

**TITLE 38
LEGISLATIVE RULES
OFFICE OF MINING AND RECLAMATION
DIVISION OF ENVIRONMENTAL PROTECTION**

**SERIES 2F
GROUNDWATER PROTECTION RULES COAL MINING OPERATIONS**

'38-2F-1. General.

1.1. Scope. -- These . rules 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 W. Va. Code '22-12-1 et seq. and subject to regulation under W. Va. Code '22-3, and/or under W.Va. Code '22-11, as it relates to coal mining operations.

1.2. Authority. -- W. Va. Code '22-12-5.

1.3. Filing Date. -- May 13, 1994.

1.4. Effective Date. -- June 1, 1994.

'38-2F-2. Definitions. As used in these rules, unless used in a context that clearly requires a different meaning, the term:

2.1. Act means the West Virginia Groundwater Protection Act, W. Va. Code '22-12-1 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 W. Va. Code '22-3-(3)(u).

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

2.4. 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 level.

2.5. Director means the Director of the Division of Environmental Protection or the Director's authorized designee.

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

2.7. 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.

2.8. Liner means a continuous layer of natural or man-made materials beneath and on the sides of an area which restricts the downward or lateral escape of contaminants.

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.

2.10. Practice means any action which is protective of groundwater.

2.11. Secondary Containment means 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.

2.12. Exempted coal mining operations means those operations subject to the exemption set forth in W. Va. Code, '22-12-5(h), and which are of an earth disturbing nature resulting from and directly related to coal extraction. Exempted coal mining operations include: coal and slurry impoundments; refuse areas and on-site haulways.

'38-2F-3. Groundwater Protection Plans and Practices for Coal Mining Operations.

3.1. Hydrologic and water quality protection practices established under the authority of W. Va. Code §22-11 or W. Va. Code §22-3 or W. Va. Code §22-30 and the legislative rules promulgated thereunder, were enacted in part to protect groundwater and are hereby incorporated by reference into this rule.

3.2. All coal mining operations which are not 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 rule. All exempted coal mining operations must conduct groundwater protection practices consistent with W. Va. Code '22-11-1 et seq, and W. Va. Code '22-3-1 et seq. Exempted operations are not subject to the 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 Environmental Quality 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.

3.3. Groundwater Protection Plans.

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

3.3.a.1. An inventory of all operations and activities that are not exempted operations and 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, maintenance activities, pipelines carrying contaminants, sumps and tanks containing contaminants.

3.3.a.2. A description of new and/or existing controls or activities to protect groundwater from the identified potential contamination sources.

3.3.a.3. Schedules and procedures for employee training addressing the prevention of groundwater contamination.

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3.3.a.4. 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.

3.3.a.5. Groundwater monitoring procedures as deemed appropriate for the facility and/or as required by the Director.

3.3.a.6. A discussion of all information reasonably available to the facility/activity regarding existing groundwater quality at, or which may be affected by, the site.

3.3.b. Within one year of the effective date of these rules all existing non-exempt coal mining operations shall complete and implement a groundwater protection plan; provided, that the groundwater protection plan shall be included with any new permit application submitted under W. Va. Code '22-3 or W. Va. Code '22-11, ninety (90) days or later after the effective date of these . rules or with any permit renewal application submitted one (1) year or more after the effective date of these rules; provided, further, that the Director may waive the requirement for a groundwater protection plan for an operation which has been granted Phase II bond release in accordance with W. Va. Code '22-3, if he finds that such is not necessary for the purposes of the Act.

3.3.c. The groundwater protection plan may be integrated with the statement of probable hydrologic consequences and the hydrologic reclamation plan required by W. Va. Code '22-3 and rules promulgated pursuant thereto.

3.3.d. 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.

3.3.e. 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.

3.3.f. In addition to the basic groundwater protection plan requirements, each plan shall address the specific requirements set forth in subsections 5 and 6 of this section to the extent the operation includes such areas or features.

3.3.g. 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.

3.4. Groundwater Protection Practices for Non-Coal Loading and Unloading Areas; Distribution and Bulk Facilities.

3.4.a. 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.

3.4.b. Distribution facilities and bulk containers shall be designed/installed in such a manner so as to prevent spills and leaks from contaminating groundwater.

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

3.5.a. Pipelines conveying materials which have the potential to contaminate groundwater shall preferentially be installed above ground.

3.5.b. Ditches shall not be installed as primary conveyances for materials which have the potential to contaminate groundwater unless provided with appropriate liners.

3.5.c. 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.

3.5.d. 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.

3.6. Groundwater Protection Practices for Sumps and Tanks.

3.6.a. 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.

3.6.b. 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.

3.6.c. 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.

3.6.d. 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.

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

'38-2F-4. Monitoring.

4.1. Pursuant to W. Va. Code '22-3 and W. Va. Code '22-11, the Director may require placement and maintenance of a reasonable number of groundwater monitoring stations (such as piezometers, 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 . rules 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 . rules and the Act if, in addition to the demonstration required by CSR 38-2-14.7(c), the applicant demonstrates and the Director finds in writing that monitoring is not necessary for the purposes of the Act or these rules.

4.3. Groundwater monitoring stations shall be located and maintained, or drilled, constructed, and

maintained in a manner that allows accurate determination of groundwater quality and levels, and prevents contamination of groundwater through the finished well hole or casing.

4.4. 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.

'38-2F-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 rules.

'38-2F-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: 47CSR11 requires all spills and accidental discharges to be reported by calling 1-800-642-3074.

'38-2F-7. Enforcement.

7.1. Any person who violates the Act or these rules 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 rules.

7.3. Civil penalties for violations of these rules 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 . rules or the Act, shall not be counted toward a pattern of violations or in determining the history of violations pursuant to W. Va. Code '22-3, and rules pursuant thereto.

'38-2F-8. Remediation.

8.1. For all non-exempt coal mining operations, 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 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.

'38-2F-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.

'38-2F-10. Appropriateness Study.

10.1. The Environmental Protection Advisory Council shall conduct a study and report back to the Joint Committee on Government and Finance on or before November 1, 1995. The study shall be an evaluation of the appropriateness and effectiveness of these rules and shall include any recommendations, modifications, or alternatives thereto.