

**WEST VIRGINIA  
SECRETARY OF STATE**

**KEN HECHLER**

**ADMINISTRATIVE LAW DIVISION**

Form #3

**FILED**

FEB 8 3 40 PM '93

OFFICE OF WEST VIRGINIA  
SECRETARY OF STATE

**NOTICE OF AGENCY APPROVAL OF A PROPOSED RULE  
AND  
FILING WITH THE LEGISLATIVE RULE-MAKING REVIEW COMMITTEE**

AGENCY: West Virginia Div. of Environmental Protection TITLE NUMBER: 38

CITE AUTHORITY WV Code 20-5M-5

AMENDMENT TO AN EXISTING RULE: YES  NO

IF YES, SERIES NUMBER OF RULE BEING AMENDED: \_\_\_\_\_

TITLE OF RULE BEING AMENDED: \_\_\_\_\_

IF NO, SERIES NUMBER OF NEW RULE BEING PROPOSED: 2F

TITLE OF RULE BEING PROPOSED: Groundwater Protection Regulations,  
Coal Mining Operations

THE ABOVE PROPOSED LEGISLATIVE RULE HAVING GONE TO A PUBLIC HEARING OR A PUBLIC COMMENT PERIOD IS HEREBY APPROVED BY THE PROMULGATING AGENCY FOR FILING WITH THE SECRETARY OF STATE AND THE LEGISLATIVE RULE MAKING REVIEW COMMITTEE FOR THEIR REVIEW.

  
David C. Callaghan, Director

7.80



DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES  
OFFICE OF THE SECRETARY

State Capitol, Room R-151  
Charleston, West Virginia 25305-0310  
Telephone: (304) 558-3255  
Fax No.: (304) 558-4983

GASTON CAPERTON  
Governor

JOHN M. RANSON  
Cabinet Secretary

September 16, 1992

RECEIVED  
1992 SEP 16 PM 1:30  
OFFICE OF WEST VIRGINIA  
SECRETARY OF STATE

Dave Callaghan. Director  
Division of Environmental Protection  
#10 McJunkin Road  
Nitro, West Virginia 25143

RE: Proposed Rule - Title 38, Series 2E (Groundwater  
Protection Regulations/Coal Mining Operations)

Dear Dave:

Pursuant to West Virginia Code §5F-2-2(a)(12), I hereby  
consent to the proposal of the rule specified above.

You may attach a copy of this letter to your filing with the  
Secretary of State as evidence of my consent.

Sincerely yours,

John M. Ranson  
Cabinet Secretary

JMR:cjb  
T:RUL-DEP2.RUL

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R E V I S E D  
FISCAL NOTE FOR PROPOSED RULES

FEB 8 3 40 PM '93

OFFICE OF WEST VIRGINIA  
SECRETARY OF STATE

Rule Title: Groundwater Protection Regulations - Coal Mining Operations  
Title 38, Series 2F

Type of Rule: X Legislative        Interpretive        Procedural

Agency Division of Environmental Protection Address 10 McJunkin Road  
Nitro, WV 25143

1. Effect of Proposed Rule	ANNUAL		FISCAL YEAR		
	Increase	Decrease	Current	Next	Thereafter
Estimated Total Cost	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-
Personal Services	-0-	-0-	-0-	-0-	-0-
Current Expense	-0-	-0-	-0-	-0-	-0-
Repairs and Alterations	-0-	-0-	-0-	-0-	-0-
Equipment	-0-	-0-	-0-	-0-	-0-
Other	-0-	-0-	-0-	-0-	-0-

2. Explanation of above estimates. As explained in the Responsiveness Summary accompanying this proposed rule, the rule is not expected to directly increase or decrease state revenues or costs, other than as described in the Fiscal Note accompanying the Title 47, Series 55, Groundwater Protection Act Fee Schedule rule. In order to avoid duplication, those figures are not repeated herein.

3. Objectives of these rules: These rules set forth a series of practices which surface coal mining operations must follow in order to protect the state's groundwater resources.

4. Explanation of Overall Economic Impact of Proposed Rule.

A. Economic Impact on State Government. This rule will regulate private industry, to wit coal mining facilities. As such, it will not directly impact state government. To the degree that coal industry costs and revenues are impacted, the state may experience a secondary impact as tax and fee collections are affected. Since this rule will increase industry costs, state revenues, if affected, will likely be decreased.

B. Economic Impact on Political Subdivisions; Specific Industries; Specific groups of citizens. This rule will impose substantial costs on the coal industry, in order to comply with the Groundwater Protection Act of 1991. The practices and procedures, the modifications to existing facilities, and the additional features for new facilities, required by this rule, will all increase industry cost above those experienced previously.

C. Economic Impact on Citizens/Public at Large. The Division of Environmental Protection has no way of accurately determining economic impact on citizens or the public at large. If, however, the cost of compliance with this rule should cause any decrease in coal mining activity, citizens and the public at large could be affected by decreased employment in or in support of the coal industry.

Date February 8, 1993

Signature of Agency Head or Authorized Representative

  
David C. Callaghan, Director

DATE: February 8, 1992  
TO: LEGISLATIVE RULE-MAKING REVIEW COMMITTEE  
FROM: Department of Commerce, Labor & Environmental Resources -  
Division of Environmental Protection  
LEGISLATIVE RULE TITLE:

1. Authorizing statute(s) citation §20-5M-5  
\_\_\_\_\_
  
2. a. Date filed in State Register with Notice of Hearing:  
9/16/92  
\_\_\_\_\_
  
- b. What other notice, including advertising, did you give of the hearing?  
Requested publication of notice in seven (7) newspapers  
across the state.  
\_\_\_\_\_  
\_\_\_\_\_
  
- c. Date of hearing(s): 10/16/92  
\_\_\_\_\_
  
- d. Attach list of persons who appeared at hearing, comments received, amendments, reasons for amendments.  
Attached x No comments received \_\_\_\_\_
  
- e. Date you filed in State Register the agency approved proposed Legislative Rule following public hearing:  
(be exact)  
February 8, 1993  
\_\_\_\_\_
  
- f. Name and phone number of agency person to contact for additional information:  
Stephen C. Keen  
759-0502  
\_\_\_\_\_  
\_\_\_\_\_

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: N/A

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: \_\_\_\_\_

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 \_\_\_\_\_

FILED

FEB 8 3 41 PM '93

TITLE 38  
LEGISLATIVE RULES  
DIVISION OF ENVIRONMENTAL PROTECTION

OFFICE OF WEST VIRGINIA  
SECRETARY OF STATE

SERIES 2EF  
GROUNDWATER PROTECTION REGULATIONS  
COAL MINING OPERATIONS

1. General.

1.1 Scope and Purpose. These regulations establish a series of practices for the protection of groundwater which are to be followed by any person who conducts coal mining operations subject to the provisions of Chapter 20-5M-1 et seq. of the West Virginia Code and subject to regulation under Chapter 22A, Article 3 of the Code of West Virginia, and/or under Chapter 20, Article 5A of the Code of West Virginia, as it relates to coal mining operations.

1.2 Authority. West Virginia Code 20-5M-5.

1.3 Filing Date. February 8, 1993

1.4 Effective Date.

2. Definitions. As used in these regulations, unless used in a context that clearly requires a different meaning, the term:

2.1 Act means the West Virginia Groundwater Protection Act, West Virginia Code 20-5M-1 et seq.

2.2 Coal Mining Operation means any facility or activity which falls within the definition of "surface mine," "surface mining," or "surface mining operations" set forth in subsection (w), Section (3), Article 3, Chapter 22A ~~of the West Virginia Surface Coal Mining and Reclamation Act~~ of the Code of West Virginia, 1931 as amended.

2.3 Contaminant means any material in a solid, liquid or gaseous state that has the potential to cause contamination.

2.34 Contamination means ~~any man-made or man-induced degradation of the chemical, physical, biological or radiological integrity of groundwater resulting from activities regulated under this rule. The baseline for determination of such degradation shall be the background concentration or level, unless that site has been granted a variance or deviation from background quality as provided in the Act, or is the subject of an order, agreement, or permit which in accordance with the Act would require protection of groundwater quality at a different concentration or level.~~ means any man-made or man-induced

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alteration of the chemical, physical, biological, or radiological integrity of the groundwater, resulting from activities regulated under this rule, in excess of existing groundwater quality, unless that activity or site has: (1) been exempted pursuant to subsection 5(h) of the Act; (2) has been granted a deviation or variance from existing quality as provided for in the Act; or (3) is subject to an order, permit, or other regulatory action that requires restoration or maintenance of groundwater quality at a different concentration level.

2.45 Director means the Director of the Division of Environmental Protection of the Department of Commerce, Labor, and Environmental Resources or the Director's authorized designee.

~~2.5 Existing Facility or Existing Coal Mining Operation means, for the purpose of this regulation, any facility or activity which was in operation prior to the effective date of this regulation, or on which construction begins prior to ninety (90) days after the effective date of these regulations.~~

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

2.67 Impoundment means an area which is a natural topographic depression, man-made excavation, or diked area that is designed or improved in such a manner so as to hold an accumulation of contaminated surface runoff, process wastewater, product, or sewage, or any other liquid substance that could contaminate groundwater.

2.78 Liner means a continuous layer of natural or man-made materials ~~which is sufficient to restrict the downward or lateral movement of contaminants beneath and on the sides of an area which restricts the downward or lateral escape of contaminants.~~

~~2.8 New Facility or New Operation means any coal mining operation, facility, or activity which submits a new application ninety (90) days or longer after the effective date of this regulation.~~

2.9 Permit means any license, certification, registration, permit, or any other approval granted by an agency authorized to regulate coal mining facilities or activities which may have an impact on groundwater.

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2.10 Practice means any action which is protective of groundwater.

2.11 Secondary Containment means ~~the use of dikes, berms, synthetic or natural liner systems, double-walled containment vessels, or any combination thereof to prevent contaminants from entering groundwater utilizing dikes, berms, synthetic or natural liner systems, double-walled containment vessels, or any combination thereof to prevent contaminants from accidentally discharging into the environment.~~

**3. Groundwater Protection Plans and Practices for Coal Mining Operations.**

3.1 Hydrologic and water quality protection practices established under the authority of Chapter 20, Article 5A, or Chapter 22A, Article 3 of the Code of West Virginia and the legislative rules promulgated thereunder, were enacted in part to protect groundwater and are hereby incorporated by reference into this rule. In cases where such statute or legislative rules are more restrictive or in conflict with the Act or these legislative rules, the statute or rule most protective of groundwater applies.

3.2 Where the evaluation of an existing facility reveals that contamination is occurring, a schedule of compliance must be submitted by the facility or activity and approved by the Director whereby the facility or activity must retrofit or improve or discontinue existing systems, activities, or procedures to make them, to the satisfaction of the Director, protective of groundwater.

3.3 All coal mining operations, including those which are subject to the exemption set forth in subsection (h), Section 5, of the Act, shall conduct groundwater protection practices, and prepare and implement groundwater protection plans, as set forth in this regulation. Exempted operations are not subject to the requirement at subsection (e), Section 5, of the Act, to maintain existing quality or to the related provisions of subsections (f) and (g), Section 5, of the Act. Further, exempted operations are not subject to water quality standards promulgated by the Water Resources Board pursuant to the Act. Such operations shall nonetheless be designed, constructed, operated, maintained, and closed in such manner as to reasonably protect groundwater from contamination.

Facilities or activities must determine if they are planning to locate or expand into areas of karst, wetlands, fault(s),

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subsidence, or delineated wellhead protection areas, as determined by the Bureau of Public Health. If areas of karst, wetlands, fault(s), subsidence, delineated wellhead protection areas or other areas determined by the Director to be vulnerable based on geologic or hydrogeologic information, are determined to exist, then the facility or activity design must adequately address the issues arising from locating in the area(s) of a potentially more vulnerable groundwater resource.

3.24 Groundwater Protection Plans.

3.24.1 Each groundwater protection plan shall at a minimum contain the following:

3.24.1.a An inventory of all operations and activities that may reasonably be expected to contaminate groundwater, and an indication of the current existence of and the potential for groundwater contamination. These include but are not limited to evaluation of materials handling areas, loading and unloading areas, equipment cleaning, construction activities, maintenance activities, pipelines carrying contaminants, sumps and tanks containing contaminants, and impoundment areas.

3.24.1.b A description of new and/or existing controls or activities to prevent protect groundwater contamination from the identified potential contamination sources.

3.24.1.c Schedules and procedures for employee training addressing the prevention of groundwater contamination.

3.24.1.d Provisions for inspections to be conducted by the operator at least every six (6) months to ensure that all elements of the coal mining operation's groundwater protection program are in place, properly functioning, and appropriately managed.

3.24.1.e Groundwater monitoring procedures as deemed appropriate for the facility and/or as required by the Director.

3.4.1.f A discussion of all information reasonably available to the facility/activity regarding existing groundwater quality at, or which may be affected by, the site.

3.24.2 ~~All coal mining operations being conducted one (1) year after the effective date of these regulations shall have implemented~~ Within one year of the effective date of these regulations all coal mining operations shall complete and implement a groundwater protection plan; provided, that the

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groundwater protection plan shall be included with any new permit application submitted under Chapter 22A, Article 3, or Chapter 20, Article 5A of the Code of West Virginia, ninety (90) days or later after the effective date of these regulations or with any permit renewal application submitted one (1) year or more after the effective date of these regulations; provided, further, that the Director may waive ~~this~~ the requirement for a groundwater protection plan for an operation which has been granted Phase II bond release in accordance with Chapter 22A, Article 3, of the Code of West Virginia, if he finds that such is not necessary for the purposes of the Act.

3.4.2.a Adherence to a groundwater protection plan does not diminish or supersede the requirement to comply with the Act or with applicable provisions of these regulations. Failure to follow any practices set forth in an approved groundwater protection plan constitutes a violation of this regulation.

3.24.3 The groundwater protection plan may be integrated with the statement of probable hydrologic consequences and the hydrologic reclamation plan required by Chapter 22A, Article 3 of the Code of West Virginia and regulations promulgated pursuant thereto.

3.24.4 A copy of the groundwater protection plan shall be kept on-site, or at the operator's nearest readily accessible office, and shall be made available for review by the Director upon request. A copy or copies of the plan shall be provided for Division review and/or files upon request by the Director.

3.24.5 The Director may require modification to groundwater protection plans to assure adequate protection of groundwater. Further, the Director may during review of a groundwater protection plan require such other information as he reasonably needs to evaluate the plan.

3.24.6 In addition to the basic groundwater protection plan requirements, each plan shall address the specific requirements set forth in ~~paragraphs 3 through 7~~ subsections 5 through 9 of this section to the extent the operation includes such areas or features.

3.4.7 Adherence to a groundwater protection plan does not relieve the facility/activity of any obligation to comply with any other state, federal or local rule, regulation, law or act.

3.35 Groundwater Protection Practices for Outside Material Storage or Disposal Areas (Coal, Raw Materials, etc.)

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3.35.1 Existing areas at which coal, raw material, product or wastes are stored or disposed shall be evaluated for the existence of and the potential to cause groundwater contamination. Where potential for contamination exists, action shall be taken to eliminate, to the degree practicable, the potential for groundwater contamination. Placement of groundwater monitoring stations may be necessary to determine if contamination has occurred or is occurring.

3.35.2 ~~New areas at which used for storage or disposal of coal, raw materials, products or wastes are to be stored shall be designed, constructed and operated to prevent contamination of groundwater.~~

3.46 Groundwater Protection Practices for Loading and Unloading Areas; Distribution and Bulk Facilities.

3.46.1 Loading and unloading stations including but not limited to areas used to load and unload drums, trucks, and railcars shall have spill prevention and control facilities and procedures, as well as secondary containment if appropriate or if otherwise required. Spill containment and cleanup equipment shall be readily accessible.

3.46.2 ~~New~~ distribution facilities and bulk containers shall be designed/installed in such a manner so as to prevent spills and leaks from contaminating groundwater.

~~3.4.3 Bulk containers shall be installed in structures designed to prevent spills and leaks from contaminating groundwater.~~

3.57 Groundwater Protection Practices for Impoundments.

3.57.1 Existing impoundments shall be evaluated for ~~the existence of and the~~ their potential to cause groundwater contamination. Where potential for contamination exists, action shall be taken to eliminate, to the degree practicable, the potential for groundwater contamination. In addition, further evaluation may be necessary to determine if contamination has occurred and to address such contamination in accordance with the Act. Placement of groundwater monitoring stations may be necessary to perform these evaluations.

3.57.2 New impoundments shall be designed and operated to prevent contamination of groundwater. New impoundments which are found to have the potential to contaminate groundwater shall use

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a liner or other appropriate control system. Groundwater monitoring stations may be necessary to assure protection of the groundwater resource.

~~3.5.3 All wastewater impoundments shall install a groundwater monitoring system that is appropriate for the facility.~~

3.57.43 Impoundment Closure of Impoundments Requirements.

~~3.5743.a All wastewater shall be treated and removed. All solids, sludges, etc., should be properly disposed of unless in-place closure is to take place, in which case the material shall be stabilized unless determined innocuous and sludges shall be properly disposed by in-place closure if approved by the Director, or removed to a landfill, or incinerated, unless a beneficial reuse is allowed in existing regulations.~~

3.7.3.b If in-place closure is to be performed, stabilize, if necessary, unless determined innocuous by the Director.

~~3.57.4.b Unless approved for retention as permanent structures, impoundments should be graded, leveled and closed in accordance with regulations promulgated pursuant to the Federal Mine Safety and Health Act, at 30 C.F.R. 77.216, and/or the requirements of the West Virginia Dam Control Act, (Code 20-5D-1 et seq), and/or the West Virginia Surface Coal Mining and Reclamation Act (Code 22A-3-1 et seq), as applicable.~~

3.7.5 Prior to closing an impoundment which has been found to be contaminating groundwater, a plan which includes, but is not limited to, details of capping, filling, grading, and runoff control must be submitted to the Director for approval.

3.68 Groundwater Protection Practices for Pipelines, Ditches, and Pumps, and Drums.

~~3.68.1 New pipelines and pumps at coal mining operations must be designed and constructed to prevent contamination of groundwater, and should be installed above ground where practicable. New pipelines or pumps that are installed below ground should have secondary containment or leak detection and control systems. Pipelines conveying materials which have the potential to contaminate groundwater shall preferentially be installed above ground.~~

3.8.2 Ditches shall not be installed as primary conveyances

for materials which have the potential to contaminate groundwater unless provided with appropriate liners.

3.8.3 Pumps and ancillary equipment (e.g., valves, flanges, filters, condensate lines and instrumentation) handling materials that have the potential to contaminate groundwater shall be selected and installed to prevent or contain any spills or leaks.

3.8.4 Drums, containing materials that have the potential to contaminate groundwater, shall be stored so that spills and leaks are contained. Measures shall be taken to control drum deterioration and/or damage due to handling.

### ~~3.7 Storage Tanks and Drums.~~

~~3.7.1 Above-ground storage tanks shall have secondary containment that is appropriate considering the potential to contaminate groundwater. Such secondary containment shall be adequately designed and constructed to contain the materials for a time sufficient to allow removal and disposal without additional contamination of groundwater, but in no case will that time be less than seventy-two (72) hours.~~

~~3.7.2 New tanks may only be installed underground for overriding safety, legal, security, or fire protection concerns, and shall be provided with leak detection systems.~~

~~3.7.3 Secondary containment is not required for sumps and tanks used only as secondary containment for other facilities.~~

~~3.7.4 Drums shall be stored so that spills and leaks are contained. Measures shall be taken to prevent drum deterioration caused by weather or other environmental influences and damage due to handling.~~

### 3.9 Groundwater Protection Practices for Sumps and Tanks.

3.9.1 Above-ground storage tanks shall have secondary containment that is appropriate considering the potential to contaminate groundwater. Such secondary containment shall be adequately designed and constructed to contain the materials for a time sufficient to allow removal and disposal without additional contamination of groundwater, but in no case will that time be less than seventy-two (72) hours.

3.9.2 Underground tanks containing materials which have the potential to contaminate groundwater shall be designed,

constructed, and operated utilizing leak detection or secondary containment, or other appropriate controls that are capable of preventing groundwater contamination.

3.9.3 New tanks containing materials that have the potential to contaminate groundwater may only be installed underground for overriding safety, legal, security, or fire protection concerns.

3.9.4 Sumps containing materials which have the potential to contaminate groundwater shall be designed, constructed, and operated utilizing leak detection or secondary containment, or other appropriate controls that are capable of preventing groundwater contamination.

3.9.5 Secondary containment is not required for sumps and tanks used only as secondary containment for other facilities.

#### **4. Monitoring.**

4.1 Pursuant to Chapter 22A, Article 3, and Chapter 20, Article 5A of the Code of West Virginia, the Director may require placement and maintenance of a reasonable number of groundwater monitoring stations (such as piezometers, or monitoring wells, or springs) at coal mining operations in order to monitor for groundwater contamination and water levels. Existing facilities not currently monitoring groundwater shall do so if required by the Director.

4.2 In addition to the base line groundwater information required by CSR 38-2-3.22 and monitoring required by CSR 38-2-14.7, the Director may require such other base line data and monitoring as he determines appropriate to meet the requirements of these regulations or the Act. A waiver of groundwater monitoring granted under CSR 38-2-14.7(c) may operate as a waiver for the purposes of these regulations and the Act if, in addition to the demonstration required by CSR 38-2-14(c), the applicant demonstrates and the Director finds in writing that monitoring is not necessary for the purposes of the Act or these regulations.

4.3 ~~Monitoring wells or piezometers~~ Groundwater monitoring stations shall be located and maintained, or drilled, and constructed, and maintained in a manner that allows accurate measurements ~~determination~~ of groundwater contamination and water quality and levels, and prevents contamination of groundwater through the finished well hole or casing.

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Series 2F, Section 4

~~4.4 Monitoring wells or piezometers~~ Groundwater monitoring stations shall be designed and installed in accordance with applicable rules promulgated pursuant to the Act.

4.5 All groundwater monitoring stations shall be accurately located, utilizing latitude and longitude, by surveying or other acceptable means, and the coordinates shall be included with all data collected.

4.6 Data Management - The Director may at his discretion require submittal of any or all groundwater monitoring data collected in association with a regulated activity, and may further specify an electronic format in which the data is to be submitted.

**5. Fees.**

5.1 Coal mining operations shall be subject to the fee schedule and fee payment requirements as set forth in CSR 47-55-1 et seq. Failure to remit fees when and as due is a violation of these regulations.

**6. Prohibitions.**

6.1 It shall be unlawful for any person, unless an authorization has been issued by a groundwater regulatory agency, to deliberately allow crude oil, or any petroleum product derived from crude oil, or septage, or natural gas, or salt water, or any chemical mixture which may contaminate groundwater to escape from any well, pipeline, impoundment, storage tank, treatment unit, equipment, or storage container, or to deliberately allow such materials to flow onto or under the land surface in a manner that could contaminate groundwater.

Note: 46 C.S.R. 3 requires all spills and accidental discharges to be reported by calling 1-800-642-3074.

~~6.2 Groundwater quality may not be degraded by any facility operation or any activity unless: 1) a valid permit exists and/or 2) the Director has taken action pursuant to subsection (f) - (1), Section 5 of the Act.~~

**7. Enforcement.**

7.1 Any person who violates the Act or these regulations shall be subject to applicable civil and criminal penalties, injunctive relief, enforcement orders, and procedures as set

forth in Section 10 of the Act.

7.2 The appeal and review procedures set forth in Section 11 of the Act shall be applicable to actions arising under these regulations.

7.3 Civil penalties for violations of these regulations shall be assessed by the Director in accordance with CSR 47-56.

7.4 Violations by a coal operator, arising from acts or omissions subject solely to these regulations or the Act, shall not be counted toward a pattern of violations or in determining the history of violations pursuant to Chapter 22A, Article 3 of the Code of West Virginia, and regulations pursuant thereto.

## 8. Remediation.

8.1 The Director may conduct or order other persons to conduct remedial actions which are appropriate to the type and extent of contamination, and which are subject to applicable permit conditions and variances and deviations from existing water quality and water quality standards that are allowed under the Act. The Director encourages agreements for investigation and cleanups in appropriate cases.

8.2 The use of permanent solutions to the maximum extent practical to correct groundwater contamination is preferred.

8.3 Cleanup actions shall not rely primarily on dilution and dispersion of the substance if active remedial measures are ~~technologically and economically practicable~~ technically and economically feasible, as determined by the Director. Natural attenuation of groundwater contamination may be an appropriate remediation response.

8.4 Adequate groundwater monitoring shall be conducted to demonstrate control and containment of the substance. The Director shall specify which parameters should be monitored in a remedial operation. The groundwater monitoring must continue until results assure adequate remedial action was taken.

8.5 In addition to any required remediation, the Director may order the facility or activity to mitigate or compensate for the loss of beneficial use of groundwater, or for any significant adverse impact to groundwater.

8.6 Remediation Guidelines. (Reserved)

**9. Applicability of Requirements.**

9.1 The Director may, to the extent authorized by the Act, waive some or all of the requirements of this rule upon determining in writing that such requirements are not necessary to protect groundwater from contamination.

9.2 Where the standards for facility design or the activities required by this rule are less stringent than the standards and activities required by other statutes, regulations, permit conditions or orders applicable to a facility, the more stringent requirement will apply.

WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION

--- PUBLIC HEARING ---

DATE: 10/16/92 LOCATION: Nitro Groundwater Public  
Hearing

ATTENDANCE ONLY

(PLEASE PRINT)

NAME	ADDRESS	REPRESENTING
Ben Greene	1624 Kennedy Blvd. E. Charleston W.V. 25311	WVNR #
W. Leonard Womble	1360 Valentine Circle Nitro, WV 25143	Self
Ch Heil	1301 Laidley Tower (Chas.)	WVOM
Patrick Campbell	1201 Greenbrier St Chas. WV 25312	DEP-OWR
Pat Sanders	1001 W 2nd St E. Charmers	Chas. Daily Mail
DAVE WATKINS	1201 Greenbrier St. Charleston, WV 25311	DEP/OWR
Louise Mills	PC Box 130 Mt Carbon WV 25311	Cyrus Kanawha Corp



DEPARTMENT OF COMMERCE, LABOR AND ENVIRONMENTAL RESOURCES  
DIVISION OF ENVIRONMENTAL PROTECTION

Office of Mining and Reclamation

Responsiveness Summary

February 8, 1993

Proposed Rule: "Groundwater Protection Regulations - Coal Mining Operations"; Title 38, Series 2F

I. Introduction and Discussion of Controversy Regarding the Act

A. Introduction

The West Virginia Division of Environmental Protection (WVDEP or Division) has received thoughtful criticism during the public comment period on proposed "Groundwater Protection Regulations - Coal Mining Operations", Title 38, Series 2F. The regulations set forth a series of practices that must be followed by any person who conducts coal mining operations subject to the provisions of the Groundwater Protection Act (the Act), West Virginia Code §20-5M-1 et seq., and subject to regulation under Chapter 22A, Article 3, of the West Virginia Code and/or under Chapter 20, Article 5A, of the West Virginia Code as it relates to coal mining operations.

B. Controversy Regarding Legislative Intent

The WVDEP has been faced with a significant controversy regarding the intent of a provision of the Act pertaining to the regulation of groundwater impacts caused by coal mining. The provision in question is subsection (h), Section 5 of the Act (20-5M-5(h)). This subsection is known as the "coal exemption" from the requirement to maintain existing quality set forth in subsections (e), Section 5 of the Act, and the related provisions of subsections (f) and (g) of Section 5. Further, subsection (h) operates as an exemption from groundwater quality standards promulgated by the Water Resources Board pursuant to authority provided by the Act. The controversy arose in early 1992, and again during the public comment period on the proposed rule.

The substance of the issue is whether the scope of the coal exemption covers only the impacts caused by earth disturbing activities directly involved in coal extraction, or impacts caused by all earth disturbing activities connected with or as a result of coal extraction. The former would include the areas excavated in a surface mine for coal recovery (the coal pits), the workings of an underground mine (the mine works), and directly related disturbances such as access roads to the coal pits or

**WVDEP Responsiveness Summary**  
**Title 38, Series 2F Proposed Rule**  
**February 8, 1993**

mine works, face-up areas, spoil storage and disposal areas, backfill areas, and other activities directly involved in coal extraction. The latter interpretation would include all those covered by the former, but would additionally extend the scope of the exemption to include areas where the earth is disturbed to handle, process, store, or dispose of coal and/or waste from the coal which is extracted.

Notably, the first interpretation would exclude most coal loading and coal preparation facilities, and most impoundments and refuse areas for the disposal of coal processing wastes. The second alternative would include these facilities in the scope of the coal exemption.

The Division has heard arguments for both interpretations, as well as suggestions that majority legislative intent upon passage of the Act favored both interpretations.

The Division recognizes the importance of the issue. While the nature of many groundwater protection plans and procedures would be the same under either interpretation of the Act, the extent and cost of on-the-ground practices might be drastically different. For instance, an extremely costly manufactured liner system for a refuse impoundment might be required to maintain existing quality or to meet Board standards. If those requirements do not apply, however, naturally occurring soil materials and/or other less costly practices might be found acceptable to reasonably protect the groundwater.

The Division understands that due to the nature of coal processing and waste disposal operations, and the often high volume of coal refuse relative to clean coal produced, the impact of high-cost groundwater protection practices (such as liners and caps) could be very significant to the overall economics of a coal operation. It is possible that the application of these types of non-degradation practices could render some existing or proposed coal operations uneconomic.

In light of these facts, the Division realizes this question of the intent of 20-5M-5(h) is a serious one. Unfortunately, it has available to it no written document clarifying Legislative intent, and it is faced with the fact that the subsection, as written, could arguably admit of either proposed interpretation.

Based on information from and recollection of WVDEP staff members who participated in the Governor's Groundwater Task Force, the agency believes the first interpretation of the "coal exemption" was the one intended by the drafters of the bill. It

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will therefore implement the Act and the rule accordingly, unless the Legislature instructs otherwise as it considers this rule.

As the rule is drafted, the Division believes it should require little or no modification, regardless of the outcome of this issue. A new subsection 3.3 has been added to the rule to which addresses the exemption in the first paragraph.

The second paragraph of 3.3 was taken from the similar Title 47, Series 58, proposed rule (discussed below); this paragraph is basically advisory, in that it is intended to provide a "head's-up" warning to those proposing new or expanded facilities in especially sensitive groundwater areas. It simply points out that the issues raised by such location and sensitive resources will need to be addressed in the facility design. This paragraph is not intended to be prohibitive; the WVDEP realizes that locations of coal mines are dictated by the location of mineable reserves. It does believe, however, that choices of location may be possible in some cases for mining-related facilities. Where sensitive or especially vulnerable groundwater resources are present, such choices should take into account, and be made so as to protect, such groundwater resources.

**C. Procedures and General Information**

To comply with public participation requirements, the Division issued on September 16, 1992 a notice announcing the beginning of a thirty day public comment period and a public hearing on the proposed rule. The notice was published in seven newspapers, representative of various geographic areas across the state.

Eight people attended the public hearing that was held October 16, 1992, at 9:00 a.m., in the Division of Environmental Protection Headquarters' Conference Room in Nitro, West Virginia.

In addition to one oral comment, the Division received three written comments by 4:30 p.m., October 16, the date on which the official record was closed. All public comments were reviewed in developing the final draft regulations.

The following is this agency's response to recommendations and concerns raised in oral and written comments.

Due to comments received and as a result of the recent formation of the Division of Environmental Protection, the redrafting of the proposed rule reflects an effort to achieve consistency between a similar rule (Title 47, Series 58) which is

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being proposed by the Office of Water Resources (OWR). Where possible, definitions and requirements of this rule and OWR's were made similar to avoid possible confusion that may have resulted from conflicting requirements within the same (WVDEP) agency's rules.

**II. General Comments**

One commentator offered its own version of the proposed rule. The Division of Environmental Protection appreciates the effort involved in this drafting, but considers the Division's revised draft of the proposed regulation to be a more comprehensive regulation, and one which properly accounts for comments received. Although the commentator provided no supporting documentation for the ideas set forth in its proposed rule, the Division incorporated those concepts from the commentator's rule which were believed to be appropriate into the revised rule. The Division's proposed regulation also more clearly acknowledges the efforts of the Coal Groundwater Workgroup, which was created as a recommendation of the Governor's Groundwater Task Force. The Workgroup's mission was to reach a compromise on issues of concern.

Realizing the possible use of springs, seeps, etc., to determine groundwater quality, the term "groundwater monitoring well" has been replaced by "groundwater monitoring stations".

The proposed rule has been renumbered Title 38, Series F, instead of Series E. The Secretary of State pointed out that the Series E designation had been assigned earlier.

Some comments were received indicating a belief that certain provisions of the proposed rule were drafted so as to allow the Director or WVDEP (the Division) to ignore or waive some or all of the provisions of the law. These are incorrect interpretations of the proposed rule and of its intent. The Division recognizes that it has no authority to waive any requirement of the Act, and it has no intent to do so.

While WVDEP believes the requirements set forth in the proposed rule are within the scope of authority granted to the Director by the Act, it recognizes that the rule imposes many specific obligations upon the regulated industry. Realizing that certain of these will in some cases be unnecessary for compliance with the letter and intent of the Act, the Division has in the draft rule provided for the possibility of waivers.

The rule is carefully drafted so as to make it clear that waivers granted under the rule are of items or actions otherwise

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required by the rule itself, not the Act. The rule further makes it clear that waivers may and will be granted only to the extent authorized by the Act.

**III. Fiscal Note**

One commentor requested that the WVDEP estimate the cost of compliance with this rule in the fiscal note, and stated that the Division should realize the economic impacts caused by the proposed rule which will be passed on the coal industry in the state. The Division has no way of determining the cost to the coal industry for compliance with this rule, but it acknowledges that the cost may well be very substantial. However, the Division has drafted the proposed rule so as to allow design flexibility that will permit facilities to utilize the best available, most cost-effective, procedures to comply with the Act.

The WVDEP believes the intent of item 1 (the table) in the fiscal note is to deal with revenues (due to fees) and costs to the state as a result of the rule, not to estimate the costs that facilities/activities will incur to achieve compliance with the rule. Those costs to the State (to enforce/implement the rule) were reflected in the fiscal note for Title 47, Series 55, Groundwater Protection Act Fee Schedule, which implemented the limited (\$1,000,000 per year) authority to impose fees to cover the costs of programs. The Division has nonetheless attached a revised Fiscal Note explaining (but not quantifying) possible economic impacts on the industry and on the public-at-large.

**IV. Specific Comments**

A. Comment was received suggesting that contamination as defined in the rule was misleading and made inappropriate use of the word degradation. The use of the word "background" in reference to groundwater quality was also questioned, since the word "existing" is generally used in the Act. The Division recognizes the importance of this definition and in response to these comments has changed it to read as follows: Contamination means any man-made or man-induced alteration of the chemical, physical, biological, or radiological integrity of the groundwater, resulting from activities regulated under this rule, in excess of existing groundwater quality, unless that activity or site has: (1) been exempted pursuant to subsection 5(h) of the Act; (2) has been granted a deviation or variance from existing quality as provided for in the Act; or (3) is subject to an order, permit, or other regulatory action that requires restoration or maintenance of groundwater quality at a different concentration or level.

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B. Comment was received requesting that a definition of groundwater be placed in the rule. The Division concurs with this comment and has added the definition of groundwater, as found in the Act, to the proposed rule.

C. Comment was received stating that the definition of "coal mining operation" should be changed to include offices, garages, bathhouses, parking areas, maintenance and supply areas, and other operations that are excluded under the referenced definition of coal mining operation in Article 3, Chapter 22A. The Division points out that the definition in Chapter 22A, Article 3, has been previously modified by Legislative action to eliminate the exclusion of the specific named facilities. However, to the degree that any facility or operation is excluded from the definition of "coal mining operation", but is subject to the Act, it will be regulated by this Division under the companion rule now being promulgated as Title 47, Series 58.

D. Comment was received to the effect that in-place natural soil materials could meet the definition of a liner in certain circumstances. The Division acknowledges this possible interpretation, but believes the procedure for review and approval of plans will allow for use of this type of liner only in appropriate situations.

E. Comment was received stating that definitions for new and existing facilities, as written, may permit facilities to avoid developing a groundwater protection plan. The Division's redrafted Section 3.4.2 of the rule now clearly states that all coal mining operations shall complete and implement a groundwater protection plan within one year. Due to the redrafting and simplification of the rule, the definitions of existing and new facilities were rendered superfluous, and have been deleted.

F. Comment was received stating that the review process for groundwater protection plans is not timely, does not allow for public review and comment, and should be incorporated into the permit. The Division maintains that it is appropriate to make the groundwater protection plan a part of the approved permit, and therefore subject to public access opportunity, at the time of permit issuance or renewal.

The Division notes, however, that it does not necessarily intend to wait until permit renewal to review the groundwater protection plans for existing operations. As was explained to commentors, all active or inactive coal mining operations are, by law, required to be inspected completely at least four times per year, with additional partial inspections of active operations to

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occur in each other month. The Division intends to review the groundwater protection plans for existing operations in a timely manner after they are required, and to enforce the requirements for the groundwater protection plans through its ongoing inspection and enforcement program. It will not routinely wait until permit renewal where that renewal may not occur for a considerable time.

In a few instances it is true that the groundwater protection plan may not be available in division files for up to four years. It is required to be implemented, however, within one year of the effective date of this rule, and copies may be requested by the Director, or his designee, at any time. When permits are issued/re-issued the groundwater protection plan will be a part of the review package and will be subject to public access. Specifics of the groundwater protection plan will be addressed when a facility or activity requests or renews a permit, or by an inspector during field review. The Division believes this will result in an orderly review procedure which will not result in the chaos that would ensue from a requirement that all plans be submitted at the same time.

For new permits, detailed review of all pertinent information including the groundwater protection plan must occur before permit issuance. If there is concern that additional information is needed to assure protection of the resource, the permittee will be notified by the permitting authority. Furthermore, Section 3.4.2 makes this groundwater protection plan an enforceable document under this rule.

G. Comment was received stating the impoundment subsection (3.5 in proposed rule, now 3.6) should be expanded to include sediment control structures such as ditches. The Division believes its insertion of the new Section 3.8.2 adequately addresses this concern by requiring liners in appropriate cases. A commentor questioned the meaning of the language in 3.5.2 of the proposed rule (now 3.6.2) regarding "other appropriate control system" as an alternate to a liner. As the commentor noted, pretreatment of inflow would be one such example. Others would include, for instance, stabilization of wastes, diversion of extraneous or contaminated surface water, at-source treatment to remove or stabilize contaminants before entry into the impoundment, use of sealants or fixative agents, and perhaps use of in situ or introduced soil materials to retard migration of impoundment contents.

H. Comment was received questioning the need for Section 6 and even recommending deleting it entirely. The intent of this

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Section was to have a mechanism to stop a person from deliberately disposing of, for example, solvents, "out the back door". It is in fact a pollution prevention section. The Act itself does not directly prohibit some undesirable actions, such as disposal of motor oil onto the ground. Subsection 6.1 prohibits certain practices and allows enforcement action based on the existence of the action, without waiting for contamination to be provable.

Subsection 6.2 was deleted, as requested. The commentors indicated it was too vague, and questioned its intent. It was determined to be superfluous, since its intent was only to restate certain basic principles of the Act. Also, it was confusing in light of subsection (h), Section 5, of the Act.

I. Comment was received on subsection 8.1 stating that the Director must order remedial action and suggested that the "may" be replaced with "shall". The Division maintains that there may be certain instances in which groundwater remediation is not desirable under certain circumstances, and the Act at subsection (b), Section 4, indicates the use of discretion as would occur under the proposed rule. Use of the word "shall" is too restrictive and does not allow for an evaluation of all circumstances surrounding the contamination event.

J. Comment was received stating that remediation should not rely "at all" on dilution and dispersion. The Division responds by stating that in certain cases it is not possible to clean up 100% of the contamination. The physical and chemical properties of contaminants, and their interaction with the aquifer, are often complex. Therefore dilution and dispersion may be the only acceptable treatment available for selected constituents or when the point of diminishing returns has been achieved in the remediation project. It is the Division's intent to not primarily rely on dilution or dispersion if proven cleanup technologies exist. The Division believes the Section as written acknowledges that cleanup efforts are rarely 100% effective, and will leave the subsection as written.

K. Comment was received stating that in certain situations the Director should be required to order mitigation. The Division maintains the requirement for mitigation must be considered on a case-by-case basis. It would be unfeasible to attempt to list every possible scenario that may involve mitigation. Mitigation will be required when the Director believes it to be appropriate. The Division observed, from comments received, that the use of the word mitigate in the proposed rule was confusing when used alone and has added the word compensate.

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L. Comment was received which questions the need for Section 9 of the proposed rule. The Division maintains that if a requirement in this rule is not necessary to protect groundwater from contamination it is not reasonable from a practical, economic, or administrative standpoint to require its implementation. It is in no way the intent of this section to allow violation of or waiver of any applicable requirement of the Act.