

APA-1
11/96

**TRANSMITTAL SHEET FOR
NOTICE OF INTENDED ACTION**

Control 335 Department or Agency Environmental Management
Rule No. 335-7-2-.07
Rule Title: Microbiological Standards and Monitoring Requirements

 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.

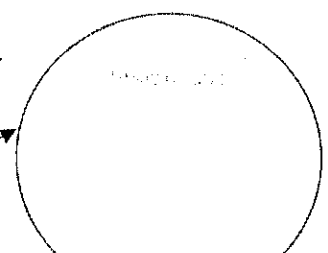
Certification of Authorized Official

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 Mandy Elliott

Date July 21, 2014

Date Filed



APA-2
11/96

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER DIVISION

NOTICE OF INTENDED ACTION

AGENCY NAME: Department of Environmental Management

RULE NO. & TITLE:

335-7-2-.07	<u>Microbiological Standards and Monitoring Requirements</u> (Amend)
335-7-2-.12	<u>Stage 2 Disinfection Byproducts</u> (Amend)
335-7-2-.21	<u>Public Notification</u> (Amend)
334-7-2-.22	<u>Assessments</u> (New)


INTENDED ACTION: Revise Division 7 of the ADEM Administrative Code.

SUBSTANCE OF PROPOSED ACTION: Revisions to rules 335-7-2-.07; 335-7-2-.12 and 335-7-2-.21 are being proposed to make technical clarifications and make administrative corrections. Rule 335-7-2-.22 is being proposed to add applicable federal requirements on assessments.

TIME, PLACE, MANNER OF PRESENTING VIEWS: Comments may be submitted in writing or orally at a public hearing to be held 2:00 p.m., September 10, 2014, in the ADEM Hearing Room, 1400 Coliseum Blvd., Montgomery, Alabama 36110.

FINAL DATE FOR COMMENT AND COMPLETION OF NOTICE: Wednesday, September 10, 2014 at 5:00 p.m.

CONTACT PERSON AT AGENCY: Christy V. Monk, Chief
Office of Water Services at (334) 394-4364



Lance R. LeFleur
Director

335-7-2-.07 Microbiological Standards and Monitoring Requirements.

(1) Public water systems meeting the following criteria will be in compliance with the *E. coli* MCL unless any of the conditions identified below exist:

~~(a) Systems collecting 40 or more compliance samples monthly shall have total coliform bacteria detected in less than 5.0 percent of the samples collected.~~

~~(b) Public water systems collecting fewer than 40 samples per month shall not have total coliform bacteria detected in greater than one sample per month.~~

~~(c) No fecal coliform or bacteria shall be present in any repeat sample necessitated by a total coliform being present in the initial sample.~~

~~(d) No total coliform bacteria shall be present in any repeat sample collected in response to either a fecal or *E. coli* positive routine sample.~~

~~(e) A public water system exceeding the MCL for total coliforms shall report the violation to the Department no later than the end of the next business day after it learns of the violation.~~

(a) The system has an *E. coli* positive repeat sample following a total coliform positive routine sample.

(b) The system has an total coliform positive repeat sample following a *E. coli* positive routine sample.

(c) The system fails to take all required repeat samples following an *E. coli* positive routine sample.

(d) The system fails to test for *E. coli* when any repeat sample tests positive for total coliform.

(2) Water systems are required to monitor for microbiological contaminants at sites which are representative of water throughout a distribution system during any month of operation according to a written sample plan acceptable to the Department. All routine and repeat compliance samples showing total coliform positive must be analyzed for fecal coliforms or *E. coli* bacteria. If fecal coliform or *E. coli* are is present, the system must notify the Department no later than the end of the day the results are provided to the system. Failure to notify the Department following an *E. coli*-positive sample in a timely manner is a reporting violation of rule 335-7-10-.06(13)(b). Chlorine or disinfectant residuals must be determined at the time of sample collection for each location and recorded on the sample form. The residual disinfectant concentration must be measured at least at the same points in the distribution system and at the same time as total coliforms are sampled. The Department may allow a public water system which uses both a surface water source or a

ground water source under direct influence of surface water, and a ground water source, to take disinfectant residual samples at points other than the total coliform sampling points if the Department determines that such points are more representative of treated (disinfected) water quality within the distribution system. Systems must provide the results of monthly bacteriological monitoring to the Department reflecting the following minimum number of samples per month.:

~~_____ (a) Non-community and NTNC water systems using ground water shall provide results from at least two compliance monitoring samples on a monthly basis. Such systems serving more than 2500 persons shall sample at the same frequency as like size community water systems. Systems using a surface source or groundwater source subject to the influence of surface water shall sample with the same frequency as a community system based on the population served.~~

~~_____ (ba) Community wWater systems must have analyzed a minimum number of monthly distribution compliance samples based on the population shown in the following chart:~~

Population Served	Compliance Samples
25 - 2,500	2
2,501 - 3,300	3
3,301 - 4,100	4
4,101 - 4,900	5
4,901 - 5,800	6
5,801 - 6,700	7
6,701 - 7,600	8
7,601 - 8,500	9
8,501 - 12,900	10
12,901 - 17,200	15
17,201 - 21,500	20
21,501 - 25,000	25
25,001 - 33,000	30
33,001 - 41,000	40
41,001 - 50,000	50
50,001 - 59,000	60
59,001 - 70,000	70
70,001 - 83,000	80
83,001 - 96,000	90
96,001 - 130,000	100
130,001 - 220,000	120
220,001 - 320,000	150
320,001 - 450,000	180
450,001 - 600,000	210
600,001 - 780,000	240
780,001 - 970,000	270
970,001 - 1,230,000	300

(3) Public water systems shall collect bacteriological compliance samples at regular time intervals throughout the month. Systems required to

collect more than five distribution compliance samples in one month shall not collect all of their samples on the same day. A system may conduct more compliance monitoring than is required by this subpart to investigate potential problems in the distribution system and use monitoring as a tool to assist in uncovering problems. A system may take more than the minimum number of required routine samples and must include the results in calculating whether the coliform treatment technique trigger has been exceeded only if the samples are taken in accordance with the existing sample siting plan and are representative of water throughout the distribution system.~~The number of samples and sampling sites per interval shall be identified in the sampling plan.~~

(4) Special samples may be required to provide information regarding the quality of raw water from existing and proposed sources and to determine whether disinfection practices following water main installation or repair is sufficient. Raw or plant water samples shall be taken at a frequency established by the Department. Neither raw samples nor special samples will be used to determine compliance with the microbiological drinking water standards. Repeat samples are not considered special purpose samples, and must be used to determine whether the coliform treatment technique trigger has been exceeded.

(5) Repeat samples shall be collected according to the following requirements:

(a) If a routine compliance sample is total coliform positive the public water system must collect a set of repeat samples within 24 hours of being notified of the positive results unless a time extension is obtained from the Department. No fewer than three repeat samples must be obtained for each total coliform positive sample found.

(b) Community water systems must collect at least one repeat sample from the sampling tap where the original total coliform positive sample was taken and at least one repeat sample at a tap within five service connections upstream and at least one repeat sample at a tap within five service connections downstream of the original sampling site. The Department may waive the requirement to collect the downstream sample should the original sample be collected at the end of a distribution line.

(c) Non-community and NTNC water systems must collect at least one repeat sample from the sampling tap where the original total coliform positive sample was taken and the other two repeat samples at representative taps from opposite sides of the facility served by the system.

(d) The system must collect all repeat samples on the same day except a system with a single service connection may be allowed to collect the required set of repeat samples over a three-day period.

(e) If one or more repeat samples in a set is total coliform positive, the public water system must collect an additional set of repeat samples for each positive sample required above. The additional samples must be collected

within 24 hours of being notified of the positive result. The system must repeat this process until either total coliforms are not detected in one complete set of repeat samples or the system exceeds the MCL-treatment technique trigger for total coliforms and notifies the Department.

~~_____ (f) _____ A system with a total coliform positive compliance sample which is required to collect fewer than five routine samples per month must collect at least five routine samples during the next compliance month the system provides water to the public.~~

_____ (f) _____ Systems may propose repeat monitoring locations to the Department that the system believes to be representative of a pathway for contamination of the distribution system. A system may elect to specify either alternative fixed locations or criteria for selecting repeat sampling sites on a situational basis in a standard operating procedure (SOP) in its sample siting plan. The system must design its SOP to focus the repeat samples at locations that best verify and determine the extent of potential contamination of the distribution system area based on specific situations. The Department may modify the SOP or require alternative monitoring locations as needed.

_____ (g) _____ Ground water systems serving 1,000 or fewer people may propose repeat sampling locations to the Department that differentiate potential source water and distribution system contamination. A ground water system with a single well required to conduct triggered source water monitoring may, with written Department approval, take one of its repeat samples at the monitoring location required for triggered source water monitoring if the system demonstrates to the Department's satisfaction that the sample siting plan remains representative of water quality in the distribution system. If approved by the Department, the system may use that sample result to meet the monitoring requirements for both the groundwater rule and this section.

_____ 1. _____ If a repeat sample taken at the monitoring location required for triggered source water monitoring is *E. coli*-positive, the system has violated the *E. coli* MCL. If a system takes more than one repeat sample at the monitoring location required for triggered source water monitoring, the system may reduce the number of additional source water samples by the number of repeat samples taken at that location that were not *E. coli*-positive.

_____ 2. _____ If a system takes more than one repeat sample at the monitoring location required for triggered source water monitoring, and more than one repeat sample is *E. coli*-positive, the system has violated the *E. coli* MCL.

_____ 3. _____ If all repeat samples taken at the monitoring location required for triggered source water monitoring are *E. coli*-negative and a repeat sample taken at a monitoring location other than the one required for triggered source water monitoring is *E. coli*-positive, the system has violated the *E. coli* MCL.

_____ 4. _____ The system must demonstrate that the alternate repeat sampling sites identified in their sample site plan remains representative of the water quality in the distribution system. The Department may determine that

monitoring at the entry point to the distribution system (especially for undisinfected ground water systems) is effective to differentiate between potential source water and distribution system problems.

(gh) Failure to provide results from the minimum number of monthly compliance samples, repeated failure to provide results from required raw water samples, and failure to analyze for *E. coli* following a total coliform-positive routine sample failure to provide results from minimum repeat samples and failure to collect repeat samples within 24 hours of notification is a monitoring violation requiring public notification.

(6) Systems must develop a written sample siting plan that identifies sampling sites and a sample collection schedule that are representative of water throughout the distribution. These plans are subject to Department review and revision. Systems must collect total coliform samples according to the written sample siting plan. Routine and repeat sample sites and any sampling points necessary to meet the requirements of the groundwater rule must be included in the sampling plan.

(7) All seasonal systems must demonstrate completion of a Department-approved start-up procedure, which may include a requirement for start-up sampling prior to serving water to the public. Seasonal system may be exempt from some or all of the requirements for seasonal systems if the entire distribution system remains pressurized during the entire period that the system is not operating. A treatment technique violation will occur when a seasonal system fails to complete a Department-approved start-up procedure prior to serving water to the public. Failure to submit certification of completion of Department-approved start-up procedure by a seasonal system is a reporting violation.

Author: Joe Alan Power, Thomas S. DeLoach, Edgar K. Hughes, Dennis D. Harrison.

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

History: May 23, 1977; Repealed and readopted: January 4, 1989; October 31, 1990; effective December 5, 1990.

Amended: December 12, 2005; January 22, 2008; XXXXXX, 2014.