

APA-1  
11/96

**TRANSMITTAL SHEET FOR  
NOTICE OF INTENDED ACTION**

Control 335 Department or Agency Environmental Management  
Rule No. 335-7-2-.12  
Rule Title: Stage 2 Disinfection Byproducts

         New      X   Amend             Repeal             Adopt by Reference

Would the absence of the proposed rule significantly harm or endanger the public health, welfare, or safety?          YES

Is there a reasonable relationship between the state's police power and the protection of the public health, safety, or welfare?          YES

Is there another, less restrictive method of regulation available that could adequately protect the public?          NO

Does the proposed rule have the effect of directly or indirectly increasing the costs of any goods or services involved and, if so, to what degree?          NO

Is the increase in cost, if any, more harmful to the public than the harm that might result from the absence of the proposed rule?          NO

Are all facets of the rulemaking process designed solely for the purpose of, and so they have, as their primary effect, the protection of the public?          YES

\*\*\*\*\*  
Does the proposed rule have an economic impact?          NO

If the proposed rule has an economic impact, the proposed rule is required to be accompanied by a fiscal note prepared in accordance with subsection (f) of section 41-22-23, Code of Alabama 1975.

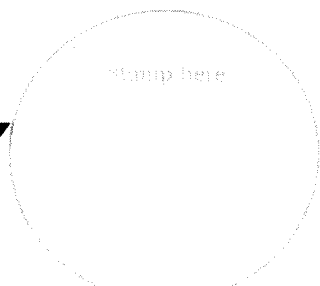
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Certification of Authorized Official

I certify that the attached proposed rule has been proposed in full compliance with the requirements of Chapter 22, Title 41, Code of Alabama 1975, and that it conforms to all applicable filing requirements of the Administrative Procedure Division of the Legislative Reference Service.

Signature of certifying officer *Mandy Elliott*

Date June 20, 2012

Date Filed



APA-2  
11/96

**DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
WATER DIVISION**

**NOTICE OF INTENDED ACTION**

**AGENCY NAME:** DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

**RULE NO. & TITLE:** 335-7-2-.03 Inorganic Chemical Standards and Monitoring Requirement (Amend)  
335-7-2-.04 Synthetic Chemical (SOCs) Standards and Monitoring Requirements (Amend)  
335-7-2-.08 Radionuclide Standards and Monitoring Requirements (Amend)  
335-7-2-.09 Maximum Residual Disinfection Levels and Monitoring Requirements (MRDLs) (Amend)  
335-7-2-.12 Stage 2 Disinfection Byproducts (Amend)  
335-7-2-.16 Operational Evaluation Level (Amend)


**INTENDED ACTION:** The Alabama Department of Environmental Management proposes to revise division 335-7, Public Water Supply.

**SUBSTANCE OR PROPOSED ACTION:** Revisions to rules 335-7-2-.03(4) (g), 335-7-2-.03 (5) (e), 335-7-2-.04(1) and 335-7-2-.08(1) are being proposed to make clarifications and administrative changes. Revisions to rules 335-7-2-.09(2) (a), 335-7-2-.12(a) 4, and 335-7-2-.16 (5) are being made for technical changes.

**TIME, PLACE, MANNER OF PRESENTING VIEWS:** Comments may be submitted in writing at the offices of the Alabama Department of Environmental Management, 1400 Coliseum Blvd, Montgomery, AL 36109 or by mail to P.O. Box 301463, Montgomery, AL 36130-1463.

**FINAL DATE FOR COMMENT AND COMPLETION OF NOTICE:** August 3, 2012 at 5:00 p.m.

**CONTACT PERSON AT AGENCY:** George M. Cox, Section Chief  
Groundwater Section [334/271-7778]

  
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Lance R. LePleur  
Director

**335-7-2-.12 Stage 2 Disinfection Byproducts.** Community and NTNC water systems that use a surface water source, groundwater source or purchase water from another public water system must monitor for disinfection byproducts (DBPs).

(a) Beginning January 1, 2012 systems must be in compliance with the TTHM and HAA5 MCLs [located in rule 335-7-2-.11(a)]. Any site's locational running annual average that exceeds either MCL will be an MCL violation. Systems may be granted a compliance extension until January 1, 2014 if the system requires capital improvements to comply with the MCLs. The system must enter into a binding contract, which would result in significant penalties to the system if the contract is not completed. All systems beginning January 1, 2012 must revert to routine monitoring until the system meets the reduced monitoring requirements below.

1. Systems must monitor during the month of the highest DBP concentrations.

2. Systems on quarterly monitoring must take dual samples sets every 90 days at each monitoring location.

3. The minimum number of samples, location of samples and sampling frequency are based upon the system's population and are in the following table. The sample locations must be at the locations identified in the system's Distribution System Evaluation (DSE) Report and cannot be moved without written approval from the Department. Systems that did not complete a DSE must monitor at the locations indicated in the system's monitoring plan. Systems must monitor according to the dates listed in the DSE Report or monitoring plan. In addition, surface water or ground water under the influence of surface water must collect one sample from the effluent of each treatment plant, prior to the first customer, at the same time the system conducts its DBP monitoring under this rule.

**DBP Monitoring Frequency and Locations Beginning January 1, 2012:**

| Source Water Type <sup>1</sup>                                     | Population          | Monitoring Frequency | Distribution System Monitoring Location |                        |                        |                   |
|--|---------------------|----------------------|---|------------------------|------------------------|-------------------|
|  |                     |                      | Total per monitoring period             | Highest TTHM Locations | Highest HAA5 Locations | Stage 1 Locations |
| Surface Water or Ground Water Under the Influence of Surface Water | < 10,000            | per quarter          | 2                                       | 1                      | 1                      |                   |
|  | 10,000-49,999       | per quarter          | 4                                       | 2                      | 1                      | 1                 |
|  | 50,000-249,999      | per quarter          | 8                                       | 3                      | 3                      | 2                 |
|  | 250,000-999,999     | per quarter          | 12                                      | 5                      | 4                      | 3                 |
|  | 1,000,000-4,999,999 | per quarter          | 16                                      | 6                      | 6                      | 4                 |
|  | > 5,000,000         | per quarter          | 20                                      | 8                      | 7                      | 5                 |
| Ground Water   | < 500               | per year             | 2                                       | 1                      | 1                      |                   |
|  | 500-9,999           | per year             | 2                                       | 1                      | 1                      |                   |
|  | 10,000-99,999       | per quarter          | 4                                       | 2                      | 1                      | 1                 |
|  | 100,000-499,999     | per quarter          | 6                                       | 3                      | 2                      | 1                 |
|  | > 500,000           | per quarter          | 8                                       | 3                      | 3                      | 2                 |

<sup>1</sup> Systems that receive both surface water and ground water must use the surface water section of the table to determine monitoring requirements.

4. Systems may reduce monitoring to the level specified in the following table any time the LRAA is  $\leq 0.040$  mg/L for TTHM and  $\leq 0.030$  mg/L for HAA5 at all monitoring locations. Systems may only use monitoring data collected under this rule or rule 335-7-2.11 to qualify for reduced monitoring. In addition, the source water annual average TOC level, before any treatment, must be  $\leq 4.0$  mg/L at each treatment plant treating surface water or ground water under the influence of surface water.

### Reduced Monitoring Frequency

| Source Type   | Population          | Monitoring Frequency <sup>1</sup> | Distribution System Monitoring Location per Monitoring Period  |
|---|---------------------|-----------------------------------|--|
| <b>Surface Water or Ground Water Under the Influence of Surface Water</b> | < 10,000            | per year                          | 2 dual sample sets: one at the location and during the quarter with the highest TTHM single measurement, one at the location and during the quarter with the highest HAA5 single measurement   |
|   | 10,000-49,999       | per quarter                       | 2 dual sample sets at the locations with the highest TTHM and highest HAA5 LRAAs   |
|   | 50,000-249,999      | per quarter                       | 4 dual sample sets - at the locations with the two highest TTHM and two highest HAA5 LRAAs   |
|   | 250,000-999,999     | Per quarter                       | 6 dual sample sets - at the locations with the three highest TTHM and three highest HAA5 LRAAs   |
|   | 1,000,000-4,999,999 | Per quarter                       | 8 dual sample sets - at the locations with the four highest TTHM and four highest HAA5 LRAAs   |
|   | > 5,000,000         | Per quarter                       | 10 dual sample sets - at the locations with the five highest TTHM and five highest HAA5 LRAAs  |
| <b>Ground Water</b>   | < 500               | every third year                  | 1 TTHM and 1 HAA5 sample: one at the location and during the quarter with the highest TTHM single measurement, one at the location and during the quarter with the highest HAA5 single measurement; 1 dual sample set per year if the highest TTHM and HAA5 measurements occurred at the same location and quarter |
|   | 500-9,999           | per year                          | 1 TTHM and 1 HAA5 sample: one at the location and during the quarter with the highest TTHM single measurement, one at the location and during the quarter with the highest HAA5 single measurement; 1 dual sample set per year if the highest TTHM and HAA5 measurements occurred at the same location and quarter |
|   | 10,000-99,999       | per year                          | 2 dual sample sets: one at the location and during the quarter with the highest TTHM single measurement, one at the location and during the quarter with the highest HAA5 single measurement   |
|   | 100,000-499,999     | per quarter                       | 2 dual sample sets; at the locations with the highest TTHM and highest HAA5 LRAAs  |
|   | > 500,000           | per quarter                       | 4 dual sample sets at the locations with the two highest TTHM and two highest HAA5 LRAAs   |

<sup>1</sup> Systems on quarterly monitoring must take dual sample sets every 90 days.

5. Systems may remain on reduced monitoring as long as the TTHM LRAA is  $\leq 0.040$  mg/L and the HAA5 LRAA is  $\leq 0.030$  mg/L at each monitoring location for systems on quarterly reduced monitoring or each TTHM sample is  $\leq 0.060$  mg/L and each HAA5 LRAA is  $\leq 0.045$  mg/L for systems with annual or less frequent monitoring. In addition, the source water annual average TOC level, before any treatment must be  $\leq 4.0$  mg/L at each treatment plant treating surface water or ground water under the influence of surface water. Systems must return to routine monitoring if any of the levels are exceeded. The Department may return any system to routine monitoring at its discretion.

6. The following TOC monitoring requirements apply to systems qualifying for or on reduced TTHM and HAA5 monitoring. If a system is required to monitor for TOC per rule 335-7-2-.11(i)8., monthly samples shall be taken every 30 days.

7. If a system is required to monitor annually or less the system must increase monitoring to dual samples sets once per quarter (taken every 90 days) at all locations if a TTHM sample is  $> 0.080$  mg/L or a HAA5 sample is  $> 0.060$  mg/L at any location. A system is in violation of the MCL when the LRAA exceeds the MCLs based upon four consecutive quarters of monitoring or the LRAA calculated based on fewer than four quarters of data if the MCL would be exceeded regardless of the monitoring results of subsequent quarters. Systems may return to routine monitoring once the systems has conducted increased monitoring for at least four consecutive quarters and the LRAA for every monitoring location is  $\leq 0.060$  mg/L for TTHM and is  $\leq 0.045$  mg/L for HAA5.

8. If a system fails to collect any required sample, the system has incurred a monitoring violation. The system will receive a monitoring violation for each quarter in which the missed monitoring result would have been used to determine compliance.

9. Systems on increased monitoring under rule 335-7-2-.11 must remain on increased monitoring until the system meets the requirements of this rule for returning to routine monitoring.

10. Systems that are required to monitor quarterly must calculate LRAAs for TTHM and HAA5 using monitoring results collected under this rule and determine that each LRAA does not exceed the MCL. If the system does not collect four consecutive quarters of monitoring, the system must calculate compliance with the MCL based on the average of the available data from the most recent four quarters. If the system takes more than one sample per quarter at a monitoring location, they must average all samples taken in the quarter at that location to determine a quarterly average to be used in the LRAA calculation.

11. Systems that are required to monitor yearly or less frequently must determine that each sample taken is less than the MCL. If no sample exceeds the MCL, the sample result is considered the LRAA and the system is

in compliance. If any sample exceeds the MCL the system is not in violation but must begin increased monitoring as outlined in this rule.

12. A system that is required to conduct quarterly monitoring must make compliance calculations at the end of the fourth quarter that follows the compliance date 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 regardless of the monitoring results of subsequent quarters.

(i) Systems that monitor less frequently than quarterly must determine compliance beginning with the first compliance sample taken after the compliance date.

(ii) Upon exceeding the MCL, the system will be required to submit a schedule to either establish a treatment process using the EPA approved best available technology to achieve compliance with the MCL or cease using the source of supply in conjunction with a Department issued compliance schedule.

13. Systems that did not complete a DSE must develop and implement a monitoring plan for TTHMs and HAA5s. The monitoring plan must be submitted to the Department by the applicable date in rule 335-7-2-.13. Systems must identify and justify all monitoring locations.

**Author:** Dennis D. Harrison.

**Statutory Authority:** Code of Alabama 1975, §§ 22-23-33, 22-23-49, 22-22A-5, 22-22A-6.

**History:** January 22, 2008; XXXXX, 2012.