## TRANSMITTAL SHEET FOR NOTICE OF INTENDED ACTION

Control	3	35	Department	or Agency	Environ	mental Management
Rule No.	335-7-2	03				
Rule Title:	Inorgan	ic Chen	ical Standards	and Monit	toring Re	quirement
	New	X	Amend	*	peal _	Adopt by Reference
Would the a significantly welfare, or s	harm or		posed rule er the public hea	alth,	_	YES
	e power a	nd the p	ship between th rotection of the re?	e	-	YES
			ve method of d adequately pro	otect	-	NO
indirectly in	creasing	the costs	the effect of dire s of any goods o o what degree?		_	NO
	the harm	that mi	more harmful t ght result from		_	NO
solely for the	e purpose	of, and	ng process desig so they have, as of the public?	•	_	YES
****	*****	*****	******	*****	*****	*******
Does the pro	oposed ru	le have	an economic im	pact?		NO
If the propos accompanie 41-22-23, <u>C</u>	d by a fis	cal note	conomic impact, prepared in acc <u>975</u> .	the propos ordance wit	ed rule is h subsect	required to be tion (f) of section
*****	******	*****	*****	******	*****	*******
Certification	of Autho	rized Of	ficial			<b>,</b>
requirement	s of Chap e filing re	oter 22, 7 quireme		Alabama 1	975, and	compliance with the that it conforms to Division of the
Signature of	certifyin	g officer	11/auly	Ellio	tl	
Date Marc	h 20, 201	2				nama ang

Date Filed

## DEPARTMENT OF ENVIRONMENTAL MANAGEMENT WATER DIVISION

## NOTICE OF INTENDED ACTION

AGENCY NAME:	DEPARTMENT OF ENVIRONMENTAL MANAGEMENT				
RULE NO. & TITLE:	335-7-203	Inorganic Chemical Standards and Monitoring			
	335-7-204	Requirement (Amend) Synthetic Chemical (SOCs) Standards and			
	335-7-208	Monitoring Requirements (Amend) Radionuclide Standards and Monitoring			
	335-7-209	Requirements (Amend)  Maximum Residual Disinfection Levels and			
	335-7-212 335-7-216	Monitoring Requirements (MRDLs) (Amend) Stage 2 Disinfection Byproducts (Amend) 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 or orally at a public hearing to be held May 2, 2012, at 10:00 a.m. in the Main Hearing Room at the ADEM Central Office located at 1400 Coliseum Blvd., Montgomery, AL 36110.

FINAL DATE FOR COMMENT AND COMPLETION OF NOTICE: May 4, 2012 at 5:00 p.m.

CONTACT PERSON AT AGENCY:

George M. Cox, Section Chief

Groundwater Section [334/271-7778]

Lance R. LeFleur

Director

## 335-7-2-.03 Inorganic Chemical Standards and Monitoring Requirements.

(1) The following are MCLs for inorganic chemicals:

Contaminant	MCL (mg/L)		
Antimony	0.006		
Arsenic	0.01		
Asbestos	7 Million		
Asocstos	Fibers*/Liter		
Barium	2.0		
Beryllium	0.004		
Cadmium	0.005		
Chromium	0.1		
Cyanide	0.2		
Fluoride	4.0		
Lead	0.015		
Mercury	0.002		
Nickel	0.1		
Nitrate (as N)	10		
Nitrite (as N)	1		
Total Nitrate/Nitrite	10		
Selenium	0.05		
Sulfate	500		
Thallium	0.002		

<sup>\*</sup>Longer than 10 micrometers

- (2) Should any inorganic contaminant exceed the MCL, the system must establish a treatment process using the best available technology to achieve compliance with the MCL or cease using the source of supply in conjunction with a Department-issued compliance schedule. The Department may require the use of an alternate source of drinking water.
  - (3) Sampling for asbestos shall be as follows:
- (a) Community and NTNC water systems shall analyze for asbestos during the first three-year compliance period of each nine-year compliance cycle.
- (b) A system that is not vulnerable to asbestos contamination may apply to the Department for a waiver from asbestos monitoring for each three-year monitoring period. If the Department grants the waiver, the system is not required to monitor.
- (c) A system vulnerable to asbestos contamination due to corrosion of asbestos-cement pipe shall collect at least one sample from a tap served by asbestos-cement pipe and under conditions where asbestos contamination is most likely to occur. A system determined to be vulnerable to asbestos contamination in source water shall monitor at least one sample representative of each suspected source after treatment.

- (d) Community and NTNC water systems which exceed the MCL shall analyze for asbestos quarterly beginning in the next quarter after the violation occurred. Sampling may be reduced to initial monitoring requirements if the average of all analytical results is less than 3.5 million fibers/Liter. Groundwater systems shall analyze a minimum of two quarterly samples and surface water systems a minimum of four quarterly samples.
- (e) The Department may require analysis of asbestos during a specific quarter of the year.
- (f) The Department has the authority to determine compliance based on analytical results and other information compiled by Department staff.
- (g) When the MCL for asbestos is exceeded, a second analysis shall be initiated within two weeks and the average of the two analyses shall be used as the compliance level. Should this level also exceed the MCL, the Department shall be notified within 48 hours.
  - (4) Sampling for nitrates shall be as follows:
- (a) Community and NTNC water systems utilizing surface sources shall analyze for nitrates annually. Community and NTNC water systems utilizing a new surface source shall analyze for nitrates four consecutive quarters. Samples shall be collected during periods of normal operating conditions from the entry point to the distribution system for each surface source.
- (b) Community and NTNC water systems utilizing surface sources shall analyze for nitrates annually if all analytical results from four consecutive quarters are less than 4.5 mg/L. A surface water system shall return to quarterly monitoring if any one sample is greater than 4.4 mg/L.
- (c) Community and NTNC water systems utilizing groundwater sources and all non-community water systems shall analyze for nitrates annually. Samples shall be collected during periods of normal operating conditions from the entry point to the distribution system representing each source or treatment plant utilized.
- (d) Community and NTNC water systems utilizing groundwater sources shall analyze for nitrates quarterly for at least one year following any one sample whose analytical result is greater than 4.4 mg/L. Sampling may be reduced to annually if the average of four consecutive quarterly results is less than 4.5 mg/L.
- (e) The Department may require analysis of nitrates during a specific quarter of the year. Samples must be collected during the quarter which previously resulted in the highest analytical result unless laboratory availability or other conditions require sampling during another quarter.
- (f) The Department has the authority to determine compliance based on analytical results and other information compiled by Department staff.

- (g) When the MCL for nitrates is exceeded, a second analysis shall be initiated within 24 hours and the average of the two analyses shall be used as the compliance level. Should this level also exceed the MCL, the Department shall be notified within 48 hours. Should the system be unable to collect a confirmation sample within 24 hours, the system must immediately notify their customers for an acute violation and collect a confirmation sample within 14 days of the original sample date.
  - (5) Sampling for nitrites shall be as follows:
- (a) Community and NTNC water systems utilizing a new surface source shall collect during periods of normal operating conditions one sample for nitrites annually. Community and NTNC water systems utilizing groundwater sources shall collect during periods of normal operating conditions from the entry point to the distribution system representing each groundwater source or treatment plant utilized one sample for nitrites every three years. One sample shall be collected from every new transient noncommunity water source prior to approval being given to place the new source into operation.
- (b) All public water systems shall collect repeat samples for nitrites the quarter following any analytical result for nitrate which exceeds 4.4 mg/L. Systems shall monitor at least quarterly for one year following any one sample whose analytical result is greater than 0.54 mg/L. Sampling may be reduced to annually if the average of four consecutive quarterly results is less than 0.54 mg/L.
- (c) The Department may require analysis of nitrites during a specific quarter of the year. Samples must be collected during the quarter which previously resulted in the highest analytical result unless laboratory availability or other conditions require sampling during another quarter.
- (d) The Department has the authority to determine compliance based on analytical results and other information compiled by Department staff.
- (e) When the MCL for nitrites is exceeded, a second analysis shall be initiated within 24 hours and the average of the two analyses shall be used as the compliance level. Should this level also exceed the MCL, the Department shall be notified within 48 hours. Should the system be unable to collect a confirmation sample within 24 hours, the system must immediately notify their customers for an acute violation and collect a confirmation sample within 14 days of the original sample date.
- (6) Sampling for inorganic chemicals other than asbestos, nitrates, and nitrites shall be as follows:
- (a) Community and NTNC water systems utilizing surface sources shall analyze for inorganic chemicals annually. Samples shall be taken during periods of normal operating conditions from a representative point in the distribution system for each surface source.

- (b) Community and NTNC water systems using groundwater sources shall analyze samples collected during periods of normal operating conditions from the distribution system representing each source or treatment plant utilized. Analysis will be performed on no less than a three year cycle.
- (c) Non-community systems must sample at a frequency established by the Department.
- (d) Community and NTNC water systems which exceed the MCL for an inorganic contaminant other than asbestos, nitrate and nitrite shall analyze quarterly for that contaminant beginning in the next quarter after the violation occurred. Sampling may be reduced to initial monitoring requirements if the average of all analytical results is less than one-half of the MCL. Groundwater systems shall analyze a minimum of two quarterly samples and surface water systems a minimum of four quarterly samples.
- (e) The Department may require analysis of inorganic contaminants during a specific quarter or season of the year.
- (f) The Department has the authority to determine compliance based on analytical results and other information compiled by Department staff.
- (g) If the result of an analysis for an inorganic contaminant other than asbestos, nitrites and nitrates exceeds the established MCL, the supplier of water shall report to the Department within seven days of receipt of the results. Also an additional confirmation sample shall be collected from the same sampling point within fourteen days of the original sampling date. The average of the two samples shall be used to determine the compliance level. If more than the minimum number of samples are collected during a compliance period, the average of the values will be used as the compliance level.
- 1. Compliance with MCLs will be determined based on the analytical result(s) obtained at each sampling point. If one sampling point is in violation of an MCL, the system is in violation of the MCL.
- 2. For systems monitoring more than once per year, compliance with the MCL is determined by a running annual average at each sampling point. If the average of any sampling point is greater than the MCL, then the system is out of compliance with the MCL. If any one sample would cause the annual average to be exceeded, then the system is out of compliance immediately.
- 3. For systems monitoring annually or less frequently, if any sample result exceeds the MCL at any sample point, the system is out of compliance with the MCL.
- 4. Systems must include all samples taken and analyzed under the provisions of this rule in determining compliance, even if that number is greater than the minimum required.

- 5. If a system does not collect all required samples when compliance is based on a running annual average of quarterly samples, compliance will be based on the running average of the samples collected.
- 6. If a sample result is less than the detection limit, zero will be used to calculate the annual average.
- (h) Arsenic sampling results shall be reported to the nearest 0.001 mg/L.
- (i) All new systems or systems that use a new source of water must demonstrate compliance with the MCL by monitoring the first year of operation. Monitoring conducted to allow a new source to be utilized may be substituted for this initial sample. Routine and increased monitoring frequencies shall be conducted in accordance with the requirements of this rule.
- (j) Community and NTNC water systems may apply to the Department for a waiver from monitoring inorganic chemicals other than asbestos, nitrates, and nitrites. Issuance of the waiver shall be based on established vulnerability criteria, results of water analysis and a demonstration by the system of no use, transport, storage or disposal in the watershed or Source Water Assessment Areas I and II. The waiver, if granted, shall be in effect for two compliance periods and the system must reapply for the waiver every two compliance periods. A system must collect one sample at each sampling point for inorganic chemicals other than asbestos, nitrates, and nitrites during the time frame the waiver is in effect.

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

**Statutory Authority:** <u>Code of Alabama</u> 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.

**Amended:** September 19, 1995 (ER); November 28, 1995; effective January 2, 1996; March 12, 2002; May 30, 2003; January 28, 2004; December 12, 2005; January 22, 2008; XXXXX, 2012.