

45.60

QUESTIONNAIRE

(Please include a copy of this form with each filing of your rule: Notice of Public Hearing or Comment Period; Proposed Rule, and if needed, Emergency and Modified Rule.)

DATE: July 30, 2009

TO: LEGISLATIVE RULE-MAKING REVIEW COMMITTEE

FROM: (Agency Name, Address & Phone No.) WVDEP- Division of Water and Waste Management
601 57th Street, SE
Charleston, WV 25304
(304) 926-0495

LEGISLATIVE RULE TITLE: _____

Requirements Governing Groundwater Standards

1. Authorizing statute(s) citation _____
22-12-4

2. a. Date filed in State Register with Notice of Hearing or Public Comment Period:
June 12, 2009

b. What other notice, including advertising, did you give of the hearing?
WVDEP Web site, press release, Class 1 legal ad in Charleston newspaper

c. Date of Public Hearing(s) *or* Public Comment Period ended:
July 16, 2009

d. Attach list of persons who appeared at hearing, comments received, amendments, reasons for amendments.

Attached X No comments received X

- e. Date you filed in State Register the agency approved proposed Legislative Rule following public hearing: (be exact)

June 12, 2009

- f. Name, title, address and phone/fax/e-mail numbers of agency person(s) to receive all *written correspondence* regarding this rule: (Please type)

William Timmermeyer, Program Manager

601 57th Street, SE
Charleston, WV 25304

P- (304) 926-0499, Ext. 1336 F- (304) 926-0496

- g. **IF DIFFERENT FROM ITEM 'f'**, please give Name, title, address and phone number(s) of agency person(s) who wrote and/or has responsibility for the contents of this rule: (Please type)

3. If the statute under which you promulgated the submitted rules requires certain findings and determinations to be made as a condition precedent to their promulgation:

- a. Give the date upon which you filed in the State Register a notice of the time and place of a hearing for the taking of evidence and a general description of the issues to be decided.

b. Date of hearing or comment period:

c. On what date did you file in the State Register the findings and determinations required together with the reasons therefor?

d. Attach findings and determinations and reasons:

Attached

46CSR12

REQUIREMENTS GOVERNING GROUNDWATER STANDARDS

RESPONSE TO COMMENTS

On June 13, 2009, the Division of Water and Waste Management commenced a thirty-day public notice period and subsequently held a public hearing on July 16, 2009 to accept oral comments on proposed revisions to legislative rule 46CSR12. Written comments were also accepted through 6:14 p.m. on July 16, 2009. No commenter submitted written comments regarding proposed revisions to rule 46CSR12, and no commenter provided verbal comments.

BEFORE THE WEST VIRGINIA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

IN THE MATTER OF:

PROPOSED 2010 RULES
47CSR12 - Requirements
Governing Groundwater Standards

TRANSCRIPT OF PROCEEDINGS had or testimony
adduced in the above-entitled matter, on the on the 16th
day of July, 2009, commencing at 6:12 p.m. and concluding
at 6:14 p.m., at 601 57th Street, S.E., Charleston, Kanawha
County, West Virginia, pursuant to notice to all interested
parties.

BEFORE: DIANA HAID
Public Information Office.

NANCY MCNEALY
CERTIFIED COURT REPORTER
Post Office Box 13415
Charleston, West Virginia 25360-0415
(304) 988-2873 FAX (304) 988-1419

I N D E X

Reporter's Certificate.....Page 4

1 MS. HAID: Good evening. My name is Diana
2 Haid and I am with the West Virginia Department of
3 Environmental Protection's Public Information Office.
4 Welcome to the public hearing on proposed rule changes to
5 47CSR12, Requirements Governing Groundwater Standards.

6 The proposed revisions reflect
7 updates/additions made to the EPA's 2006 edition of the
8 Drinking Water Standards & Health Advisories. Technical
9 revisions and corrections are made throughout.

10 Please make sure that you have signed in and
11 have indicated whether you are going to make a comment. If
12 you have written comments, please provide them to me when
13 you speak, or at the close of this hearing.

14 If everyone is ready, the floor is now open
15 for comments. There are no comments indicated on the sign-
16 in sheet, so please let the record show no comments will
17 be given.

18 This concludes the public hearing on the
19 proposed rule changes to 47CSR12, Requirements Governing
20 Groundwater Standards.

21 The public comment period ends tonight. The
22 agency will review all comments and take them into
23 consideration for the rule.

24 (WHEREUPON, the hearing was concluded.)

BEFORE THE WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

STATE OF WEST VIRGINIA,
COUNTY OF KANAWHA, to wit:

I, **NANCY MCNEALY**, Certified Verbatim Court
Reporter and Commissioner of West Virginia, do hereby
certify that the foregoing is, to the best of my skill and
ability, a true and accurate transcript of all the
proceedings as set forth in the caption hereof.

Given under my hand this 17th day of July,
2009.

My commission expires November 26, 2010.



Certified Verbatim Reporter
Commissioner of West Virginia

Public Hearing

Proposed revisions to 47CSR12, Requirements Governing Groundwater Standards
Thursday, July 16, 2009, 6:30 p.m.

[illegible]

**DEPARTMENT OF ENVIRONMENTAL PROTECTION
BRIEFING DOCUMENT**

Rule Title: 47CSR12 Requirements Governing Groundwater Standards

A. AUTHORITY: W. Va. Code 22-12-14 and 22B-3-4

B. SUMMARY OF RULE:

The purpose of this Legislative rule is to update the established minimum standards of purity and quality for groundwater located within this State.

C. STATEMENT OF CIRCUMSTANCES WHICH REQUIRE RULE:

The proposed revisions to the Requirements Governing Groundwater Standards Rule reflect updates/additions made to the United States Environmental Protection Agency's 2006 Edition of the Drinking Water Standards and Health Advisories. Costs of implementing the changes will be absorbed in the agency's current budget.

D. FEDERAL COUNTERPART REGULATIONS -- INCORPORATION BY REFERENCE / DETERMINATION OF STRINGENCY:

A federal counterpart to the proposed rule exists. Because proposed revisions are consistent with the federal counterpart regulation, no determination of stringency is required.

E. CONSTITUTIONAL TAKINGS DETERMINATION

In accordance with W. Va. Code §§ 22-1A-1 and 3(c), the Secretary has determined that this rule will not result in taking of private property within the meaning of the Constitutions of West Virginia and the United States of America.

F. CONSULTATION WITH THE ENVIRONMENTAL PROTECTION ADVISORY COUNCIL:

At its meeting on June 3, 2009, the Environmental Protection Advisory Council discussed the proposed rule. See attached minutes for Council's discussion.

APPENDIX B
FISCAL NOTE FOR PROPOSED RULES

Rule Title: Requirements Governing Groundwater Standards, 47CSR12

Type of Rule: ☒ Legislative ☐ Interpretive ☐ Procedural

Agency: West Virginia Department of Environmental Protection

Address: 601 57th Street, SE
Charleston, WV 25304

Phone Number: (304) 926-0495 Email: Scott.G.Mandirola@wv.gov

Fiscal Note Summary

Summarize in a clear and concise manner what impact this measure
will have on costs and revenues of state government.

No fiscal impacts on state government are anticipated.

Fiscal Note Detail

Show over-all effect in Item 1 and 2 and, in Item 3, give an explanation of
Breakdown by fiscal year, including long-range effect.

FISCAL YEAR			
Effect of Proposal	Current Increase/Decrease (use "-")	Next Increase/Decrease (use "-")	Fiscal Year (Upon Full Implementation)
1. Estimated Total Cost	0.00	0.00	0.00
Personal Services	0.00	0.00	0.00
Current Expenses	0.00	0.00	0.00
Repairs & Alterations	0.00	0.00	0.00
Assets	0.00	0.00	0.00
Other	0.00	0.00	0.00
2. Estimated Total Revenues	0.00	0.00	0.00

Rule Title: _____

Rule Title:

Requirements Governing Groundwater Standards, 47CSR12

3. **Explanation of above estimates (including long-range effect):**
Please include any increase or decrease in fees in your estimated total revenues.

None anticipated

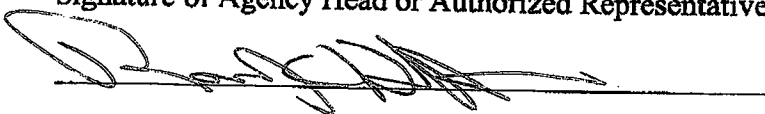
MEMORANDUM

Please identify any areas of vagueness, technical defects, reasons the proposed rule would not have a fiscal impact, and/or any special issues not captured elsewhere on this form.

The proposed revisions to the Requirements Governing Groundwater Standards Rule reflect updates/additions made to the United States Environmental Protection Agency's 2006 Edition of the Drinking Water Standards and Health Advisories. Costs of implementing the changes will be absorbed in the agency's current budget.

Date: June 1, 2009

Signature of Agency Head or Authorized Representative



RECEIVED
2009 JUL 30 AM 10:46

TITLE 46 47
LEGISLATIVE RULE
~~ENVIRONMENTAL QUALITY BOARD~~
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER RESOURCES

SECRETARY OF STATE
STATE OF WEST VIRGINIA

SERIES 12
REQUIREMENTS GOVERNING GROUNDWATER STANDARDS

§46-12-1, §47-12-1. 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. -- ~~April 15, 2002~~.

1.4. Effective Date. -- ~~July 1, 2002~~.

§46-12-2, §47-12-2. 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 the Environmental Quality Board.~~

~~2.3.~~ 2.2. "Constituent" means any chemical or biological substance found in groundwater due to either natural or man-made conditions.

~~2.4.~~ 2.3. "Groundwater" means the water occurring in the zone of saturation beneath the seasonal high water table, or any perched water zones.

~~2.5.~~ 2.4. "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; the State of West Virginia and any of its political subdivisions, including any county commission or

municipal corporation; any governmental agency, including federal facilities; political subdivisions; county commissions; municipal corporations; 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, §47-12-3. Groundwater Standards.

3.1. Except as provided in Sections 3.2 and 3.3 below, the standards of purity and quality for groundwater in the state shall be the constituent concentrations found in Appendix A of this rule.

3.2. Concentration of a constituent in excess of otherwise applicable groundwater quality standards shall be governed as follows:

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

~~a.~~ 3.2.b. 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 ~~make~~ 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~~ 47CSR2 in any surface water.

3.4. Groundwater quality standards do not apply:

3.4.a. Within areas of geologic formations that are site-specific to site production or storage zones of crude oil or natural gas and that 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; §§22-6-1, et seq., 22-7-1, et seq., 22-8-1, et seq., 22-9-1, et seq., or 22-10-1, et seq.;~~ and

3.4.b. Within areas of geologic formations that 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.

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

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

3.5. Measurement of inorganic constituents

3.5.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 subsection 3.5.b below.

3.5.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:

3.5.b.1. The sample is from a carbonate formation in an area of karst terrane;

3.5.b.2. The sample is from a collection point for groundwater used for private or public water supply;

3.5.b.3. The sample is from a spring or seep; or

3.5.b.3. The sample is one for which State or Federal regulations require that total inorganic concentrations be measured.

~~§46-12-4. §47-12-4.~~ Hazardous Waste Treatment, Storage or Disposal Facilities.

4.1. Nothing in this rule prohibits the Office Division of Water and 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

Organic Compounds

<u>Constituent</u>	<u>Limit (mg/L)</u> (except where noted)
Alachlor	0.002
<u>Aldicarb</u>	0.003
<u>Aldicarb sulfone</u>	0.003
<u>Aldicarb sulfoxide</u>	0.004
Atrazine	0.003
Benzene	0.005
Benzo (a) pyrene (PAH)	0.0002
<u>Bromodichloromethane (THM)</u>	0.08
<u>Bromoform (THM)</u>	0.08
Carbofuran	0.04
Carbon tetrachloride	0.005
Chlordane	0.002
<u>Chloroform (THM)</u>	0.08
2, 4-D	0.07
Dalapon	0.2
Di(2-ethylhexyl)adipate	0.4
Di(2-ethylhexyl)phthalate	0.006
<u>Dibromochloromethane (THM)</u>	0.08
Dibromochloropropane (DBCP)	0.0002
<u>Dichloroacetic acid</u>	0.06
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
Glyphosate	0.7
Heptachlor	0.0004
Heptachlor epoxide	0.0002
Hexachlorobenzene	0.001

Hexachlorocyclopentadiene	0.05
Lindane	0.0002
Methoxychlor	0.04
<u>Monochloroacetic acid</u>	<u>0.06</u>
Monochlorobenzene	0.1
Oxamyl (Vydate)	0.2
Pentachlorophenol	0.001
Picloram	0.5
Polychlorinated biphenyls	0.0005
Simazine	0.004
Styrene	0.1
2, 3, 7, 8-TCDD (Dioxin)	0.000000005 <u>0.00000003</u>
Tetrachlorethylene	0.005
Toluene	1.0
Toxaphene	0.003
2, 4, 5-TP (Silvex)	0.05
<u>Trichloroacetic acid</u>	<u>0.06</u>
Trichlorobenzene (1, 2, 4-)	0.07
Trichloroethane (1, 1, 1-)	0.2
Trichloroethane (1, 1, 2-)	0.005
Trichloroethylene	0.005
Vinyl Chloride	0.002
Xylenes (Total)	10

Inorganic Compounds

<u>Constituent</u>	<u>Limit (mg/L)</u> (except where noted)
Arsenic	0.01
Asbestos	7 MFL ¹
Barium	2.0
Beryllium	0.004
<u>Bromate</u>	<u>0.01</u>
Cadmium	0.005
<u>Chloramine</u>	<u>4.0</u>
<u>Chlorine</u>	<u>4.0</u>
<u>Chlorine dioxide</u>	<u>0.8</u>
<u>Chlorite</u>	<u>1.0</u>
Chromium (Total)	0.1
<u>Copper</u>	<u>1.3</u>
Cyanide	0.2
Fluoride	4.0
Lead	0.015
Mercury (Inorganic)	0.002
Nickel	0.1

Nitrate (as N)	10
Nitrite (as N)	1.0
Total Nitrate and Nitrite (both as N)	10
Selenium	0.05
Thallium	0.002

Radionuclides

Beta particle and photon activity	4 mrem ²
Gross alpha particle activity	15 pCi/L ³
Combined Radium 226 and 228	5 pCi/L
<u>Radon</u>	<u>300 pCi/L</u>
<u>Uranium</u>	<u>30 µg/L⁴</u>

1 – MFL = million fibers per liter

2 – mrem = millirem (rem = roentgen – equivalent – man)

3 – pCi = picocurie

4 – µg/L = microgram per liter