an optional USEPA provision relating to monitoring 15 additional contaminants that USEPA does not require for state programs; 141.40(k), which pertains to notice to the Agency by smaller suppliers up until a date long since expired in lieu of sampling; and 141.40(m), an optional provision that pertains to composite sampling.

The Board has codified the laboratory certification requirements and the repeat monitoring requirements as subsections (c) and (d) because it appears that USEPA intended that these also apply to monitoring for the Phase V unregulated contaminants. The federal language is broad enough to embrace the new federal subsection (n) Phase V requirements, and the language appears relevant to them on its face. Otherwise, the text of federal subsections (a) through (m), adopted by USEPA as Phase I requirements, appears to apply only to monitoring for the Phase I unregulated contaminants. In codifying the laboratory certification requirements of subsection (c), the Board references the Phase II and Phase V VOC requirements, rather than the Phase I certification requirements. In codifying the repeat monitoring requirements at subsection (d), the Board adds a reference to the timing of the Phase V monitoring requirements. In codifying the methods requirements at subsection (a)(7), we use the 1988 edition of USEPA Organic Methods, rather than the 1986 edition.

Special Exception Permits--Sections 611.110 & 611.646

The federal Phase V amendments included new language at the end of 40 CFR 141.24(f)(7) (corresponding with Section 611.646(g)) that allows the states to waive the initial round of monitoring for 1,2,4-trichlorobenzene for small system suppliers. The federal rules do not define a "small system" in the regulatory text (outside of the context of the Lead and Copper Rules, where it is defined as regularly serving fewer than 3,300 persons). However, the preamble to the federal rules, at 57 Fed. Reg. 31825, appears to contemplate a system with fewer than 500 service connections. On this basis, the Board added this language to the proposal for public comment with a change that indicates this size limitation in terms of the number of service connections. Thus, we used "a supplier that serves fewer than 500 service connections", rather than "small system", as did USEPA.

We made a small number of amendments to the core SEP provision at Section 611.110 to implement the federal Phase V Rules. All references at subsection (e) are now to "Phase I, Phase II, and Phase V VOCs" and "Phase II, Phase IIB, and Phase V SOCs". Additionally, we added to subsection (e) a reference to the SEP from the 1,2,4-trichlorobenzene monitoring requirement of Section 611.646(d) for small system suppliers.

The Board requested comment on our approach to the federal waiver provisions. The Agency commented (PC 2) that the Board's language appeared accurate, but it deferred to USEPA. USEPA commented (PC 3) that because the definition of "small system" appears in 40 CFR 141.2, the Board should use the 3300 person limit. We have changed the text to do so; however, since the Board codified the lead and copper definitions at Section 611.350, we use "3300" rather than "small system".

USEPA further commented with regard to Section 611.110(e)(2)(D)(i), adopted in R92-3, that 40 CFR 141.24(f)(8)(ii)(E) further requires consideration of wellhead protection. USEPA states that "a wellhead protection program should be the goal of any monitoring waiver program". We have added "wellhead protection" as appropriate.

BAT Designations for Contaminants--Sections 611.130, 611.300(c) & 611.311(b)

USEPA added new designations of the best available treatment technology (BAT) for each of the Phase V contaminants at 40 CFR 141.62, for IOCs, and 40 CFR 141.61, for VOCs and SOCs. The Board has adopted these designations without change at corresponding Sections 611.301(c) and 611.311(b). However, USEPA kept with its prior practice of adding to the separate listings of BAT in the implementation rules of 40 CFR 142.

When adapting 40 CFR 142, Subpart G in R92-3, the Board referred to the main BAT listings at Sections 611.310 and 611.311, rather than follow the federal structure and maintain a separate listing at the conditions for relief provisions. That saved space and avoided confusion as to whether the BAT designations were different in the two contexts. At 57 Fed. Reg. 31848 (July 17, 1992), USEPA amended 40 CFR 142.62 to add BAT for each of the Phase V contaminants. Those added listings are similar to the ones added at 40 CFR 141.61 and 141.62, with three notable exceptions: the heading "PTA", for packed tower aeration", in 40 CFR 161.61 appears as "PAT" in section 142.62; PTA appears in section 142.62 for alachlor, whereas it does not appear in section 141.61; PAT does not appear in section 142.62, whereas it appears in section 141.61 for toxaphene; and "OX" (oxidation) appears in section 142.62 for hexachlorobenzene, whereas granulated activated carbon (GAC) appears in section 40 CFR 141.61.

Faced with this apparent federal error, the Board has decided to remain with our single-listing structure and follow the actual text of the federal substantive rule--i.e., the BAT listings of 40 CFR 141.61. However, this still leaves confusion. In the course of determining USEPA's intent, we examined the federal listings of BAT in the preamble discussions, at 56 Fed. Reg. 3529 (Jan. 30, 1991) (toxaphene is a Phase II contaminant)

and 57 Fed. Reg. 31778. This discussion indicates that the 40 CFR 141.61 listing is correct as to alachlor and hexachlorobenzene, but the preamble at 56 Fed. Reg. 3529 indicates that USEPA may not have intended PTA as BAT for toxaphene. We have added a Board Notes to this effect at Section 611.130(c)(1) and 611.311(b). Nevertheless, we have followed the actual text of 40 CFR 141.61(b) because the rule text is enforceable and the federal preamble discussion is not.

The Board received comments from both the Agency (PC 2) and from USEPA (PC 3) in response to our request for comments on the codification of BAT for the chemical contaminants at Sections 611.301(c) and 611.311(b). Specifically, we requested comment on our use of the single listings of BATs for both the substantive rules and the limitations on relief rules of Section 611.130 and on our dealing with the apparent federal errors as to alachlor, toxaphene, and hexachlorobenzene. The Agency agreed that the BAT listings should be consistent, and it agreed with our treatment of alachlor, toxaphene, and hexachlorobenzene, but the Agency deferred to USEPA. USEPA stated that GAC is BAT for all three contaminants, and PTA should be removed from the listings. We therefore deleted the proposed listing for PTA from toxaphene in Section 611.311(b).

MCLs--Sections 611.300, 611.301, 611.310, and 611.311

Section 611.300 derives from 40 CFR 141.11. USEPA did not amend this provision in the current update period, but other federal amendments prompted Board action and inquiry.

The only remaining federal MCL at 40 CFR 141.11(b) is that for arsenic. The Board has in dockets R91-3 and R92-3 followed the federal lead and deleted the remaining federally-derived MCLs from Section 611.300(b). USEPA has retained the introductory text of subsection (a), the fluoride limitation of subsection (c) (which the Board has listed in subsection (b)), and the conditions for higher nitrate limitations for non-CWSs in subsection (d). The Board has also followed the federal lead to retain these, even if it has lead to a double listing of the MCL for fluoride at both Sections 611.300 and 611.301 and an apparent dislocation of the nitrate exception from the listing of the MCL at Section 611.301.

Section 611.300(b) also includes four remaining state-only MCLs for cyanide, iron, manganese, and zinc. We recently deleted the fifth prior state-only MCL for copper in docket R92-3, in response to the federal Lead and Copper Rules. We now delete the state-only MCL for cyanide, effective when the new federally-derived MCL becomes effective on January 17, 1994. Although the state-only MCL of Section 611.300(b) is the same as the new federal MCL for cyanide, which the Board codifies at Section 611.301, we believe that the existence of two MCLs would lead to

confusion and possible inconsistency with the federal rules.

At past meetings of the regulatory work group, the Agency has raised the issue of whether the Board should delete the remaining state-only MCLs. The Board always responded that since those are rules adopted pursuant to Section 27 of the Act, and since they do not render the state regulations less stringent than or inconsistent with the federal regulations, we cannot delete them in an identical-in-substance proceeding pursuant to Sections 7.2 and 17.5. Therefore, if the Agency desires to delete the remaining state-only MCLs, in the absence of a federal action that would necessitate their deletion, we would invite the Agency to file a petition for regulatory amendment pursuant to Section 27 of the Act.

Section 611.300(c) contains a listing of the secondary MCL for fluoride. Corresponding 40 CFR 141.11(c) contains the MCL for fluoride and a reference to the secondary MCL at 40 CFR 143.3. The Board noted in the proposal for public comment that 40 CFR 143.1 provides that the federal secondary MCLs are advisory only, and they are not enforceable. For this reason, we proposed deletion of this language and replacement of subsection (c) with our traditional "dummy" language to maintain structural parity with the corresponding federal provision. We proceed to make these amendments; however, in response to an Agency comment (discussed below), we have added a statement as to the secondary MCL to the Board Note to Section 611.301(b), where the MCL for fluoride appears.

In examining this section for the purposes of amendment in response to the federal Phase V amendments, we question the way we crafted subsection (d) in R88-26. This subsection allows non-CWSs to exceed the nitrate MCL as provided by 40 CFR 141.11(d) and incorporates the federal provision by reference. There is no cross-reference to Section 611.301(b), where the MCL actually appears. 40 CFR 141.11(d) provides that the states may allow a non-CWS to exceed the MCL for nitrate, up to a level of 20 mg/l, if certain conditions are fulfilled:

1. the water must not be available for consumption by children under six years old,

2. there will be continuous public notice of the fact that the nitrate level exceeds the MCL and of the potential adverse health effects of elevated nitrate,

3. there will be annual notification to state and local public health officials of nitrate levels in excess of the MCL, and

4. no adverse health effects will result from the exceedance.

Aside from the issue of the separation of this exception from the MCL, the Board has a few questions about this provision. Initially, we question whether we should even retain this provision, since this provision is federally-optional. Assuming it is a desireable provision, the Board wonders whether we should just set forth the federal language, as we have for nearly the entire text of the federal rules. The text is not particularly lengthy and highly technical, which are two factors that usually prompt an incorporation by reference. In fact, the federal use of "at the discretion of the state" in the incorporated text presents some potential difficulty. Further, by setting forth the text, we could spell out the need to notify the "Illinois Department of Public Health and the county and city departments of health, as appropriate, for the political subdivision(s) served by the supplier with the water that exceeds the nitrate MCL." A final issue relates to whether this prerogative of deciding to use the exception should rest solely with the supplier. In all other contexts where USEPA has rested a discretionary decision of this nature based on fixed criteria with the state, Illinois has used the mechanism of the SEP and the Agency makes the determination based on enunciated standards, subject to Board review. The Board believes that using the SEP mechanism for granting nitrate "exceptions" may be the proper tool to use.

Finally, the Board has amended subsection (e) for clarity and structural consistency with the rest of the rules without making any substantive change. We have removed the colon, using "for" in its place, and we substituted "MCLs" for "concentrations".

The Board requested public comments on our approach to Section 611.300. Specifically, we requested comments on our deletion of the state-only MCL for cyanide, our deletion of the secondary MCL for fluoride, on whether we should codify the language of the federal nitrate exception in place of the incorporation by reference, and on whether we should use the SEP mechanism for granting nitrate "exceptions". The Agency responded (PC 2) that it agrees with regard to the expiration of the old MCL for cyanide on the effective date of the new federally-derived MCL. The Agency further commented that the federal secondary MCL remains an enforceable requirement because exceedance of that secondary MCL requires public notice. Finally, the Agency commented that the Board should codify the nitrate language, but we should not use the SEP mechanism for the purposes of nitrate.

In response to this comment, the Board examined further and observed that 40 CFR 143.5 requires notice and sets forth the content of the notice, effective in 1986. We believe that such a parallel provision is necessary for federal primacy, but the time remaining in this proceeding, in light of the imminent deadline

for Board adoption of these amendments, does not quite allow us to craft one at this time. We believe that adding the reference to the Section 611.301(b) Board Note maintains status quo, but we intend to adopt a provision parallel to 40 CFR 143.5 in the next update docket.

The Agency stated that the primary users of the nitrate exception are very small suppliers regulated by the Department of Public Health. Rather than using the SEP mechanism for relief, the Agency stated that the language of the exception should be specific. The Board responds by replacing the former incorporation by reference with a version of the text containing all the essential elements of 40 CFR 141.11(d). In so doing, the Board has dropped all references pertaining to prior authorization by the state. We further added specificity to the public notice requirements by specifying use of the federally-required nitrate public health effects notice of Section 611.Appendix A(20).

Section 611.301 derives from 40 CFR 141.62, amended by USEPA at 57 Fed. Reg. 31847 (July 17, 1992). For antimony, beryllium, cyanide, nickel, and thallium, USEPA added the MCLs at subsection (b) and BAT designations at subsection (c). The new MCLs apply to CWSs and NTNCWSs, and not to transient suppliers.

The Board made minimal correction to the federal text in adapting their substance to the Illinois system. The Board rendered the federal "chlorine" as "chlorination" and "ultraviolent" as "ultraviolet irradiation". We retained the BAT listing of "UV" despite the fact that USEPA designated it for none of the IOCs.

In adapting the new IOC MCLs, we added a statement to the preamble of Section 611.301(b) that states that they become effective on January 17, 1994. In the first update that will clearly become effective only after that date has passed, the Board can delete this statement in keeping with our past practice.

We requested public comments on our approach to the new federal IOC MCLs. Specifically, we requested comment on our correction of an obvious federal error in citing "ultraviolent" as BAT, yet keeping it listed despite the lack of any contaminant to which it applies under the federal rules. The Agency commented (PC 3) that the Board's chosen language appeared accurate, but deferred to USEPA for comment. USEPA (PC 3) specifically stated that "chlorine" should appear as "oxidation (chlorine)". We have made this change to the definitions of the abbreviations at the end of Section 611.301(c). USEPA specifically stated that it had no comments with regard to the new inorganic MCLs.

Section 611.310 derives from 40 CFR 141.12, amended by USEPA at 57 Fed. Reg. 31838 (July 17, 1993). USEPA deleted the existing MCL for endrin at subsection (a), since it adopted another new MCL for endrin at 40 CFR 141.61 (corresponding with Section 611.311), and marked subsection (a) as "reserved". Therefore, 40 CFR 141.12 contains only one remaining MCL, that for TTHMs, and it applies only to CWSs that add a disinfectant and which provide water to 10,000 or more persons. The MCLs for aldrin, DDT, dieldrin, heptachlor, heptachlor epoxide, and 2,4-D[1] and TTHM (to the extent it applies to all other suppliers) are state-only MCLs.

The Board followed through and deleted the prior federally-derived MCL for endrin. We correspondingly amended the Board Notes to subsections (a) and (b) to observe that they were formerly derived from 40 CFR 141.12(a) and (b), and we noted the federal deletion of the last federal MCL. This is an action overlooked in docket R91-3 as to subsection (b) when USEPA similarly removed the final MCL in 40 CFR 141.12(b) and marked the subsection "reserved".

The Board is also considering an additional action with regard to Section 611.310 that would shorten it. Since there is only one remaining federal MCL at 40 CFR 141.12(c) (for TTHMs) and the balance of this Section includes only state-only MCLs, it may be desireable to "collapse" the three subsections with their three Board Notes into a single listing with a single Board Note. We believe that this structure would more clearly impart the requirements to the regulated community--especially since there is no longer any need to maintain structural parity with the corresponding federal rule.

The Board requested public comments on our approach to Section 611.310. We specifically requested comments on the possible restructuring of this Section by the removal of all subsection designations and the consolidation of the substance of all the Board Notes into a single Board Note. The Agency reiterated (PC 2) its desire that the Board not distinguish between "new" and "old" MCLs. As previously stated, we will revisit the possibility of dropping distinctions in a future proceeding. The Agency also commented that the state-only MCLs for heptachlor, heptachlor epoxide, and 2,4-D were based on older federal data, and since USEPA has now adopted higher MCLs based on newer data, the Board should delete these state-only MCLs. As previously discussed above, the Board cannot do so by identical-in-substance procedures except under very narrow circumstances.

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[1] USEPA has adopted MCLs for heptachlor, heptachlor epoxide, and 2,4-D as part of the Phase II Rules. In R91-3, the Board retained the state-only MCLs for these contaminants because they are more stringent than the federal MCLs.

The state-only MCLs must be less stringent than the federal MCLs or inconsistent with the federal regulations. Since the Agency has not made these arguments, all the Board can do is suggest that the Agency propose a Section 27 rulemaking to delete them. (See above discussion at pages 14 and 15.)

Section 611.311 derives from 40 CFR 141.61, amended by USEPA at 57 Fed. Reg. 31846 (July 17, 1992). USEPA added MCLs for the new Phase V three VOCs to subsection (a) and MCLs for the 15 new Phase V SOCs to subsection (c). (As previously discussed, the BAT designations for all the new Phase V organic contaminants are added to subsection (b).) The new MCLs become effective on January 17, 1994. The Board adopts the 18 new Phase V MCLs for organic contaminants without changing the federal text. We add a Board Note to both subsections to draw attention to the amended definition of "initial compliance period" at Section 611.101, in order to highlight the delay in monitoring for these contaminants.

In adapting the new VOC and SOC MCLs, we add statements to the preambles of Section 611.311(a) and (c) that states that they become effective on January 17, 1994. In the first update that will clearly become effective only after that date has passed, the Board can delete this statement in keeping with our past practice.

In response to the Board's request for public comments on our approach to the new federal VOC and SOC MCLs, the Agency stated that it supports the Board's designation of effective dates, but it deferred to USEPA. USEPA stated that it had no comments on our approach to the VOC and SOC MCLs.

Lead and Copper: Analytical Provisions--Section 611.359

Section 611.359 derives from 40 CFR 141.89. This Section sets forth the analytical requirements for the lead and copper program. USEPA made a corrective amendment to this provision at 57 Fed. Reg. 31847, on July 17, 1992. The Board made the necessary revision in adopting Section 611.359 in docket R92-3, so no further action is necessary in this docket.

Reporting and Public Notice: MCL Violations--Section 611.Appendix A

Section 611.Appendix A derives from 40 CFR 141.32, amended by USEPA at 57 Fed. Reg. 31843 (July 17, 1992). The federal rule sets forth the contaminant-by-contaminant mandatory health effects information that suppliers must submit to the public when they violate an MCL. The federal amendments added notices for each of the new Phase V contaminants: five IOCs (antimony, beryllium, cyanide, nickel, and thallium), three VOCs (dichloromethane, 1,2,4-trichlorobenzene, and 1,1,2-trichloroethane), and

18 SOCs (benzo[a]pyrene, dalapon, di(2-ethylhexyl)adipate, di(2-ethylhexyl)phthalate, dinoseb, diquat, endothall, endrin, glyphosate, hexachlorobenzene, hexachlorocyclopentadiene, oxamyl, picloram, simazine, and 2,3,7,8-TCDD (dioxin)). The Board adopts the federal language without material deviation. We use "USEPA" for clarity in each notice and render "ground water" as "groundwater" wherever it appears throughout the Appendix, which is the Board's usual convention. We update the CFR reference in the Board Note.

The Board make three corrections to the proposed notices in response to the Agency's comments (PC 3). We insert "of" in "risk of cancer" in the notice for benzo(a)pyrene (paragraph 58). We capitalize "Dalapon" in the first word for the notice for that contaminant (Paragraph 59). Finally, we add the words "that have been observed in laboratory animals" at the end of the next to last sentence of the notice for di(2-ethylhexyl)adipate (paragraph 61).

Federal Effective Dates--Section 611.Table Z

Section 611.Table Z derives from no particular federal provision. Rather, the Board believes that setting forth the federal effective dates for the various federal MCLs would prove useful to the regulated community. We added this as Table D in R91-3 for reference and renumbered it to Table Z in R92-03. We added the effective dates for the federal Phase V amendments. The Board has separated the Phase V IOC, Phase V VOC, and Phase V SOC entries.

AGENCY OR BOARD ACTION?

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

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

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

1. Is the person making the decision applying a Board regulation, or taking action contrary to ("waiving") a Board regulation? It generally takes some form of Board action to

"waive" a Board regulation.

2. Is there a clear standard for action such that the Board can give meaningful review to an Agency decision?

3. Does the action result in exemption from the permit requirement itself? If so, Board action is generally required.

4. Does the decision amount to "determining, defining or implementing environmental control standards" within the meaning of Section 5(b) of the Act. If so, it must be made by the Board.

There are four common classes of Board decision: variance, adjusted standard, site specific rulemaking, and enforcement. The first three are methods by which a regulation can be temporarily postponed (variance) or adjusted to meet specific situations (adjusted standard or site specific rulemaking). Note that there often are differences in the nomenclature for these decisions between the USEPA and Board regulations.

EDITORIAL CONVENTIONS

As a final note, 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" - "shall" is used when the subject of a sentence has to do something. "Must" is used when someone has to do something, but that someone is not the subject of the sentence. "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".

CONCLUSION

This opinion supports the Board's order of this same day. The Board will promptly file these adopted amendments with the Secretary of State.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above proposed opinion was adopted on the 14th day of July, 1993, by a vote of 5-0.

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board