

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

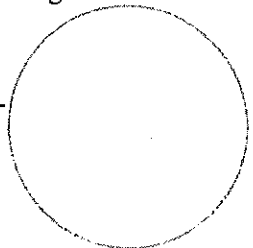
If the proposed rule has an economic impact, the proposed rule is required to be accompanied by a fiscal note prepared in accordance with subsection (f) of Section 41-22-23, Code of Alabama 1975.

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 *Naelyn Elliott*

Date **March 21, 2016**



ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER DIVISION

NOTICE OF INTENDED ACTION

Agency Name: Alabama Department of Environmental Management
Rule No. & Title: 335-7-2-.12 Stage 2 Disinfection Byproducts (Amend)
Intended Action: The Alabama Department of Environmental Management proposes to amend rule 335-7-2-.12

Substance of Proposed Action:

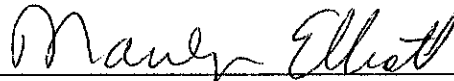
The Department proposes to make administrative corrections in this rule.

Time, Place, Manner of Presenting Views:

Comments may be submitted in writing or orally at a public hearing to be held at 1:00 PM, May 13, 2016, in the ADEM Main Hearing Room, 1400 Coliseum Boulevard, Montgomery, Alabama 36110.

Final Date for Comment and Completion of Notice: May 13, 2016

Contact Person at Agency: Christy Monk, (334) 394-4364



Lance R. LeFleur
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-paragraph~~ 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 ¹	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

Source Water Type ¹	Population	Monitoring Frequency	Distribution System Monitoring Location			
			Total per monitoring period	Highest TTHM Locations	Highest HAA5 Locations	Stage 1 Locations
	> 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

¹ 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 ≤ 0.040 mg/L for TTHM and ≤ 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 ≤ 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 ¹	Distribution System Monitoring Location per Monitoring Period
Surface Water or Ground Water Under the Influence of Surface Water	< 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

Source Type	Population	Monitoring Frequency ¹	Distribution System Monitoring Location per Monitoring Period
Ground Water	< 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

¹ 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 ≤ 0.040 mg/L and the HAA5 LRAA is ≤ 0.030 mg/L at each monitoring location for systems on quarterly reduced monitoring or each TTHM sample is ≤ 0.060 mg/L and each HAA5 LRAA is ≤ 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 ≤ 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-subparagraph 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 ≤ 0.060 mg/L for TTHM and is ≤ 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.

(b) Wholesale systems (with the exception of systems with only ground water sources) shall submit the results of TTHM and HAA5 sampling at or near all points of delivery to consecutive systems. Consecutive systems who also sell to other consecutive systems shall submit the results of TTHM and HAA5 sampling at or near all points of delivery to other consecutive systems. These results shall be submitted with the routine sample results required by paragraph (a) of this rule.

1. The number of sample locations can be reduced by submitting justification to the Department that the point of delivery is not contributing to elevated TTHM and/or HAA5 levels in the downstream consecutive system(s).

2. If all consecutive systems served by the wholesale system are in compliance with the TTHM and/or HAA5 MCLs in accordance with paragraph ~~335-7-2-12~~(a) of this rule for four consecutive quarters, then the systems can request a reduction or end of the monitoring.

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; September 25, 2012.

Amended: November 25, 2014; XXXX XX, 2016.