

# Upcoming requirements for systems serving 10,000 or less

**T**his article addresses the upcoming deadline of April 1, 2008, and requirements of the Stage 2 Disinfectants and Disinfection Byproducts Rule for systems serving fewer than 10,000 persons. Resources for additional information are given in a nearby sidebar. This article discusses some of the basic requirements and is meant to give the reader information for understanding and meeting the April 1, 2008 requirement.

## Overview of Stage 2 Rule

EPA's Stage 2 Disinfectants and Disinfection Byproducts Rule (herein referred to as the Stage 2 Rule) was promulgated on January 4, 2006. The Stage 2 Rule requirements determine how water

supply systems determine correct sampling locations in the distribution system for disinfection byproducts sampling. Additionally, the Stage 2 Rule requires compliance monitoring which will begin in 2012 – 2014 depending on the size of the system.

The table on page 80, for the Initial Distribution System Evaluation (or IDSE), shows compliance dates for systems based on population served. The first compliance date for all systems is for the submittal of a standard monitoring plan (SMP) or 40/30 certification or system specific study (SSS). Systems

serving less than 500 persons also have the option of a very small system waiver.

For systems serving 10,000 persons or more, the first

interconnected distribution system consisting of the distribution systems of wholesale systems and of the consecutive systems that receive finished water.

**For systems serving 10,000 persons or more, the first compliance dates are passed. For systems serving less than 10,000, the first compliance date is April 1, 2008 – no “April Fools” with this date!**

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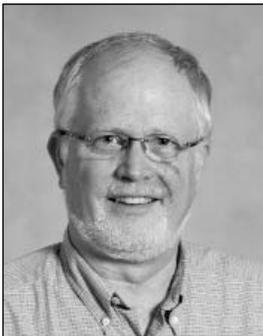
Under the Stage 2 Rule and as shown by the table on page 80,

Thus, if a small city of 600 is buying water from a larger city of 20,000, the small city would be on the schedule 3 with the larger city and would have already complied with the first requirements by October 1, 2007.

One particular difficulty for water systems in Kansas is that KDHE will not be the regulatory agency initially administrating the Stage 2 Rule. Also, KDHE will not be the laboratory with which you can have water samples analyzed for any monitoring under a standard monitoring plan (SM Plan). This is a result of KDHE declining to implement these regulations at this

time. KDHE does intend to adopt and implement the Stage 2 Rule sometime in the future.

Until KDHE begins implementing the Stage 2 Rule, water supply systems will have to



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## Additional Information Sources

For general information on Stage 2 check the Web site:

<http://www.epa.gov/safewater/disinfection>

This Web site includes:

- Final Stage 2 Rule and Preamble
- Guidances, Manuals, and Fact Sheets
- Searchable Q&A
- Webcast Training Schedule and Registration
- Or EPA in the Kansas City office:  
e-mail [R7mdbp@epa.gov](mailto:R7mdbp@epa.gov)

For future training and on-site assistance call KRWA at: 785/336-3760 or e-mail [krwa@krwa.net](mailto:krwa@krwa.net)

systems must comply with certain requirements by certain dates depending on the population of the *combined distribution system*. The EPA definition of “the combined distribution system” is the

submit required documents to EPA (as represented by their contractor). Any questions about this rule should be addressed to EPA. Also, any analyses of any samples taken under the IDSE will have to be performed by a private laboratory selected and contracted by the water supply system.

### Selecting an option for the April 1, 2008 deadline

Water supply systems serving a combined population fewer than 10,000 persons must select one of four options. These options are: 1) comply under the Very Small System Waiver; 2) submit a 40/30 Certification letter; 3) submit a Standard Monitoring Plan (SMP) or; 4) submit a System Specific Study (SSS). These options are listed in order of preference when considering time, expense, and simplicity.

- 1) If the system serves fewer than 500 persons and has taken total trihalomethane (TTHM) and haloacetic acid

(HAA) samples, the system should choose the Very Small System (VSS) waiver. The system has no further requirements for the IDSE under the VSS waiver unless EPA contacts you. *There is no application necessary or submittal required under the VSS waiver option.*

- 2) If the system has taken samples for TTHMs and HAAs for eight consecutive quarters (or two years) starting no earlier than January 2005, *and* there were no monitoring violations, *and* no individual sample exceeded 40 ug/l for TTHMs or 30 ppb for HAAs, then the system can apply for what is known as a 40/30 certification.

Most systems that use only groundwater for a source and that have taken the required samples under the Stage 1 Rule will probably meet the requirements for the 40/30 certification. These samples

## Remember!

When surface waters or groundwaters that contain natural organic compounds are chlorinated, unintended disinfection byproducts (DBPs) are formed in very low concentrations of less than 100-200 ug/l (micrograms per liter or parts per billion). The regulated byproducts addressed in the Stage 2 Rule are the four trihalomethanes (THMs) and five haloacetic acids (HAAs) compounds. The regulated maximum contaminant levels (MCLs) for the THMs and HAAs are 80 ug/l and 60 ug/l, respectively.



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were probably taken as required, routine sampling with the analyses being performed by the KDHE laboratory under the existing Stage 1 Rule. You should contact the KDHE district office to obtain analyses results if you do not have such in your records.

The system will need to complete, sign and mail the form letter to EPA's contractor by April 1, 2008 to apply for the 40/30 certification. Call the KRWA office to obtain a copy or download a copy from the KRWA Web site.

3) The systems that cannot receive a VSS waiver or do not meet the requirements for a 40/30 certification will probably have to complete a standard monitoring plan (SMP). The standard monitoring plan can best be developed using the EPA *Standard Monitoring Plan*

*Form for Systems Serving less than 10,000*. This five-page form, along with a distribution system schematic, will need to be completed and mailed to EPA's contractor by April 1,

proposed monitoring schedule. The form is completed by evaluation of the distribution system and water quality data to determine answers to questions on the form.

**EPA and KRWA presented training sessions for larger systems in 2007 on the completing the requirements on the first stage of the IDSE schedule. Additional workshops for meeting the April 1, 2008, requirements for systems serving less than 10,000 persons will also be given after in January through March.**

2008. The contractor's name and address are listed on the next page of this article.

The form requires basic contact and system information, proposed sampling sites, justification for proposed sampling sites, and

This form will be difficult to complete if you are not familiar with the Stage 2 requirements or do not have assistance from someone who is.

4) The fourth option is the System Specific Study (SSS). The study must include a

IDSE Schedule			
If you serve this population	You must submit your standard monitoring plan or system specific study plan \1\ or 40/30 certification \2\ to the EPA by or receive very small system waiver from EPA	You must complete your standard monitoring or system specific by	You must submit your ISDE report to the EPA by \3\
<b>Systems that are not part of a combined distribution system and systems that serve the largest population in the combined distribution system</b>			
(i) >= 100,000	October 1, 2006	September 30, 2008	January 1, 2009
(ii) 50,000 - 99,000	April 1, 2007	March 31, 2009	July 1, 2009
(iii) 10,000 - 49,000	October 1, 2007	September 30, 2009	January 1, 2010
(iv) <10,000 (CWS only)	April 1, 2008	March 31, 2010	July 1, 2010
<b>Other systems that are part of a combined distribution system</b>			
(v) Wholesale system or consecutive system	at the same time as the system with the earliest compliance date in the combined distribution system	at the same time as the system with the earliest compliance date in the combined distribution system	at the same time as the system with the earliest compliance date in the combined distribution system
<p>\1\ If, within 12 months after the date identified in this column, the EPA does not approve your plan or notify you that it has not yet completed its review, you may consider the plan that you submitted as approved. You must implement that plan and you must complete standard monitoring or a system specific study no later than the date identified in the third column.</p> <p>\2\ You must submit your 40/30 certification under 141.603 by the date indicated.</p> <p>\3\ If, within 3 months after the date identified in this column (nine months after the date identified in this column if you must comply on the schedule in paragraph c (1) (iii) of this section), the EPA does not approve your IDSE report or notify you that it has not yet completed its review, you may consider the report that you submitted as approved and you must implement the recommendation subpart V monitoring as required.</p>			

mathematical model of the distribution system for determining values of TTHMs and HAAs in the water at various locations. This option is very complicated, time-consuming, and expensive.

This option is only attractive to very large systems that have probably already mathematically modeled the distribution for other water quality reasons. This is *not* an attractive option for systems serving less than 10,000 persons.

**Good news if this all sounds complicated**

EPA and KRWA presented training sessions for larger systems in 2007 on completing the requirements on the first stage of the IDSE schedule. Additional workshops for meeting the April 1, 2008 requirements for systems

**You should attend one of the training sessions if you can, especially if you cannot qualify for a VSS waiver or cannot meet the requirements for the 40/30 certification; that is, if you have to complete the five-page standard monitoring plan.**

serving less than 10,000 persons will be given in January through March.

You should attend one of the training sessions if you can, especially if you cannot qualify for a VSS waiver or cannot meet the requirements for the 40/30 certification – that is, if you have to complete the five-page standard monitoring plan.

Also, Monica Wurtz of the EPA staff is available at 1-913-551-7868 to answer questions and give some assistance in these matters. Also, KRWA staff is available for

assistance. Watch KRWA's Training Calendar at [www.krwa.net](http://www.krwa.net) for upcoming sessions on this topic.

**EPA Contractor, Address**

Stage 2 DBPR  
US EPA-IPMC  
P.O. Box 98  
Dayton, OH 45401-0098

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