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NOTICE OF RULE MODIFICATION OF A PROPOSED RULE

AGENCY: DCL&ER, Division of Environmental Protection TITLE NUMBER: 47

CITE AUTHORITY § 20-5M-5(d)

AMENDMENT TO AN EXISTING RULE: YES _____ NO X

IF YES, SERIES NUMBER OF RULE BEING AMENDED: _____

TITLE OF RULE BEING AMENDED: _____

IF NO, SERIES NUMBER OF RULE BEING PROPOSED: 58

TITLE OF RULE BEING PROPOSED: Groundwater Protection Regulations

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THE ABOVE PROPOSED LEGISLATIVE RULE, FOLLOWING REVIEW BY THE LEGISLATIVE RULE-MAKING REVIEW COMMITTEE IS HEREBY MODIFIED AS A RESULT OF REVIEW AND COMMENT BY THE LEGISLATIVE RULE-MAKING REVIEW COMMITTEE. THE ATTACHED MODIFICATIONS ARE FILED WITH THE SECRETARY OF STATE.

David C. Callaghan, Director
Division of Environmental Protection

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TITLE 47
LEGISLATIVE RULES
DIVISION OF ~~NATURAL RESOURCES~~ ENVIRONMENTAL PROTECTION
DEPARTMENT OF COMMERCE, LABOR AND ENVIRONMENTAL RESOURCES

SERIES 58
GROUNDWATER PROTECTION REGULATIONS

§ 47-58-1. General.

1.1. Scope and Purpose. -- This rule establishes a series of practices which must be followed by any person who owns or operates facilities or conducts activities subject to the provisions of chapter 20-5M-1 et seq. of the West Virginia Code and is subject to regulation by the Division of ~~Natural Resources,~~ Environmental Protection's Office of Waste Management or Office of Water Resources. ~~provided that this regulation does not apply to those facilities or activities which are under jurisdiction of the Division of Natural Resources and have been assigned/transferred to other regulatory agencies through valid agreements.~~

1.2. Authority -- West Virginia Code 20-5M-5(d)

1.3. Filing date --

1.4. Effective date --

§ 47-58-2. Definitions.

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

2.2. "Contamination" means any man made or man induced alteration of the chemical, physical, or biological, ~~or radiological~~ integrity of the groundwater, resulting from activities regulated under this rule, in excess of existing groundwater quality, unless that site has been granted a deviation or variance from existing quality as provided for in the West Virginia Groundwater Protection Act, or is subject to an order, permit, or other regulatory action that requires restoration or maintenance of groundwater quality at a different concentration or level.

2.3.~~2.1.~~ "Director" means the director of the Division of ~~Natural Resources~~ Environmental Protection of the Department of Commerce Labor, and Environmental Resources or his authorized designee.

2.4.~~2.2.~~ "Existing Facility" for the purpose of this regulation means any facility and/or activity which was in operation prior to the effective date of this regulation or which does not meet the definition of a new facility.

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

2.6.~~2.3.~~ "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 impact groundwater, but does not include any area used for secondary containment.

2.7.~~2.4.~~ "Industrial Establishment" means any mill, factory, tannery, paper or pulp mill, mine, colliery, breaker or mineral processing operation, quarry, refinery, electric power generating facility, well, and each and every industry or plant or works, or activity in the operation or process of which industrial wastes, sewage, or other wastes are produced. Furthermore, any facility or activity not set forth above may be subject to any or all of the requirements of this rule at the director's discretion pursuant to Section 5 of this rule. This definition does not include ~~electric power generation facilities, or~~ private or publicly owned sewage treatment operations.

~~2.5. "Mitigate" means reparation for the loss of use of groundwater, including the replacement of a water source.~~

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.

~~2.6. "Naturally Occurring Substance" for the purpose of this regulation means raw or processed coal.~~

2.9.~~2.7.~~ "New Facility" for the purpose of this regulation means any facility and/or activity which begins construction 180 days or more ~~initializes operation~~ after the effective date of this regulation.

2.10.~~2.8.~~ "Permit" means any license, certification, registration, permit, or any other approval granted by an agency authorized to regulate facilities or activities, which may have an impact on groundwater.

2.11.~~2.9.~~ "Practice" means any ~~regulation, rule, policy, permit requirement, or other appropriate regulatory~~ action which is protective of groundwater.

2.12. "Runoff/Infiltration Control System" means any system which is designed to prevent contamination of groundwater from any materials stored in an outside material storage area, by either prohibiting stormwater from contacting the material, or by intercepting and properly disposing of stormwater which has become contaminated due to contact with the material.

2.13.~~2.10.~~ "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.

~~2.11. "Small Business" means any facility or activity that has less than $300,000.00 in gross receipts per annum.~~

~~**§ 47-58-3. Incorporation by Reference.**~~

~~3.1. Practices contained in or created under the authority of Chapter 20, Article 5A, Article 5E, Article 5F, Article 5G, Article 5H, and the legislative rules promulgated pursuant thereto, were enacted in part to protect groundwater and are hereby incorporated by reference into this rule.~~

~~**§ 47-58-4. Practices Authorized by the Groundwater Protection Act**~~
§ 47-58-3. Conflicting Provisions.

3.1 ~~4.1.~~ Recognizing that in certain cases, ~~existing regulations are more protective, and in the event this rule conflicts with another applicable rule, the rule most protective of groundwater shall apply.~~ existing regulations impose requirements that are more or less restrictive than the requirements of this rule, in the event that this rule conflicts with another applicable rule, the director shall determine which rule, or section(s) thereof, best complies with the intent of the Groundwater Protection Act, and require adherence to said rule or section(s) thereof. The director may, at his discretion, begin the formal regulatory process to remove the conflict between the regulations.

§ 47-58-4. ~~**§ 47-58-5.**~~ **Groundwater Protection Practices For Industrial Establishments.**

~~5.1. Industrial establishments owned and/or operated by a small business may be exempted from certain requirements of this section at the director's discretion.~~

~~5.2. Outside Material Storage Areas (Coal, Raw Materials etc.)~~

~~5.2.1. Existing areas shall be evaluated for their potential to release contaminants to the groundwater. Where potential exists, the areas shall have runoff and/or infiltration control systems. Placement of groundwater monitoring wells may be necessary to perform this evaluation.~~

~~5.2.2. New areas shall be designed and operated to prevent release of contaminants to the groundwater, using liner systems if necessary.~~

~~5.3. Loading and Unloading~~

~~5.3.1. Loading and unloading stations including but not limited to drums, trucks and railcars shall have spill prevention and control facilities and procedures. Spill containment~~

and cleanup equipment shall be readily accessible.

5.3.2. Product distribution facilities and bulk containers shall be designed to prevent spills and leaks.

5.4. Wastewater Impoundments (Holding, Storage, Equalization, Treatment, etc.)

5.4.1. Existing impoundments shall be evaluated for their potential to release contaminants to the groundwater. Where potential exists, the areas shall have runoff and/or infiltration control systems. Placement of groundwater monitoring wells may be necessary to perform this evaluation.

5.4.2. New impoundments shall be designed and operated to prevent release of contaminants to the groundwater, using liner systems. Groundwater monitoring wells will be placed, if there is a potential for groundwater contamination.

5.5. Best Management Practices (BMP) Plans — Plans are required for all Industrial Establishments.

5.5.1. BMP plans shall address groundwater as well as surface water. Particular areas to be addressed regarding groundwater protection methods include:

5.5.1.a. Outside manufacturing facilities;

5.5.1.b. Outside materials handling;

5.5.1.c. Equipment cleaning;

5.5.1.d. Construction activities; and

5.5.1.e. Maintenance activities.

5.5.2. BMP's should clarify that no wastes be used for deicing, fills, etc., unless provided for in existing regulations.

5.5.3. The industrial establishment BMP Plan should include the following provisions:

5.5.3.a. For all employees to be instructed and trained on their responsibility to ensure groundwater protection. Job procedures shall provide direction on how to prevent groundwater contamination;

5.5.3.b. Quarterly inspections conducted to ensure that all elements of the site's groundwater protection program are in place, properly functioning and appropriately

managed;

5.5.3.c. Equipment or structures installed to provide groundwater protection shall be inspected and maintained regularly for system integrity;

5.5.3.d. Maintenance procedures, including equipment preparation shall include appropriate provisions to protect groundwater; and

5.5.3.e. Subsurface boring (e.g., water wells, injection wells, soil boring, production wells, extraction wells, exploratory wells and groundwater monitoring wells) shall be constructed, operated and closed in a manner that protects groundwater.

5.6. Each industrial establishment should have a comprehensive groundwater protection plan which covers all aspects of activities which could potentially contaminate groundwater. Each industrial establishment shall conduct a groundwater assessment survey and prepare a groundwater protection plan containing the following:

5.6.1. An inventory of all operations that may reasonably be expected to contaminate the groundwater resources and contain an indication of the potential for soil and groundwater contamination;

5.6.2. A description of procedures designed to protect groundwater from the identified potential contamination sources;

5.6.3. A list of procedures to be employed in the design of any new operations;

5.6.4. A summary of all activities carried out under other regulatory programs that have relevance to groundwater protection; and

5.6.5. A discussion of all available information regarding the existing groundwater situation.

5.7. Implementation Schedule In order to accomplish this task in a timely manner, the following schedule will be established.

5.7.1. Begin groundwater assessment survey upon promulgation of these regulations.

5.7.2. Begin collection of information on other regulatory activities upon promulgation of these regulations.

5.7.3. Complete assessment survey and collection of information and begin drafting of Groundwater Protection Plan (GPP) within six months of promulgation of these regulations.

5.7.4. Implement Groundwater Protection Plan within one year of promulgation of these regulations.

5.8. Impoundment Closure Requirements

5.8.1. All wastewater shall be treated and removed. All solids, sludges, etc. should be properly disposed of in a landfill.

5.8.2. If in-place closure is to be performed, stabilize, if necessary, unless determined innocuous.

5.8.3. Impoundments should be filled in, graded, capped and vegetated.

5.8.4. At impoundments which were previously existing and where groundwater contamination had been determined to exist requiring remedial action with continuing groundwater monitoring, the groundwater monitoring must continue until results assure adequate remedial action was taken.

5.8.5. If impoundments are closed due to a current problem, then an impermeable cap should be placed over impoundment when filled in and graded to facilitate surface water run-off.

5.9. Site Selection Criteria. Determine if shallow groundwater zones or karst areas exist and locate away from these areas.

5.10. Pipelines And Pumps.

5.10.1. Pipelines shall be preferentially installed above ground.

5.10.2. On-site underground pipelines may only be installed if provided with leak detection and secondary containment measures, excluding sewer systems containing only sanitary wastewater, uncontaminated stormwater, raw water, condensate, etc.

5.10.3. Ditches shall not be installed as primary conveyances where contaminants may be present unless provided with appropriate impervious liners.

5.10.4. Pumps and ancillary equipment (e.g. valves, flanges, filters, condensate lines and instrumentation) shall be selected and installed to prevent or contain any spills or leaks.

5.11. Sumps And Tanks.

5.11.1. Sumps and tanks installed above ground shall have a leak detection system and secondary containment.

~~5.1.1.2. Sumps and tanks may only be installed underground for overriding safety, legal, security or fire protection concerns.~~

~~5.1.1.3. Sump design shall include provisions for inspection of system integrity. Inspections shall be performed on a quarterly basis.~~

~~5.1.1.4. Secondary containment is not required for sumps and tanks used only as secondary containment for other facilities.~~

~~5.12. Diking And Spill Containment.~~

~~5.12.1. Secondary containment (compatible with and impervious to the contarninants being stored or handled) shall be provided for all above ground tanks and vessels containing contaminants.~~

~~5.12.2. Secondary containment capacity shall be appropriate to the risk for containment failure and the potential to contaminate groundwater.~~

~~5.12.3. 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.~~

4.1. ~~5.1.~~ 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.

4.2. ~~5.2.~~ Subsurface borings (e.g., water wells, injection wells, soil boring, production wells, extraction wells, exploratory wells and groundwater monitoring wells) shall be constructed, operated and closed in a manner that protects groundwater.

4.3. ~~5.3.~~ Outside Material Storage or Disposal Areas

4.3.1. ~~5.3.1. Existing areas used for storage or disposal of raw materials, products or wastes shall be evaluated for their potential to contaminate groundwater. Where potential exists, the areas shall have runoff/infiltration control systems. Placement of groundwater monitoring stations may be necessary to determine if contamination has occurred or is occurring.~~ Existing areas used for outdoor, non-containerized storage or disposal of raw materials, products or waste shall be evaluated for their potential to contaminate groundwater. Where substantial potential exists, the areas shall have runoff/infiltration control systems. Placement of groundwater monitoring stations may be necessary to determine if contamination has occurred or is occurring.

4.3.2. ~~5.3.2.~~ New areas used for storage or disposal of raw materials, products

or wastes shall be designed, constructed and operated to prevent release of contaminants to the groundwater, using liner systems if necessary. Groundwater monitoring stations may be necessary to assure protection of the groundwater resource.

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

4.4. ~~5.4.~~ Loading and Unloading Areas; Distribution and Bulk Facilities.

4.4.1. ~~5.4.1.~~ Loading and unloading stations including but not limited to drums, trucks and railcars shall have spill prevention and control facilities and procedures as well as secondary containment, if appropriate or otherwise required. Spill containment and cleanup equipment shall be readily accessible.

4.4.2. ~~5.4.2.~~ Distribution facilities and bulk containers shall be designed/installed in such a manner so as to prevent spills and leaks from contaminating groundwater.

4.5. ~~5.5.~~ Impoundments (Holding, Storage, Equalization, Treatment, etc.)

4.5.1. ~~5.5.1.~~ Existing impoundments shall be evaluated for 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 this evaluation.

4.5.2. ~~5.5.2.~~ 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 a liner or other appropriate control system. Groundwater monitoring stations may be necessary to assure protection of the groundwater resource.

4.6. ~~5.6.~~ Impoundment Closure Requirements

4.6.1. ~~5.6.1.~~ All wastewater shall be treated and removed. All solids 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.

4.6.2. ~~5.6.2.~~ If in-place closure is to be performed, stabilize, if necessary, unless determined innocuous by the director.

4.6.3. ~~5.6.3.~~ Impoundments must be graded and leveled to the maximum extent possible including, where practicable, filling with soils or other material approved by the director, capped if the director determines necessary, and vegetated.

4.6.3.a. ~~5.6.3.a.~~ In the event the impoundment is subject to regulation by the West Virginia Dam Control Act (20-5D-1 et seq.) or the rules promulgated thereunder, it must be closed in accordance with applicable sections of both Articles (Chapter 20-5M and 20-5D).

4.6.4. ~~5.6.4.~~ 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.

4.7. ~~5.7.~~ Pipelines, Ditches, Pumps, and Drums

4.7.1. ~~5.7.1.~~ Pipelines conveying materials which have the potential to contaminate groundwater shall preferentially be installed above ground.

4.7.2. ~~5.7.2.~~ Ditches shall not be installed as primary conveyances for materials which have the potential to contaminate groundwater unless provided with appropriate liners.

4.7.3. ~~5.7.3.~~ 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.

4.7.4. ~~5.7.4.~~ 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.

4.8. ~~5.8.~~ Sumps and Tanks.

4.8.1. ~~5.8.1.~~ 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.

4.8.2. ~~5.8.2.~~ Under-ground 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.

4.8.3. ~~5.8.3.~~ 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.

4.8.4. ~~5.8.4.~~ 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.

4.8.5. ~~5.8.5.~~ Secondary containment is not required for sumps and tanks used only as secondary containment for other facilities.

4.9. ~~5.9.~~ Monitoring

4.9.1. ~~5.9.1. Existing facilities not currently monitoring groundwater shall do so if required by the director.~~ Existing facilities not currently monitoring groundwater shall do so upon order of the director if the director reasonably believes that an industrial establishment is causing or has caused contamination of groundwater.

4.9.2. ~~5.9.2. The director may require such other baseline data and monitoring as he determines appropriate to meet the requirements of these regulations or the Act.~~ Industrial establishments may submit such baseline data and monitoring information as they deem appropriate to meet the requirements of the Act and this rule, including information necessary to determine existing quality.

4.9.3. New facilities shall monitor groundwater upon order of the director if the director reasonably believes that an industrial establishment or activity has the potential to contaminate groundwater.

4.9.4. ~~5.9.3.~~ Groundwater monitoring stations shall be located drilled and constructed in a manner that allows accurate determination of groundwater quality and levels, and prevents contamination of groundwater through the finished well hole or casing.

4.9.5. ~~5.9.4.~~ Groundwater monitoring stations shall be designed and installed in accordance with applicable rules promulgated pursuant to the Act.

4.9.6. ~~5.9.5.~~ 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.

4.9.7. ~~5.9.6.~~ 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.

4.10. ~~5.10.~~ Site Selection Criteria -- Facilities or activities must determine if they are planning to locate or expand into areas of karst, wetlands, fault(s), 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.

4.11. ~~5.11.~~ Each industrial establishment shall have a comprehensive groundwater protection plan (GPP). Each GPP shall contain the following:

5.11.1. ~~5.11.1.~~ An inventory of all operations that may reasonably be expected to contaminate the groundwater resources with an indication of the potential for soil and groundwater contamination from those operations;

4.11.2. ~~5.11.2.~~ A description of procedures designed to protect groundwater from the identified potential contamination sources, with specific attention given to:

4.11.2.a. ~~5.11.2.a.~~ Manufacturing facilities;

4.11.2.b. ~~5.11.2.b.~~ Materials handling;

4.11.2.c. ~~5.11.2.c.~~ Equipment cleaning;

4.11.2.d. ~~5.11.2.d.~~ Construction activities;

4.11.2.e. ~~5.11.2.e.~~ Maintenance activities;

4.11.2.f. ~~5.11.2.f.~~ Pipelines carrying contaminants; and

4.11.2.g. ~~5.11.2.g.~~ Sumps and tanks containing contaminants.

4.11.3. ~~5.11.3.~~ A list of procedures to be employed in the design of any new equipment/operations;

4.11.4. ~~5.11.4.~~ A summary of all activities carried out under other regulatory programs that have relevance to groundwater protection; and

4.11.5. ~~5.11.5.~~ A discussion of all available information reasonably available to the facility/activity regarding existing groundwater quality at, or which may be affected by the site.

4.11.6. ~~5.11.6.~~ A clarification that no wastes be used for deicing, fills, etc., unless provided for in existing regulations.

4.11.7. ~~5.11.7.~~ Provisions for all employees to be instructed and trained on their responsibility to ensure groundwater protection. Job procedures shall provide direction on how to prevent groundwater contamination;

4.11.8. ~~5.11.8.~~ The GPP shall include provisions for quarterly inspections

to ensure that all elements and equipment of the site's groundwater protection program are in place, properly functioning and appropriately managed;

4.12. ~~5.12.~~ Implementation Schedule -- In order to accomplish this task in a timely manner, the following schedule will be established.

4.12.1. ~~5.12.1.~~ Within one year of the effective date of these regulations, all industrial establishments shall complete and implement a Groundwater Protection Plan (GPP). The GPP shall be based on a groundwater assessment survey and an evaluation of other applicable groundwater protection regulations.

4.12.1.a. ~~5.12.1.a.~~ Failure to follow any practice set forth in the GPP constitutes a violation of this regulation.

4.12.2. ~~5.12.2.~~ For new facilities, the GPP shall be completed prior to construction.

4.12.3. ~~5.12.3.~~ The GPP must be available on site at all times after one year from the effective date of these regulations. The GPP is to be submitted and reviewed as part of the facility's or activity's permit application/renewal process. However, the director may review the GPP at any time.

4.12.4. ~~5.12.4.~~ The director may require modification to GPP's to assure adequate protection of groundwater. Further the director may, during review of a GPP require such other information as he reasonably needs to evaluate the plan.

4.12.5. ~~5.12.5.~~ Effect of groundwater certification for facilities or activities with permits.

4.12.5.a. ~~5.12.5.a.~~ GPP's for those facilities or activities who are required to obtain a permit will be administered through the appropriate permitting program. Groundwater certification will be incorporated into the issuance of the permit, only if all pertinent requirements of the act and rules promulgated thereunder have been met. If a compliance schedule is determined necessary to meet the requirements of the act the schedule shall be addressed in the facility/activity permit.

4.12.6. ~~5.12.6.~~ Groundwater certification for facilities or activities not required to obtain a permit - reserved.

4.12.7. ~~5.12.7.~~ Adherence to a GPP does not relieve the facility/activity of any obligation to comply with any other state, federal or local rule, regulation, law or act.

~~**§ 47-58-6. Criteria Applicable To Facilities Who Generate Electric Power.**~~

6.1. Groundwater Protection Practices.

6.1.1. Outside Material Storage Areas (Coal, Raw Materials, Loading, Unloading, Etc.)

6.1.1.a. Existing areas shall be evaluated for their potential to release contaminants to the groundwater. Where potential exists, the areas shall have runoff and/or in infiltration control systems. Placement of groundwater monitoring wells may be necessary to perform this evaluation.

6.1.1.b. New areas shall be designed and operated to prevent release of contaminants to the groundwater, using liner systems, runoff and/or infiltration control systems, if necessary. Groundwater monitoring wells may be necessary to assure protection of the groundwater resources.

6.1.2. Wastewater Impoundments (Holding, Storage, Equalization, Treatment, Etc.)

6.1.2.a. Existing impoundments shall be evaluated for their potential to release contaminants to the groundwater. Where potential exists, the areas shall have runoff control systems. (Placement of groundwater monitoring wells may be necessary to perform this evaluation.)

6.1.2.b. New impoundments shall be designed and operated to prevent release of contaminants to the groundwater, using liner systems, if necessary.

6.2. Groundwater Protection Plan.

6.2.1. Each facility should have a comprehensive groundwater protection plan which covers all aspects of activities which could potentially contaminate groundwater. Each facility shall conduct a groundwater assessment survey and prepare a groundwater protection plan containing the following:

6.2.1.a. Specific identification of all plant operations that may reasonably be expected to impact negatively on the groundwater resources;

6.2.1.b. A description of procedures designed to protect groundwater from the identified potential contamination sources;

6.2.1.c. A list of procedures to be employed in the design of any new operation;

6.2.1.d. A summary of all activities carried out under other regulatory programs that have relevance to groundwater protection; and

6.2.1.e. A discussion of all available information regarding the existing groundwater situation.

6.2.2. Development of a Best Management Practices (BMP) Plan to address groundwater protection procedures for the above activities. Particular areas to be detailed include outside materials/waste handling, equipment cleaning, construction activities and maintenance activities. BMPs should also clarify that no wastes be used for deicing, fills or any other use which could negatively impact groundwater, unless a reuse is provided for in existing regulations.

6.2.3. In order to accomplish this task in a timely manner, the following schedule will be established.

6.2.3.a. Begin ground water assessment survey upon promulgation of these regulations.

6.2.3.b. Begin collection of information on other regulatory activities upon promulgation of these regulations.

6.2.3.c. Complete assessment survey and collection of information and begin drafting of Groundwater Protection Plan (GPP) within six months of promulgation of these regulations.

6.2.3.d. Implement Groundwater Protection Plan within one year of promulgation of these regulations.

6.3. Impoundment Closure Requirements

6.3.1. All wastewater shall be treated and removed.

6.3.2. All solids, sludges, etc. should be properly disposed of or reused in accordance with the Solid Waste Management Regulations.

6.3.3. If in-place closure is to be performed, stabilize, if necessary, unless determined innocuous.

6.3.4. Impoundments should be graded and leveled to the maximum extent possible including, where practicable, filling with soils or other material approved by the director, capped if the director determines necessary, and vegetated.

6.3.5. Impoundments which were previously existing and where groundwater contamination has been determined to exist requiring remedial action will require continuing groundwater monitoring until results assure adequate remedial action was taken.

6.3.6. If impoundments are closed due to a current problem, then an impermeable cap must be placed over the impoundment when filled, and graded to facilitate surface water

~~run-off.~~

~~6.4. Site Selection Criteria. Determine if shallow groundwater zones or karst areas exist and will be vulnerable to the proposed activity. Should such conditions be present, the facility design shall be modified to protect the resources. Additional monitoring may be required to assure protection of the groundwater resources.~~

~~6.5. Pipelines and Pumps.~~

~~6.5.1. Pipelines shall be preferentially installed above ground.~~

~~6.5.2. On site underground pipelines may only be installed if provided with leak detection and secondary containment measures, excluding systems containing only sanitary wastewater, contaminated stormwater, raw water, condensate, ash, etc.~~

~~6.6. Sumps and Tanks.~~

~~6.6.1. Tanks, reservoirs, and basins installed above ground shall have impervious secondary containment. Such structures will also employ a leak detection system if located in an isolated area (i.e. not inspected by personnel at least every 48 hours).~~

~~6.6.2. Underground Storage Tank regulated sumps and tanks shall meet all the applicable groundwater protection requirements (leak detection, corrosion protection, overfill protection, etc.).~~

~~6.7. Remedial Action.~~

~~6.7.1. Electric power facilities shall be subject to the remediation procedures set forth in section 47-58-13 of this regulation.~~

§ 47-58-5. ~~§ 47-58-6.~~ Applicability To Facilities Or Activities Not Included In The Definition Of An Industrial Establishment.

~~5.1.~~ ~~6.1. Recognizing that facilities and activities exist, which either have contaminated or have the potential to contaminate groundwater, and do not meet the definition of an industrial establishment as set forth in this rule, it becomes necessary and is hereby authorized for the director to require any facility or activity to comply with any or all of the requirements of this rule which the director determines to be necessary for the protection or maintenance of the groundwater resource.~~

5.1. Where a statute, rule, ordinance or other legal requirement (other than W. Va. Code Chapter 20, Article 5M and rules promulgated pursuant thereto) provides authority to regulate facilities and activities which may adversely affect groundwater, and such facilities and activities are not regulated by another groundwater regulatory agency, including another office

of the Division of Environmental Protection, the Director may require such facility or activity to comply with any or all of the requirements of this rule which the Director reasonably determines to be necessary for the implementation of W. Va. Code Chapter 20, Article 5M.

5.2. ~~6.2.~~ The director must provide a written notification specifying which Section(s) of this rule will be enforced, before compliance with this rule or any provision thereof is required from any facility or activity not included in the definition of an industrial establishment

§ 47-58-6. ~~§ 47-58-7.~~ Groundwater Protection Practices For Private Or Publicly Owned Sewage Treatment Operations. (reserved)

~~§ 47-58-8. Criteria Applicable To New Facilities Or New Activities Not Specified In Sections 5, 6, 7, 14, or 15.~~

~~New facilities or new activities shall be designed to be protective of groundwater and shall incorporate the following minimum design principles. In addition to these minimum design principles additional measures may be required if deemed necessary by the director to be protective of groundwater.~~

~~8.1. New facilities or activities which have the potential to impact groundwater quality, at the director's request, shall install and sample a sufficient number of groundwater monitoring wells, prior to facility or activity operation, to determine representative background groundwater quality for areas of the site which will be developed/ used/potentially impacted.~~

~~8.1.1. Such wells shall remain in service until the director determines that the threat of contamination from the facility or activity has ceased.~~

~~8.1.2. Impoundments, regardless of size, that may impact groundwater quality shall be lined in such a manner which will prevent the migration of contaminants into groundwater. Impoundments shall also be designed utilizing runoff control systems in order to minimize stormwater influx.~~

~~8.1.3. Secondary containment is required for any process or storage activity, other than impoundments and bulk storage areas for naturally occurring substances, in which materials are stored, handled, or used that may impact groundwater quality.~~

~~8.1.4. Bulk storage areas for naturally occurring substances shall employ runoff and infiltration control systems to prevent the migration of contaminants into the groundwater.~~

~~8.2. Pipelines and Pumps.~~

~~8.2.1. Pipelines shall be preferentially installed above ground.~~

~~8.2.2. On site underground pipelines which convey or transmit any substance~~

~~which may impact groundwater quality may only be installed if provided with leak detection and secondary containment measures, excluding systems containing only sanitary wastewater.~~

~~8.3. Sumps and Tanks.~~

~~8.3.1. Tanks, reservoirs, and basins which contain any substance which may impact groundwater quality, installed above ground shall have impervious secondary containment. Such structures will also employ a leak detection system if located in an isolated area (i.e. not inspected by personnel at least once every 48 hours) and requested by the director.~~

~~8.3.2. Underground storage tank regulated sumps and tanks shall meet all the applicable groundwater protection requirements (leak detection, corrosion protection, overfill protection, etc).~~

§ 47-58-7. ~~§ 47-58-8.~~ Prohibitions.

7.1. ~~8.1.~~ 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 impact groundwater quality to escape from any well, pipeline, impoundment, storage tank, treatment unit, or storage container, or be deliberately allowed to flow onto or under the land surface in such a manner that could impact groundwater quality.

7.2. ~~8.2.~~ Groundwater quality may not be impacted by any facility operation or any activity unless 1) a valid permit exists and/or 2) the director has taken action pursuant to section(s) 20-5M-5 (f) through (l) of the W.Va. Code.

~~§ 47-58-9. Criteria Applicable To Existing Facilities Or Existing Activities Not Specified In Sections 5, 6, 7, 14, or 15.~~

~~Existing facilities or activities shall take such action as necessary to prevent groundwater contamination.~~

~~9.1. Where it can be demonstrated to the director that existing facility or activity design is such that no groundwater contamination is occurring, continued verification will be the minimum requirement. Provided that if new construction occurs or if activities change they shall be done in a manner which complies with Section 8 above. Furthermore notification to the director must be made, in writing, 180 days prior to any operational modification.~~

~~9.2. Where it is determined that an existing facility or activity is contaminating groundwater 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. The director may provide a schedule of compliance for completing the work if necessary. Furthermore the facility or activity may be directed to begin remedial actions pursuant~~

~~to section 13.~~

§ 47-58-8. ~~§ 47-58-9.~~ Remediation.

8.1. ~~9.1.~~ The Division has the authority to order persons to conduct remedial actions. The division encourages agreements for investigation and cleanups in appropriate cases.

8.1.1. ~~9.1.1.~~ The use of permanent solutions to the maximum extent practical to correct groundwater contaminations is preferred.

8.1.2. ~~9.1.2.~~ 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.

8.1.3. ~~9.1.3.~~ 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. Groundwater monitoring must continue until results assure adequate remedial action was taken.

~~9.2. In addition to any required remediation the director may order the facility or activity to compensate for the loss of beneficial use of groundwater, or for any significant adverse impact to groundwater.~~

8.2. ~~9.3.~~ Remediation Guidelines. (reserved)

~~§ 47-58-10. Operational Management For Facilities Or Activities Not Specified In Sections 5 6, 7, 14, or 15.~~

~~10.1. Any facility or activity, upon receipt of notification from the director, must conduct a groundwater assessment and prepare a comprehensive groundwater protection plan (GPP) which covers all aspects of activities which could potentially contaminate groundwater including, but not limited to, the following:~~

~~10.1.1. Specific identification of all operations that may reasonably be expected to impact groundwater;~~

~~10.1.2. Descriptions of plans, including spill control measures and waste minimization plans, associated with these identified potential sources designed to protect the resource;~~

~~10.1.3. A list of design criteria to be employed in the design of any new operations;~~

~~10.1.4. A summary of all activities carried out under other regulatory~~

~~programs that have relevance to groundwater protection;~~

~~10.1.5. Determine if any portion of the facility or activity is located within a designated Wellhead Protection Area;~~

~~10.1.6. A discussion of all available information regarding the existing groundwater situation.~~

~~10.2. The director may request that additional information be provided in the plan at any time.~~

~~10.3. In order to accomplish this task in a timely manner, the following schedule will be established.~~

~~10.3.1. Begin groundwater assessment survey upon notification of the director.~~

~~10.3.2. Begin collection of information on other regulatory activities upon notification by the director.~~

~~10.3.3. Complete assessment survey and collection of information and begin drafting of Groundwater Protection Plan (GPP) within six months of notification by the director.~~

~~10.3.4. Fully implement Groundwater Protection Plan within one year of notification by the director.~~

~~10.3.5. Update or revise the GPP on a biennial basis, or before substantive operational changes or new construction occurs.~~

§ 47-58-9. ~~**§ 47-58-10.**~~ **Fees.**

~~10.1. Failure to remit fees when and as due as required in 47 CSR 55 is a violation of these regulations.~~

9.1. Nothing in this rule relieves any person of an obligation to pay fees as required by the Groundwater Protection Act Fee Schedule, 47 CSR 55.

~~**§ 47-58-11. Impoundment Closure Requirements Not Specified In Sections 5, 6, 7, 14, or 15.**~~

~~11.1. All fluids shall be removed and disposed of in an acceptable manner. All solids, sludges, etc. must be properly disposed of or reused in accordance with the Solid Waste Management Regulations 47 C.S.R. 38.~~

~~11.2. If in place closure is to be performed, impoundment contents must be stabilized, unless determined innocuous.~~

~~11.3. Impoundments must be filled, graded and leveled to the maximum extent possible, covered with an impervious cap, if the director determines necessary, and vegetated.~~

~~11.4. Impoundments which were previously existing and where groundwater contamination had been determined to exist requiring remedial action with continuing groundwater monitoring, the groundwater monitoring must continue until results assure adequate remedial action was taken.~~

~~11.5. If impoundments are closed due to an impoundment related groundwater contamination event, and remedial action has been completed, an impermeable cap must be placed over the impoundment when filled and graded.~~

§ 47-58-10. ~~§ 47-58-11.~~ Enforcement.

10.1. ~~11.1.~~ Any person who violates the act or these regulations shall be subject to civil and criminal penalties, injunctive relief, enforcement orders, and procedures as set forth in Section 10 of the Act.

10.2. ~~11.2.~~ The appeal and review procedures set forth in Section 11 of the Act shall be applicable to actions arising under these regulations.

10.3. ~~11.3.~~ Civil penalties for violations of these regulations may be assessed by the director in accordance with 47 CSR 56.

~~§ 47-58-12. Prohibitions.~~

~~12.1. 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 impact groundwater quality to escape from any well, pipeline, impoundment, storage tank, treatment unit, or storage container, or be deliberately allowed to flow onto the land surface in such a manner that could impact groundwater quality.~~

~~12.2. Groundwater quality may not be impacted by any facility operation or any activity unless 1) a valid permit exists and/or 2) the director has taken action pursuant to section(s) 20-5M-5 (f) through (l) of the W.Va. Code.~~

§ 47-58-11. ~~§ 47-58-12.~~ Waiver Provisions.

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.

~~§ 47-58-13. Remediation.~~

~~13.1. The Division has the authority to order persons to conduct remedial actions. The division encourages agreements for investigation and cleanups in appropriate cases.~~

~~13.1.1. The use of permanent solutions to the maximum extent practical to correct groundwater contaminations is preferred.~~

~~13.1.2. Cleanup actions shall not rely primarily on dilution and dispersion of the substance if active remedial measures are technically and economically feasible.~~

~~13.1.3. 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.~~

~~13.2. In addition to any required remediation the director may order the facility or activity to mitigate for the loss of use, or for any significant adverse impact to groundwater.~~

~~13.3. Remediation Guidelines. (reserved)~~

~~§ 47-58-13. Requirements For Fuel Storage Tanks Not Subject To Regulation Under This Rule or Chapter 20, Article 5H of the W. Va. Code. (reserved)~~

§ 47-58-12. Appeals.

12.1. Any person ordered or requested to take any action pursuant to this rule may appeal such order or request to the Water Resources Board as provided for in W. Va. Code § 20-5M-11.

12.2. Any person against whom enforcement action is initiated pursuant to section 10 of this rule may appeal to the Water Resources Board as provided for in W.Va. Code § 20-5M-11.

~~§ 47-58-14. Requirements For Fuel Storage Tanks Not Subject To Regulation Under Chapter 20, Article 5H of the W. Va. Code. (reserved)~~

§ 47-58-13. ~~§ 47-58-14.~~ Requirements For Reuse Of Sludges. (reserved)

~~§ 47-58-15. Requirements For Reuse Of Sludges Generated By Facilities Permitted Under Chapter 20, Article 5A Of The W. Va. Code. (reserved)~~

FILED

JAN 28 | 03 PM '94

OFFICE OF WEST VIRGINIA SECRETARY OF STATE

West Virginia Legislature

Legislative Rule-Making Review Committee

Room M-152, State Capitol
Charleston, West Virginia 25305
(304) 340-3286

Senator Joe Manchin, III, Co-Chair
Delegate Brian A. Gallagher, Co-Chair

Debra A. Graham, Counsel
Marie Nickerson, Admr. Assistant

January 9, 1994

NOTICE OF ACTION TAKEN BY LEGISLATIVE RULE-MAKING REVIEW COMMITTEE

TO: Ken Hechler, Secretary of State, State Register

TO: David C. Callaghan, Director
Dept. of Environmental Protection
10 McJunkin Road
Nitro, WV 25143-2506

FROM: Legislative Rule-Making Review Committee

PROPOSED RULE: Groundwater Protection Regulations

The Legislative Rule-Making Review Committee recommends that the West Virginia Legislature:

1. Authorize the agency to promulgate the Legislative Rule
   (a) as originally filed ____
   (b) as modified by the agency __X__

2. Authorize the agency to promulgate part of the Legislative rule; a statement of reasons for such recommendation is attached. ____

3. Authorize the agency to promulgate the Legislative rule with certain amendments; amendments and a statement of reasons for such recommendation is attached. ____

4. Authorize the agency to promulgate the Legislative rule as modified with certain amendments; amendments and a statement of reasons for such recommendation is attached. ____

5. Recommends that the rule be withdrawn; a statement of reasons for such recommendation is attached. ____

Pursuant to Code 29A-3-11(c), this notice has been filed in the State Register and with the agency proposing the rule.

cc: Eli McCoy,
Office Water Resources
Patrick Perleman, Esquire
Jackson & Kelly