

Date: 26 April 2012

To: ODW Staff

From: Steven D. Pelli, PE, Acting Director *SDP*
Office of Drinking Water

Subject: SURVEILLANCE AND REGULATIONS – Transition between Stage 1 and
Stage 2 DDBP Rules and Stage 2 Rule Extension Requests

Reference: *Compliance Sampling and Reporting Guidance Manual,*
SDWIS Users Manual

Project Leader: Doug Meyer

Reviewed by: Susan E. Douglas *SED*

SUMMARY STATEMENT

This memo outlines the procedures for compliance monitoring during the transition period between the Stage 1 and Stage 2 Disinfectant and Disinfection Byproduct (DDBP) Rules. It also describes how compliance will be determined for disinfection byproduct maximum contaminant levels (MCLs), reporting violation and enforcement data through SDWIS/STATE, and public notification requirements during the transition period. The memo also provides procedures and templates for evaluating Stage 2 DDBP Rule extension requests for capital improvements, and instructions for determining compliance during the extension period.

The procedures described herein are based on the Memorandum from Ann Codrington, Director of the Drinking Water Protection Division of the EPA in Washington, D.C., dated Feb 13, 2012 with the SUBJECT: "Safe Drinking Water Act – Compliance Monitoring Transition Period between the Stage 1 and Stage 2 Disinfectants and Disinfection Byproducts Rules and Extension Agreements."

Table of Contents

1. BACKGROUND 3

2. TRANSITION TO STAGE 2..... 3

 2.1. Monitoring & Compliance Determination..... 3

 2.2. Public Notification and Consumer Confidence Reports (CCRs)..... 4

3. MCL COMPLIANCE EXTENSIONS FOR CAPITAL IMPROVEMENTS 4

 3.1. Authority 4

 3.2. Procedure 5

 3.3. Qualification of Applicant..... 5

 3.4. Extension Documents 5

 3.5 Ongoing Public Notification 6

 3.6. Revocation of Extension 6

 3.7 Time Accounting and Tracking 6

Attachments

- A. LETTER TO OWNER, INFORMATIONAL
- B. EXTENSION REVIEW WORKSHEET
- C. TEMPORARY EXTENSION
- D. INITIAL PUBLIC NOTICE
- E. TRANSMITTAL LETTER TO OWNER – DRAFT
- F. TRANSMITTAL LETTER TO OWNER – FINAL
- G. EPA MEMORANDUM dated Feb 13, 2012

1. BACKGROUND

Federal and state regulations for Stage 1 and Stage 2 both require community and nontransient noncommunity waterworks to monitor for total trihalomethanes (TTHM) and five haloacetic acids (HAA5). Under Stage 1, compliance with the TTHM and HAA5 Maximum Contaminant Levels (MCLs) is based on the system-wide running annual average (RAA) results of all monitoring locations. Under Stage 2, compliance with the TTHM and HAA5 MCLs will be based on locational running annual averages (LRAA) at each compliance location within the distribution system.

The start date for Stage 2 DDBP compliance monitoring has been scheduled based on the waterworks' 2006 service population. Monitoring plans for Stage 2 are required, and in some cases the monitoring locations have changed. Significant milestones are given as follows:

PWS or CDS¹: Population	Stage 2 Monitoring Start Date²	Stage 2 Sampling Plan ODW Approval Deadline
Sch 1: $\geq 100,000$	April 1, 2012	January 1, 2012
Sch 2: 50,000-99,999	October 1, 2012	July 1, 2012
Sch 3: 10,000-49,999	October 1, 2013	July 1, 2013
Sch 4: < 10,000 w/o crypto monitoring	October 1, 2013	July 1, 2013
Sch 4: <10,000 w/crypto monitoring	October 1, 2014	July 1, 2014

2. TRANSITION TO STAGE 2

2.1. Monitoring & Compliance Determination

Once a waterworks begins monitoring for Stage 2, sampling from Stage 1 locations shall be discontinued.

Waterworks monitoring quarterly shall calculate compliance with Stage 2 at the end of the fourth calendar quarter. If the LRAA is calculated based on fewer than four quarters and exceeds the MCL (a "zero" is used for missing quarterly data in the computation during the transition period) then a Notice of Violation (NOV) is warranted.

Waterworks monitoring less frequently than quarterly that exceed the MCL for TTHM or HAA5 must begin quarterly monitoring. Compliance is then determined from the LRAA calculations after four consecutive quarters.

If a waterworks exceeds the MCL in Stage 1, the NOV continues until a Stage 2 LRAA compliance determination is made.

Refer to the *SDWIS Manual* for instructions on coding violations during the transition period.

¹ If a waterworks is included in a Combined Distribution system (CDS), their schedule is based on the population of the largest waterworks' service population in the CDS.

² Per the *Waterworks Regulations* 12VAC5-590-370 B 3(e) (3) Locational running annual average monitoring requirements.

2.2. Public Notification and Consumer Confidence Reports (CCRs)

Public Notification Rule requirements continue during the transition between Stage 1 and Stage 2. Specifically:

- Tier 2 Public Notice is required if an MCL exceedance occurs under Stage 1 or Stage 2.
- Tier 2 Public Notice for a Stage 1 MCL exceedance remains until a Stage 2 compliance determination is made.
- Tier 3 Public Notice is required for monitoring and reporting MCL exceedances under Stage 1 and Stage 2.
- The range of TTHM and HAA5 individual sampling results under Stage 1 and Stage 2 must be reported in the CCR.

3. MCL COMPLIANCE EXTENSIONS FOR CAPITAL IMPROVEMENTS

3.1. Authority

An extension of the Stage 2 Disinfectants-Disinfection Byproducts Rule MCL requirements is authorized in the footnote to the table found in 12VAC5-590-370 B 3 e (3) (c). Additionally, the extension is allowed under 40 CFR 141.620 (c) (footnote1). VDH may allow up to 2 additional years for the waterworks to comply with rule if additional time is needed for capital improvements. The following explanations are significant:

- “Capital improvements” include the design and construction of treatment facilities or alternative water supplies.
- The extension only applies to the TIME FRAME for compliance with an MCL or treatment technique (TT). Monitoring and reporting shall continue per the rule.
- For Stage 2, the extension refers to the switch from Stage 1 to Stage 2 monitoring and compliance determination methodology. **During the extension, compliance will be determined using Stage 2 sites and Stage 1 methodology (RAA, not LRAA).**
- Compliance LRAAs are not calculated until 4 quarters of data are obtained after “capital improvements” are completed and the extension ends.

ODW will adhere to EPA 816-R-07-007: The Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR) Implementation Guidance, Appendix I - Final Guidance for Reviewing Extension Requests under 1412(b)(10) of the *SDWA*, dated August 2007. Based on the federal guidance:

- 1) A waterworks wholesaler’s extension request application does not automatically extend to its consecutive waterworks,
- 2) Each consecutive waterworks shall submit a separate extension request application, and
- 3) A consecutive waterworks should work with its wholesaler to coordinate the extension request applications to expedite review.

3.2. Procedure

The process will require the owner to be proactive because a significant amount of preliminary work is needed before a request is submitted. If the waterworks owner requests information about an extension, the District Engineer will provide information to the owner using the letter provided in ATTACHMENT A.

- A. The waterworks submits a written request to ODW for the extension.
- B. The District Engineer reviews the request and coordinates modifications (e.g. schedule and interim measures) with the owner, and obtains concurrence from the Field Director, Local Health Director, and Central Office (ODW Central Office will confer with the Office of Epidemiology for their concurrence.) Use the review worksheet in ATTACHMENT B.
- C. If the extension is justified, the District Engineer drafts the Extension and Initial Public Notice using ATTACHMENTS C and D, respectively.
- D. The District Engineer forwards these draft documents to the owner, using the transmittal letter in ATTACHMENT E.
- E. The District Engineer makes any changes to the documents as agreed upon after conferring with the owner, and forwards the Extension to the Field Director for signature. The extension becomes effective after the Field Director and the Office Director sign the documents. The District Engineer sends the final signed documents to the owner using ATTACHMENT F.

3.3. Qualification of Applicant

The waterworks owner must apply for an extension in writing. To qualify for an extension, the waterworks must be existing and shall be in compliance with the current (Stage 1) rule. The application must provide the following qualification criteria:

- A. Data that shows the waterworks may not be able to reduce levels below the MCLs by the compliance deadline. The data shall include lab results showing high levels and information about the timing of various measures to reduce those levels.
- B. Evidence that a capital improvement project has been initiated to adequately address compliance with the Stage 2 MCL(s). Milestones must be identified.
- C. Documentation that the waterworks has made “Good Faith” efforts to meet the original compliance deadline of the Stage 2 Rule.
- D. Justification that the capital improvements warrant the duration of the extension request.
- E. Proposed interim measures that minimize public health risk during the extension period.

3.4. Extension Documents

A description of the extension documents and their use is given below.

- A. Initial Public Notice – for the owner to distribute before the extension is granted, to determine if there is significant or specific public concern and whether a public meeting is warranted.
- B. Extension – include the following Special Conditions:

- 1) Compliance Schedule, including milestones
- 2) Progress reports - A minimum quarterly reporting interval is required (monthly frequency may be more appropriate in some cases), with a statement of progress towards the critical deadlines.
- 3) Interim measures, as appropriate. The following should be considered: routine flushing, minimizing the use of specific sources known to cause high DBPs, provision of alternate drinking water for sensitive populations, provision of Point-of-Use or Point-of-Entry devices for sensitive populations, and interim treatment.

3.5 Ongoing Public Notification

Community waterworks shall include a notice of the extension in the annual Consumer Confidence Report for as long as the extension remains in effect.

3.6. Revocation of Extension

The extension may be revoked by the VDH if the waterworks does not demonstrate sufficient progress / adherence to the scheduled milestones in the Special Conditions.

3.7 Time Accounting and Tracking

Review of extension applications and the granting of the Stage 2 Rule Extension are to be entered into PT Log under the category "Other", subcategory "Exemptions & Variances". However, it should be noted that this is NOT a formal exemption or variance.

Tracking of all Extensions issued for the Stage 2 Rule will be performed on an Excel spreadsheet located at: <\\odwsrv1\odwshare\06-Technical Resources\630-Permits & Project Review>

END OF MEMO

ATTACHMENT A. LETTER TO OWNER, INFORMATIONAL

INSTRUCTIONS: Complete / select items shown with *italics*, and convert to regular font.

{date}

SUBJECT: *City/County*

WATER: *Waterworks Name*

PWSID: *PWSID No.*

Administrative Contact

Address

City, State, Zip

Dear *Admin Contact*:

The Stage 2 D/DBP rule established a new primary maximum contaminant level (PMCL) calculation methodology for TTHM and HAA5. According to the rule, your waterworks will need to sample and comply with the new locational PMCL starting (*select one: April 2012/October 2012/October 2013/October 2014*).

Waterworks that require capital improvements to meet Stage 2 D/DBP requirements may request additional time (up to 2 years) for compliance. Please follow these steps to obtain an extension to the new PMCL deadline noted above:

1. Submit a request letter to this Office with justification and schedule (see below).
2. Coordinate with this Office to produce a draft Extension.
3. After receiving a draft Extension, issue a "Notice of Availability" for a public meeting to explain and receive feedback on the proposed extension.
4. Address all comments – summarize and review the comments received with this Office
5. Revise the draft Extension, if needed, and review with this Office.
6. Sign a letter addressed to this Office accepting the extension.

Include the following items in the request letter:

1. Provide justification that the additional time is required to comply with the Stage 2 PMCL for TTHM and HAA5 limits.
2. Provide a review of current TTHM/HAA5 data and the various alternatives that you have considered.
3. Summarize the efforts you have made to meet the rule's deadline, such as:
 - a. Including the schedule with key milestones.
 - b. Providing justification that the milestones are reasonable.
 - c. Explaining why non-D/DBP items are included in the project, if any are included.
4. Regularly scheduled progress reports on your progress towards the milestones will be required.

5. Describe interim measures you will be taking to minimize health risk (lower TTHM/HAA5 levels) until your project is complete. This will also become a binding part of the Extension. Consider measures such as:
- a. Increased flushing,
 - b. Minimizing use of problematic sources,
 - c. Providing alternate water source for sensitive population,
 - d. Use of Point-of-Use devices, and/or
 - e. Interim treatment.

If we can be of additional assistance, please call me at *phone number*.

Sincerely,

District Engineer
XXX Field Office

cc: *Local Health Department, attn: Health Director*
County Administrator
County Building Official
VDH, ODW – Central Office

{file name & path}

ATTACHMENT B. EXTENSION REVIEW WORKSHEET

EXTENSION REVIEW SHEET

City / County:		Date
Waterworks Name:	Application received	
PWSID #	Draft to owner	
Consecutive <input type="checkbox"/> Yes <input type="checkbox"/> No	Public comments received	
Schedule and deadline	Public Meeting	
Evaluated By:	Approved	

I. GENERAL INFORMATION		COMMENT
Existing waterworks (required)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Currently in compliance w/TTHM/HAA5 (req'd)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Project already in progress (required)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
II. MISCELLANEOUS ITEMS		
Justification that Stage 2 cannot be achieved?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Locations where data shows problems and LRAA?		
Good Faith efforts made to meet deadline?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Interim measures included and reasonable?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
III. ON-GOING PROJECT		
Project includes milestones?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Total extension requested (up to 24 mo)?	_____ months	
Milestones are reasonable?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Milestones req'd for Stage 2 compliance?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Non-D/DBP items are justified?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
IV. FINDINGS		
Construction req'd to comply with Stage 2 PMCL?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
No unreasonable risk from Extension (LHD and Epidemiology concurrence received)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
V. PUBLIC COMMENTS		
Any significant comments (if yes, attach discussion)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Comments:

Recommendation for extension: Grant Deny

Initialed _____ DFD _____ FD

ATTACHMENT C. ST2 COMPLIANCE EXTENSION

INSTRUCTIONS: Complete / select items shown with *italics*, and convert to regular font.

<Central Office Letterhead>

EXTENSION TO THE
STAGE 2 DISINFECTANTS / DISINFECTION BYPRODUCTS RULE
COMPLIANCE DEADLINE

Waterworks Name
PWSID No. XXXXXXXX

In accordance with 12VAC5-590-370 B 3 e (3) (c) of the Virginia *Waterworks Regulations* and § 1412(b)(10) of the *Safe Drinking Water Act (SDWA)*, {owner's name} has requested, and the Virginia Department of Health (VDH) hereby grants, a {Insert 24 or less} month extension (until {insert date per EPA Implementation Timeline}) from the Primary Maximum Contaminant Level (PMCL) requirements for the Stage 2 Disinfectants/Disinfection Byproducts Rule (Stage 2 Rule) for Total Trihalomethanes (TTHM) and the group of Five Haloacetic Acids (HAA5). VDH has determined that the {waterworks name} needs additional time for the design and construction of modifications to the waterworks to comply with the stricter PMCL standards of the Stage 2 Rule. VDH has also determined the {waterworks' name} currently complies with the PMCL for the Stage 1 Disinfectants/Disinfection Byproducts Rule (Stage 1 Rule) and granting this extension will not result in an unreasonable risk to the consumers' health. The effect of this extension is that "monitoring" and "reporting" for TTHM and HAA5 shall comply with the Stage 2 Rule; however, compliance with the TTHM and HAA5 PMCLs shall be determined in accordance with the Stage 1 Rule (i.e., calculated using the "system-wide" running annual average) and not the Stage 2 Rule (i.e., calculated using the "locational" running annual average).

This extension is entirely contingent upon strict adherence to the following conditions:

1. {Owner's name} shall complete the design and construction of {describe work to be accomplished} to comply with the stricter PMCL standards of the Stage 2 Rule in accordance with the following schedule:
 - By {date}, complete {item},
 - By {date}, complete {item}, and
 - By {date}, all work shall be complete, the extension shall expire, and the {waterworks name} shall begin complying with the Stage 2 PMCL for TTHM and HAA5.
2. {Owner's name} shall submit (*Select one: monthly, quarterly*) reports to the {Field Office name} on the status of the construction of modifications. The report is due by the 10th day of the following month, and shall include the following:
 - Percentage of construction completed.
 - Estimate of number of days ahead or behind completion by the scheduled date.
3. {Owner's name} shall operate {waterworks name} in a manner to minimize TTHM and HAA5 production. This shall include, but not be limited to the following:

- Interim measures...
 - Interim measures...
4. Public notification actions are required by this extension and shall be distributed in accordance with 12VAC5-590-540 A 3 of the *Waterworks Regulations* as follows:
- Repeat at least annually as long as the extension is in effect.
 - {Community systems} Include a copy of the notice in the annual Consumer Confidence Report.
 - Within ten days of completion of each public notification, the waterworks owner shall provide this Office with written certification that he has fully complied with the public notice requirements.

This extension does not suspend, minimize, or otherwise alter {owner's name} obligation to comply with the *Waterworks Regulations* except for the regulations specifically referenced above.

VDH waives no lawful means of enforcing the laws it administers, the regulations it has adopted, or this extension.

This extension is nontransferable and shall terminate on {Insert Date} or at any time upon written notice of termination by VDH if it is determined that {owner's name} has failed to comply with any of the terms or conditions contained in this extension.

Recommended: _____ Date: _____
Field Office Director's Name, Title
Field Office Name

Approved: _____ Date: _____
ODW Director
Office of Drinking Water

ATTACHMENT D. INITIAL PUBLIC NOTICE

INSTRUCTIONS: Complete / select items shown with *italics*, and convert to regular font.

{Waterworks Letterhead}

NOTICE TO THE CONSUMERS SERVED BY
{WATERWORKS NAME}

PROPOSAL TO GRANT AN EXTENSION OF THE COMPLIANCE DEADLINE FOR THE STAGE 2
DISINFECTANTS/DISINFECTION BYPRODUCTS RULE

Our waterworks is required to comply with the National Primary Drinking Water Regulations and the Virginia *Waterworks Regulations*. These regulations establish drinking water standards for various contaminants, including the Total Trihalomethanes (TTHM) and the group of 5 Haloacetic Acids (HAA5). A recent change in the regulations has tightened the standards for these contaminants. To comply with these new standards, we must construct modifications to our *{name of WTP}*, which means we will not be able to meet the *{April 2012 / October 2012 / October 2013 / October 2014}* compliance deadline. As allowed by the regulations, we have requested a *{##}* month extension to this deadline from the Virginia Department of Health.

TTHM and HAA5 are two groups of compounds formed when chlorine (used to disinfect drinking water) react with naturally occurring organics found in raw water. Some people who drink water containing TTHMs in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer. Some people who drink water containing HAA5 over many years may have an increased risk of getting cancer. It has been determined that the duration of this compliance extension does not subject the public to unreasonable health risks.

{Define status: *We have been in compliance with the current water quality standards for more than # years or since the treatment plant was built and will continue to be required to meet the current standards*}. We will be taking the following interim measure to minimize the creation of these compounds.

- Measure #1
- Measure #2...

This notice is provided to you in compliance with the federal and state regulations aimed at increasing consumer awareness. If you have any questions or wish to submit comments please feel free to contact us at {phone number}. If sufficient comments are received, we will hold a public meeting on this matter.

Sincerely,

Waterworks Official – Title - Date

ATTACHMENT E. TRANSMITTAL LETTER TO OWNER, DRAFT

INSTRUCTIONS: Complete / select items shown with *italics*, and convert to regular font.

{date}

SUBJECT: *City/County*

WATER: *Waterworks Name*

PWSID: *PWSID No.*

Administrative Contact

Address

City, State, Zip

Dear *Admin Contact*:

We have received your request for an extension to the Stage 2 rule compliance date. We have drafted an Extension for the TTHM and HAA5 PMCL. If this draft is acceptable, you have several actions to perform.

First, you must distribute the attached public notice informing your customers about the proposed Temporary Extension and give them an opportunity to respond. At a minimum, the notice shall be published in a local newspaper. These comments must be tabulated and summarized. If sufficient comments are received, you should hold a public meeting.

You must send a letter to this Office. This letter must clearly state your acceptance of the extension. The letter must also transmit the comments (*tabulation and summary*), and the minutes of the public meeting, if one is held.

If we can be of additional assistance, please contact me at *{Phone Number}*.

Sincerely,

District Engineer

XXX Field Office

Enclosures: 1) Draft Extension
2) Initial Public Notice

cc: *Local Health Department, attn: Health Director*
County Administrator
County Building Official
ODW – Central Office

{file name}

ATTACHMENT F. TRANSMITTAL LETTER TO OWNER, FINAL
INSTRUCTIONS: Complete / select items shown with *italics*, and convert to regular font.

{date}

SUBJECT: *City/County*
WATER: *Waterworks Name*
PWSID: *PWSID No.*

Administrative Contact
Address
City, State, Zip

Dear *Admin Contact*:

Enclosed is an Extension for compliance with the Stage 2 Disinfectant/Disinfection Byproducts Rule, dated *{date}*.

Please review the Extension to ensure you are familiar with its requirements:

1. The construction schedule extends the compliance date from *April 2012 / October 2012 / October 2013 / October 2014 until {date}*.
2. *Reporting requirements.*
3. *Interim measures*
4. Include the following language discussing your extension in your annual consumer confidence report while it is in affect *{community systems only}*:

We have been granted an extension to the new tighter requirements for TTHM/HAA5 compliance. We were unable to meet the *{April 2012 / October 2012 / October 2013 / October 2014}* regulatory deadline because we needed to construct *{describe facilities}*. We plan to complete this work by *{date}*. Until then, we will be required to comply with the old standards and will be *{describe interim measures}* to provide the best water possible.

If we can be of additional assistance, please contact me at {Phone Number}.

Sincerely,

District Engineer
XXX Field Office

Enclosures: 1) Approved Extension

cc: *Local Health Department, attn: Health Director*
County Administrator
County Building Official
ODW – Central Office

{file name}



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 13 2012

MEMORANDUM

SUBJECT: Safe Drinking Water Act – Compliance Monitoring Transition Period between the Stage 1 and Stage 2 Disinfectants and Disinfection Byproducts Rules and Extension Requests

FROM: Ann Codrington, Director *AC*
Drinking Water Protection Division
Office of Ground Water and Drinking Water

for Mark Pollins, Director *MP*
Water Enforcement Division
Office of Civil Enforcement

for Edward Messina, Acting Director *Anna Pontius*
Monitoring, Assistance and Media Programs Division
Office of Compliance

TO: Drinking Water Regional Managers and
Drinking Water Enforcement Regional Managers
Regions I-X

This memorandum provides states and EPA Regions with guidance for the compliance monitoring period between the Stage 1 Disinfectants and Disinfection Byproducts Rule (Stage 1), 40 C.F.R. §§ 141.130 – 135, and the Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2), 40 C.F.R. §§ 141.620 – 629. The memorandum discusses calculating the maximum contaminant levels (MCLs) to determine compliance during the time period that systems are transitioning from Stage 1 to Stage 2, and properly reporting violation and enforcement data to the Safe Drinking Water Information System federal version (SDWIS/FED). In addition, this memo provides guidance for notifying the public of existing Stage 1 violations during this period. It also provides related guidance about extension requests for capital improvements under § 1412(b)(10) of the Safe Drinking Water Act (SDWA).

Background

All community water systems (CWSs) and non-transient non-community water systems (NTNCWSs) that add a primary or residual disinfectant other than ultraviolet (UV) light must comply with Stage 1. Stage 2 applies to all CWSs and NTNCWSs that use or deliver a primary or residual disinfectant other than UV light, or receive water that has been treated with a primary

or residual disinfectant other than UV light (*i.e.*, consecutive systems). Federal regulations at 40 C.F.R. §§ 141.132 and 141.621 for Stage 1 and Stage 2 both require monitoring for total trihalomethanes (TTHM) and five haloacetic acids (HAA5) to determine compliance with maximum contaminant levels (MCLs). Stage 1 requirements specify compliance monitoring locations in the distribution system (maximum residence time locations for all systems and average residence time locations for some systems). Under Stage 1, TTHM and HAA5 MCL compliance is based on the calculation of a system-wide running annual average (RAA). Stage 2 changes how MCL compliance for TTHM and HAA5 are calculated and also changes sample site collection criteria, but not the MCL values, which remain at 80 ppb for TTHM and 60 ppb for HAA5. This will result in some systems changing the number and/or location of compliance monitoring sites.

Compliance with the MCLs for TTHM and HAA5 under Stage 2 will be based on locational running annual averages (LRAA) at compliance monitoring locations within the distribution system. The LRAA calculation methodology is more stringent than the RAA approach because when compliance is based on an RAA, samples with high TTHM or HAA5 concentrations in one part of the distribution system can be masked by samples with low TTHM or HAA5 concentrations in another part of the distribution system. The LRAA provides more equitable public health protection for all consumers because all monitoring sites in the distribution system must meet the TTHM and HAA5 MCLs. Since the LRAA is calculated at each monitoring site under Stage 2 rather than averaging all RAAs system-wide, multiple LRAAs will be calculated for a system during every compliance period. During one compliance period, a public water system may have one or more sample locations that exceed the MCL in accordance with the LRAA compliance calculation in the regulation.

Primacy agencies should continue to encourage systems to use Initial Distribution System Evaluation (IDSE) data and Stage 1 data in preparing for Stage 2 compliance monitoring. Stage 2 requires some systems to complete an IDSE to characterize the disinfection by-products (DBPs) levels in their distribution systems and identify HAA5 and TTHM Stage 2 compliance monitoring locations. IDSE and Stage 1 data can assist a system in determining if treatment or distribution changes are needed to achieve Stage 2 compliance.

It should also be noted that CWSs and NTNCWs must continue complying with Stage 1 maximum residual disinfectant levels (MRDLs), MCLs and DBP precursor removal requirements, which Stage 2 does not change. In addition, all associated monitoring, reporting and compliance calculations must continue to be met.

Transition to Stage 2 Compliance Monitoring

The period of time after Stage 2 monitoring is required to begin, but before TTHM and HAA5 compliance calculations can be made based on the LRAA, will be a transition period from Stage 1 to Stage 2. During the transition period, all recordkeeping requirements as described in 40 C.F.R. § 141.33 must continue to be met by systems.

Pursuant to the table in 40 C.F.R. § 141.620, systems will start compliance monitoring in accordance with Stage 2 requirements beginning April 1, 2012 (or earlier based on primacy

agency directive), but no later than October 1, 2014, with the specific monitoring period dependent on system population and other factors. Once a system is required to begin Stage 2 quarterly compliance monitoring under 40 C.F.R. § 141.620(c), it will no longer be required to perform monitoring pursuant to its Stage 1 TTHM and HAA5 monitoring plan. Under Stage 2, systems will perform four consecutive quarters of monitoring and will conduct compliance calculations at the end of the fourth calendar quarter that follows the compliance date. Systems will continue to conduct LRAA compliance calculations at the end of each subsequent quarter. (Please note a violation can be incurred earlier if the LRAA calculated based on fewer than four quarters of data would exceed the MCL). If a system is required to conduct monitoring at a frequency that is less than quarterly and its first Stage 2 compliance sample is greater than the MCL, then the system must initiate quarterly monitoring and perform LRAA compliance calculation(s) after four consecutive quarters.

Public Notice of Existing Stage 1 MCL Violations during the Transition Period

The Public Notification (PN) rule requirements of 40 C.F.R. § 141.202-204 continue during the transition period between Stage 1 and Stage 2. Specifically, 40 C.F.R. § 141.203(a)(1) of the PN rule requires Tier 2 public notice when a system exceeds a TTHM and/or HAA5 MCL under Stage 1 or Stage 2 along with Tier 3 public notice for monitoring and reporting (M&R) violations of either rule. Accordingly, any activities associated with existing Stage 1 MCL violations, including the PN requirements under Subpart Q, are ongoing. Additionally, a CWS must include in its yearly consumer confidence report (CCR) the range of TTHM and HAA5 individual sampling results during the transition period.

Systems in violation of the TTHM and/or HAA5 MCL using Stage 1's RAA immediately before and during the transition period to Stage 2 must provide notification to their consumers that the system is in violation until a Stage 2 MCL compliance determination has been made. 40 C.F.R. § 141.203(b)(2). As part of the PN, EPA recommends a system explain that it is collecting/evaluating new data before determining compliance with the MCL using the LRAA. The explanation should also detail a system's actions in addressing its TTHM and/or HAA5 levels, including the use of Stage 2 data to make improved treatment decisions (*e.g.*, data may identify an area in the distribution system with extended water age that the system can then address using water age management). Once the Stage 2 MCL compliance determination has been made and if it shows no exceedance of the Stage 2 MCL, then public notice for the Stage 1 violation is no longer necessary. However, if the Stage 2 MCL has been exceeded, Tier 2 public notice will be required for the Stage 2 MCL violation. 40 C.F.R. § 141.203(b)(2).

EPA's Drinking Water Enforcement Response Policy and Enforcement Targeting Tool

In December 2009, EPA issued the Drinking Water Enforcement Response Policy (ERP). The ERP is an approach that replaces the contaminant-by-contaminant strategy with one that examines all the violations of a public water system. The purpose of the ERP is to help states and EPA focus enforcement attention on public drinking water systems with the most serious and/or repeat violations, including noncompliance with Stage 1 and Stage 2 requirements.

The Enforcement Targeting Tool (ETT) under the new ERP uses data in the SDWIS/FED to generate a score for each public water system with at least one unresolved violation in the past five years. The ETT assigns points for each violation based upon the severity of the violation

and the length of time for the oldest unresolved violation, producing a quarterly aggregate score for each noncomplying public water system. The ETT allows noncomplying systems to be ranked according to severity and length of time since the unresolved violations. Primacy agencies directly implementing Stage 1 and Stage 2 must continue to report violation and enforcement data into SDWIS/FED to help ensure a complete and accurate picture for each public water system subject to the rules.

Questions have been posed by primacy agencies about the proper way to code Stage 1 MCL and M&R violations in SDWIS/FED that have not been returned to compliance before Stage 2 compliance monitoring begins. A system's Stage 1 and Stage 2 compliance monitoring locations may differ; however, due to the required Stage 2 location selection process, the Stage 2 sites are more protective of public health. For this reason, Stage 2 compliance monitoring locations will be used to determine when to close existing Stage 1 TTHM and/or HAA5 MCL and M&R violations in SDWIS/FED, as outlined below.

Once a system begins to implement Stage 2 and makes its TTHM and/or HAA5 MCL(s) compliance determinations using the LRAA, a primacy agency may begin reporting any new Stage 2 MCL violation(s) and code any existing Stage 1 MCL violation(s) with resolving action codes SO6 (state intentional no action) or EO6 (federal intentional no action). Further, primacy agencies should only code open Stage 1 M&R violations with resolving action codes SO6 or EO6 after the system demonstrates one quarter of compliance with Stage 2 M&R requirements. SO6 and EO6 indicate that no further enforcement response is being taken at this time for the corresponding violation. These SDWIS/FED codes in the above prescribed manner should only be used during the transition period. It is not appropriate for a primacy agency to use the SOX (state compliance achieved) and/or EOX (federal compliance achieved) codes for any open Stage 1 MCL violations that have not been returned to compliance before the Stage 2 compliance monitoring transition begins.

MCL Compliance Extensions for Capital Improvements

In accordance with § 1412(b)(10) of the SDWA and regulations at 40 C.F.R. § 141.620(c), a state or EPA may grant an individual system an extension of up to two additional years to comply with an MCL or treatment technique if the state or EPA determines the system needs additional time for capital improvements. A system subject to Stage 2 should have sufficient information (*e.g.*, IDSE, Stage 1 Rule, and/or operational monitoring data) to determine whether a request for an extension from its primacy agency is appropriate, because the system may have difficulty complying with Stage 2. As described in the Stage 2 DBPR Implementation Guidance Manual, Appendix I, the state should consider whether there has been a "good faith" effort on the part of the system submitting the extension request. A request for an extension under SDWA § 1412(b)(10) should not be an "eleventh-hour" effort by a system to avoid potential violations. Furthermore, a system requesting a SDWA § 1412(b)(10) extension should notify and inform its customers, and thereby provide an opportunity for the customers to provide input to the state/primacy agency about the extension.

In addition, it should be noted that a wholesaler's extension request application does not automatically extend to its consecutive system(s). It is recommended that a consecutive system work with its wholesaler to coordinate extension request applications. A system that submits an

extension request that does not allow sufficient time for primacy agency consideration ahead of the compliance deadline (*i.e.*, not in “good faith”) risks incurring violations until the state has made a determination on the system’s request.

Appendix I of the implementation guidance provides information for how a state or EPA should evaluate an extension request. Appendix I also includes recommendations for what to consider during the review (*e.g.*, duration of extension including a schedule, critical milestones, and a final deadline) and best management practices the system should use to ensure the highest quality drinking water is delivered during the extension period. Often the conditions for the extension will be refined through negotiations between a water system and a primacy agency. While establishing the conditions for the extension, the state and water system should discuss and document the implications of missed milestones (*e.g.*, violations of the National Primary Drinking Water Regulations) and how to resolve any deviations. EPA recommends the state document in writing the conditions of the extension.

A SDWA § 1412(b)(10) extension only applies for the period negotiated between the state/EPA and the system. The system must still comply with all other provisions of the Stage 2 Rule (*e.g.*, M&R requirements). Compliance determinations for TTHM and HAA5 during the extension period will be based on an RAA of the samples collected at the Stage 2 compliance monitoring locations. Please note that a SDWA § 1412(b)(10) extension does not preclude a water system from incurring TTHM or HAA5 MCL violations. During the extension period, MCL violations of the TTHM and HAA5 based on a RAA of the samples collected must be documented appropriately in SDWIS FED. Once the system completes its capital improvements agreed upon in the extension, it must monitor for four quarters at the Stage 2 compliance monitoring locations before making its first LRAA compliance determinations, and at the end of each subsequent quarter (or earlier if the LRAA calculated based on fewer than four quarters of data would cause the MCL to be exceeded). If a system is required to conduct monitoring at a frequency that is less than quarterly, it must make compliance calculations beginning with its first Stage 2 compliance sample.

If you have additional questions about Stage 1 and Stage 2, please contact OGWDW’s Adrienne Harris at 202-250-8793, or OECA’s Carol DeMarco at 202-564-2412 or Joyce Chandler at 202-564-7073.

cc: Jim Taft, ASDWA
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