

**WEST VIRGINIA  
SECRETARY OF STATE  
JOE MANCHIN, III  
ADMINISTRATIVE LAW DIVISION**

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2001 MAY 29 P 2:44

OFFICE WEST VIRGINIA  
SECRETARY OF STATE

Form #1

**NOTICE OF A PUBLIC HEARING ON A PROPOSED RULE**

AGENCY: WV Environmental Quality Board TITLE NUMBER: 46

RULE TYPE: Legislative CITE AUTHORITY: 22-12-4 and 22B-3-4

AMENDMENT TO AN EXISTING RULE: YES  NO

IF YES, SERIES NUMBER OF RULE BEING AMENDED: Twelve

TITLE OF RULE BEING AMENDED: Requirements Governing Groundwater Standards

IF NO, SERIES NUMBER OF RULE BEING PROPOSED: \_\_\_\_\_

TITLE OF RULE BEING PROPOSED: \_\_\_\_\_

DATE OF PUBLIC HEARING: June 28, 2001 \* TIME: 7:00 p.m. \*

LOCATION OF PUBLIC HEARING: 1615 Washington St., E.  
Second Floor Conference Room  
Charleston, WV 25311-2126

\*Note: The deadline for the submission of written comments to the Board is  
5:00 p.m. on June 29, 2001

COMMENTS LIMITED TO: ORAL , WRITTEN , BOTH

COMMENTS MAY ALSO BE MAILED TO THE FOLLOWING ADDRESS: WV Environmental Quality Board

The Department requests that persons wishing to make comments at the hearing make an effort to submit written comments in order to facilitate the review of these comments.

1615 Washington St., E., Suite 301

Charleston, WV 25311-2126

The issues to be heard shall be limited to the proposed rule.



ATTACH A **BRIEF** SUMMARY OF YOUR PROPOSAL

Authorized Signature

**46 CSR 12**  
Requirements Governing Groundwater Standards  
May 27, 2001

**Summary of Proposed Changes**

**Appendix A** Insert in the table a value for the constituent Arsenic after the constituent Antimony as follows:

<u>Constituent</u>	<u>Not to Exceed (in mg/l)</u>
Arsenic	0.05

**46 CSR 12**  
**Requirements Governing Groundwater Standards**  
**May 27, 2001**

**Statement of Circumstances Requiring Proposed Amendments**

The Environmental Quality Board is authorized by the state Groundwater Protection Act to promulgate the legislative rule, 46 CSR 12, "Requirements Governing Groundwater Standards." The Board conducted a review of this rule to determine whether new Maximum Contaminant Levels (MCL) promulgated by the US Environmental Protection Agency according to the federal Safe Drinking Water Act should be adopted as a groundwater standard. This review was conducted in consultation with the WV Department of Environmental Protection and the WV Bureau for Public Health.

As a result of the review, the Board has determined that the currently effective federal MCL for arsenic of 0.05 mg/L is appropriate for inclusion in the rule at this time. This MCL for arsenic is currently under review by USEPA. A revised criterion is expected to be promulgated by that agency within the next year. The Board recognizes that USEPA's action may require an additional revision to 46 CSR 1. However, the Board is proposing adoption of the currently effective MCL to provide a criterion for use in state regulatory programs which implement these groundwater standards.

□  
APPENDIX B

FISCAL NOTE FOR PROPOSED RULES

Rule Title: 46 CSR 12 Requirements Governing Groundwater Standards

Type of Rule:  Legislative     Interpretive     Procedural

Agency: WV Environmental Quality Board

Address: 1615 Washington St., E., Suite 301  
Charleston, WV 25311

1. Effect of Proposed rule:    N/A

	ANNUAL FISCAL YEAR				
	INCREASE	DECREASE	CURRENT	NEXT	THEREAFTER
<b>ESTIMATED TOTAL COST</b>					
<b>PERSONAL SERVICES</b>					
<b>CURRENT EXPENSE</b>					
<b>REPAIRS &amp; ALTERATIONS</b>					
<b>EQUIPMENT</b>					
<b>OTHER</b>					

2. Explanation of Above Estimates:

N/A

3. Objectives of These Rules:

To adopt the Maximum Contaminant Level (MCL) for arsenic as promulgated by the US Environmental Protection Agency as the numeric standard for groundwater.

Rule Title: 46 CSR 12 - Requirements Governing Groundwater Standards

4. Explanation of Overall Economic Impact of Proposed Rule:

A. Economic Impact on State Government:

Consultations with the WV DEP's Office of Water Resources indicate that no economic impact to State government is expected.

B. Economic Impact on Political Subdivisions; Specific Industries; Specific Groups of Citizens:

None Anticipated

C. Economic Impact on Citizens/Public at Large.

None Anticipated

Date: 05/29/01

Signature of Agency Head or Authorized Representative:



TITLE 46  
LEGISLATIVE RULE  
ENVIRONMENTAL QUALITY BOARD  
SERIES 12  
REQUIREMENTS GOVERNING  
GROUNDWATER STANDARDS

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**§46-12-1. General.**

1.1. Scope.-- The purpose of this Legislative rule is to establish minimum standards of purity and quality for groundwater located within this State.

1.2. Authority. -- W. Va. Code §§22-12-4 and 22B-3-4.

1.3. Filing Date. --

1.4. Effective Date. --

**§46-12-2. Definitions.**

As used in this rule:

2.1. "Act" means the Groundwater Protection Act, W. Va. Code §22-12-1 et seq..

2.2. "Board" means Environmental Quality Board.

2.3. "Constituent" means any chemical or biological substance found in groundwater due to either natural or man-made conditions.

2.4. "Groundwater" means the water occurring in the zone of saturation beneath the seasonal high water table, or any perched water zones.

2.5 "Person" means any industrial user, public or private corporation, institution, association, firm or company organized or existing under the laws of this or any other state or country; State of West Virginia; governmental agency, including federal facilities; political subdivision; county commission; municipal corporation; industry; sanitary district; public service district; soil conservation district; watershed improvement district; partnership; trust; estate; person or individual; group of persons or individuals acting individually or as a group; or any legal entity whatever.

**§46-12-3. Groundwater Standards.**

3.1. Except as provided in Sections 3.2 and 3.3, the standards of purity and quality for

groundwater in the state shall be the constituent concentrations found in Appendix A.

3.2. Where the concentration of a constituent exceeds an otherwise applicable groundwater quality standard as a result of natural conditions, the naturally occurring level of that constituent shall become the groundwater quality standard for the affected area.

a. Where the concentration of a certain constituent exceeds an otherwise applicable groundwater quality standard due to human-induced contamination, no further contamination by that constituent shall be allowed, and every reasonable effort shall be made to identify, remove or mitigate the source of such contamination, and to strive where practical to reduce the level of contamination over time to support drinking water use.

3.3. Constituents in groundwater shall not cause a violation of the standards found at 46 CSR Series 1 in any surface water.

3.4. Groundwater quality standards do not apply:

a. Within areas of geologic formations which are site specific to site production or storage zones of crude oil or natural gas and which are utilized for the exploration, development or production of crude oil or natural gas permitted pursuant to W.Va. Code Chapter 22, Articles 6, 7, 8, 9 or 10; and

b. Within areas of geologic formations which are site specific to the injection zones of Class II or III or wells permitted pursuant to the statutes and regulations governing the underground injection control program.

c. To any constituent or any class of activities for which a variance from groundwater quality standards has been granted by the Director pursuant to W. Va. Code §22-12-5(1).

d. To coal extraction and earth disturbing activities directly involved in coal extraction that are subject to either or both article three or eleven (§22-3-2 et seq. or §22-11-1 et seq.) of chapter 22 of the West Virginia Code.

3.5. Measurement of inorganic constituents

a. Compliance with groundwater protection standards for inorganic constituents shall be determined in terms of dissolved concentrations rather than total concentrations except as specified in section 3.5.b.

b. Any groundwater regulatory agency as specified in the Act may determine compliance with groundwater protection standards for inorganic constituents utilizing total concentration values, only as necessary to protect human health or the environment. Appropriate

situations for utilizing total concentrations values include, but are not limited to, the following:

- A. Sample is from a carbonate formation in an area of karst terrane:
- B. Sample is from a collection point for groundwater used for private or public water supply; or where
- C. Sample is from a spring or seep.
- D. Sample is one for which state or federal regulations require that total inorganic concentrations be measured.

**§46-12-4 Hazardous Waste Treatment, Storage or Disposal Facilities.**

4.1. Nothing in this rule prohibits the Office of Waste Management, acting in accordance with federal regulations, from using criteria other than the standards specified in this rule for purposes of determining the need for corrective action at hazardous waste treatment, storage or disposal facilities, as provided in 40 C.F. R. Parts 264 and 265, Subpart F.

APPENDIX A

<u>Constituent</u>	<u>Not to Exceed (in mg/l except where noted)</u>
Alachlor	0.002
Antimony	0.006
<u>Arsenic</u>	<u>0.05</u>
Asbestos	7 MFL*
Atrazine	0.003
Barium	2.0
Benzene	0.005
Benzo (a) pyrene (PAH)	0.0002
Beryllium	0.004
Cadmium	0.005
Carbofuran	0.04
Carbon tetrachloride	0.005
Chlordane	0.002
Chromium (total)	0.1
Cyanide	0.2
2, 4-D	0.07
Dalapon	0.2
Di(2-ethylhexyl)adipate	0.4

Di(2-ethylhexyl)phthalate	0.006
Dibromochloropropane (DBCP)	0.0002
Dichlorobenzene p-	0.075
Dichlorobenzene o-	0.6
Dichlorobenzene m -	0.6
Dichloroethane (1,2)	0.005
Dichloroethylene (1,1-)	0.007
Dichloroethylene (cis- 1,2-)	0.07
Dichloroethylene (trans - 1,2-)	0.1
Dichloromethane	0.005
Dichloropropane (1,2-)	0.005
Dinoseb	0.007
Diquat	0.02
Endothall	0.1
Endrin	0.002
Ethylbenzene	0.7
Ethylene dibromide (EDB)	0.00005
Fluoride	4.0
Glyphosate	0.7
Heptachlor	0.0004
Heptachlor epoxide	0.0002
Hexachlorobenzene	0.001

Hexachlorocyclopentadiene	0.05
Lead	0.015
Lindane	0.0002
Mercury (inorganic)	0.002
Methoxychlor	0.04
Monochlorobenzene	0.1
Nickel	0.1
Nitrate (as N)	10.0
Nitrite (as N)	1.0
Total Nitrate and Nitrite (both as N)	10.0
Oxamyl (Vydate)	0.2
Pentachlorophenol	0.001
Picloram	0.5
Polychlorinated biphenyls	0.0005
Selenium	0.05
Simazine	0.004
Styrene	0.1
2, 3, 7, 8- TCDD (Dioxin)	0.000000005
Tetrachlorethylene	0.005
Thallium	0.002
Toluene	1.0
Toxaphene	0.003

2, 4, 5,- TP (Silvex)	0.05
Trichlorobenzene (1, 2, 4-)	0.07
Trichloroethane (1, 1, 1-)	0.2
Trichloroethane (1, 1, 2-)	0.005
Trichlorethylene	0.005
Vinyl Chloride	0.002
Xylenes (total)	10.0
Radionuclides	
Beta particle and photon activity	4 mrem**
Gross alpha particle activity	15 pCi/L***
Combined Radium 226 and 228	5 pCi/l

\*MFL = million fibers per liter

\*\*mrem = millirem (rem = roentgen - equivalent - man)

\*\*\* pCi = picocurie