

**WEST VIRGINIA
SECRETARY OF STATE**

KEN HECHLER

ADMINISTRATIVE LAW DIVISION

Form #1

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RECEIVED

NOTICE OF PUBLIC HEARING ON A PROPOSED RULE

AGENCY: Agriculture TITLE NUMBER: 61

RULE TYPE: Legislative; CITE AUTHORITY: 20-5M-5-C.

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 NEW RULE BEING PROPOSED: 6A

TITLE OF RULE BEING PROPOSED: General Groundwater Protection Rules
for Fertilizer and Manures

DATE OF PUBLIC HEARING: Tuesday, July 21, 1992 TIME: 9:00 AM

LOCATION OF PUBLIC HEARING: West Virginia Department of Agriculture
J. T. Johnson Conference Room, Building 2
Guthrie Agricultural Center
Charleston, WV 25312

COMMENTS LIMITED TO: ORAL ___ , WRITTEN ___ , BOTH X

Written comments will be accepted until Friday, July 31, 1992.

COMMENTS MAY ALSO BE MAILED TO THE FOLLOWING ADDRESS:

Barbara Smith
Director, Compliance Division
West Virginia Dept. of Agriculture
1900 Kanawha Blvd., East
Charleston, WV 25305

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

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

ATTACH A **BRIEF** SUMMARY OF YOUR PROPOSAL

3.50

TITLE 61 SERIES 6A

GENERAL GROUNDWATER PROTECTION RULES FOR FERTILIZERS AND MANURES

Summary and Description of the rule

This rule establishes voluntary guidelines (best management practices) for the use and application of fertilizers and manures, establishes the requirement for manure handling in an environmentally correct manner, and requires the commissioner of agriculture to make voluntary practices mandatory when found to be ineffective at protecting groundwater.

The rule establishes a strong educational program for the application of these best management practices.

Circumstances requiring this rule

This rule is required to comply with the mandates of the Groundwater Protection Act which states that the Department of Agriculture is the groundwater protection agency for the use and application of fertilizers.

The use and application of fertilizers and manures may serve as a source of groundwater contamination, so these activities are regulated (in a substantially voluntary manner) under this rule so as to be operated in a manner protective of groundwater.

APPENDIX B

FISCAL NOTE FOR PROPOSED RULES

TITLE 61, SERIES 6A

GENERAL GROUNDWATER PROTECTION RULES FOR FERTILIZER AND MANURE

Type of rule: Legislative

Agency: West Virginia Department of Agriculture
 Compliance Division
 1900 Kanawha Boulevard, E.
 Charleston, West Virginia 25305

Effect of Proposed Rule Estimated Total Cost	ANNUAL		FISCAL YEAR		
	Increase \$	Decrease \$	Current \$	Next \$	Thereafter \$
Personal Services	27,000	0	0	27,000	27,000
Current Expense	1,000	0	0	1,000	1,000
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:

The estimates are based on the assumption that an annual inspection will be performed for each facility storing manure and that other investigational trips for follow-up on reports of contaminated groundwater will occur throughout the year. The estimates also factor in the travel costs and facility costs for training and education courses that should be held throughout the state in order to comply with the mandate of the law.

One additional field position will be needed for initial compliance with this rule.

These estimates are very rough as the Department has no experience with enforcement of this type of program.

3. Objectives of these rules:

The objective of this rule is to provide for mandatory and voluntary practices for the storage, use and application of fertilizers and manures. The Groundwater Protection Act designated the Department of Agriculture as the regulatory agency for the application and use of fertilizers and required the agency to develop practices to prevent groundwater contamination in this area.

4. Explanation of Overall Economic Impact of Proposed Rule:

A. Economic Impact on State Government.

This rule increases the responsibility of the Department of Agriculture. The impact on state government will be that an additional program will be added to a staff that is already working at capacity. There will be increased current expense and a reduction of the amount of time spent on other mandated programs.

B. Economic Impact on Political Subdivisions, Specific Industries, Specific groups of citizens.

approximate cost \$ 7,500,000

The economic impact on the agricultural community and those served by it will be high for those that need to install manure holding facilities. It is estimated that the capitol cost to each farm or firm installing manure holding facilities will be from \$12,000 to \$100,000 with additional auxiliary equipment costs of \$20,000 to \$50,000. The ASCS does have limited money available for cost sharing for approximately \$10,000 per facility, when available. The number of facilities that would be needed is estimated at 75 based on interpretation of the data from the 1987 U.S. Agricultural Census. This number may include farms that already have adequate facilities, and may be inaccurate due to assumptions made to interpret the data.

The economic impact on the agricultural community for compliance with the best management practices will be low. These practices, when implemented, should reduce the overall cost of chemical fertilizers and should serve to increase the amount of fertilizer value that is available to crops. The actual dollar amount of impact cannot be calculated.

C. Economic Impact on Citizens/Public at Large.

The economic impact on citizens and the public at large will be that costs of using manure will increase and the costs for animals sold from large facilities may increase to compensate for the increased manure holding costs. However, the overall cost of doing business for most farmers may decrease as these practices are designed so that these resources are utilized to the greatest degree possible to increase the fertility of the soils of this state without contaminating groundwater.

As there is no evidence that fertilizers are a major, or minor, pollutant of groundwater there can be no calculation of the benefits to the present and future users of groundwater due to the impact of these rules.

Date: June 5, 1992



Signature of Agency Head or Authorized Representative

TITLE 61
LEGISLATIVE RULE
STATE DEPARTMENT OF AGRICULTURE

SERIES 6A
GENERAL GROUNDWATER PROTECTION RULES FOR FERTILIZER AND MANURES

§61-6A-1. General.

1.1. Scope - The rules establish best management practices to prevent, minimize or mitigate the entry of nutrients from fertilizers and manures into groundwater so as to maintain and improve the soil and plant resources of this state while at the same time maintaining or improving the quality of the groundwater of this state.

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

1.3. Filing Date -

1.4. Effective Date -

1.5. This is a new legislative rule.

§61-6A-2. Incorporation by Reference.

2.1. The following documents are adopted in their entirety:

2.1.a. Generic State Management Plan for Pesticides and Fertilizers in Groundwater, (latest version) WV61CSR 22 et seq.

2.1.b. Primary and Secondary Containment of Fertilizers (latest version) WV 61 CSR 6B et seq.

2.1.c. Water Well Design Standards WV 61 CSR 46 et seq. (effective 6-8-84).

2.1.d. Soil Conservation Service Field Office Technical Guide as supplemented by the West Virginia Soil Conservation Service (access number PB85-2444661AS) (current version at effective date of this rule).

§61-6A-3. Definitions.

3.1. "Animal unit" means a unit of measurement calculated by adding the following numbers: the number of slaughter and feeder

cattle multiplied by 1.0, plus the number of mature dairy cattle multiplied by 1.4, plus the number of swine weighing over 25 kilograms (approximately 55 pounds) multiplied by 0.4, plus the number of sheep multiplied by 0.1, plus the number of horses multiplied by 2.0, plus the number of turkeys multiplied to 0.018, plus the number of laying hens or broilers multiplied by 0.01.

3.2. "Best Management Practices" means activities, procedures and practices to prevent or remedy the introduction of fertilizer or manure residues into groundwater to the extent technically feasible and economically practical. Best Management Practices are designed to maintain the health and long-term productivity of the soil, water and related plant and animal resources and to minimize the threat of soil, waste and nutrient contamination to the waters of the state.

3.3. "Commissioner" means the commissioner of agriculture of the state of West Virginia or his or her duly authorized agent.

3.4. "Department" means the West Virginia Department of Agriculture.

3.5. "Feedlot" means a concentrated, confined livestock or poultry lot or facility operated for meat, milk or egg production, grown, stabled, or housed in pens or houses wherein livestock or poultry are fed at the place of confinement for a total of 45 days or more in any 12 month period and where crop or forage growth or production of feed is not sustained in the area of the lot or facility. For purposes of this definition two or more lots or facilities under common ownership are considered to be a single feedlot if they adjoin each other or if they use a common area or system for the disposal of wastes.

3.6. "Fertilizer" means any substance containing one or more recognized plant nutrients which is used for its plant nutrient content and which is designed for use or claimed to have value in promoting plant growth. The term fertilizer does not include agricultural liming materials, wood ashes, gypsum or industrial/municipal byproducts, except for industrial/municipal byproducts that are dried and bagged prior to offering for sale.

3.7. "Fertigation" means the application of fertilizers or manures by an irrigation system.

3.8. "Manure" means any substance composed of excreta of animals, other than man, and may include bedding or other materials normally associated with the manure as well as water associated with or added to the manure.

3.9. "Non-point source" means a diffuse source of substances that have the potential to impair the beneficial uses of groundwater resulting from activities over a relatively large area,

the effects of which must normally be addressed or controlled by a management or conservation practice.

3.10. "Point source" means a source of substances that have the potential to impair the beneficial uses of groundwater resulting from an activity over a small area and generally is limited to mixing, loading and storage sites or feedlots. A source is not considered a point source until a discharge of substances occurs.

3.11. "Water quality standards" means the standards of purity and quality promulgated by the State Water Resources Board (WV 64 CSR Series XX, date).

§61-6A-4. Program and Policy Statements.

4.1. The commissioner finds that current knowledge of the chemical balance and leaching of chemicals found in fertilizers and manures in soils and groundwaters of this state that in many instances is not sufficient to allow for the development of mandatory use and application practices that will effectively protect the groundwaters of this state.

4.2. The commissioner encourages the use of voluntary best management practices promulgated by these rules that he believes will be effective in the protection of the groundwaters of this state.

4.3. The commissioner will encourage the education of all users of fertilizers and manures so that they have the knowledge and technical means to respond independently and voluntarily in addressing environmental concerns. The commissioner will encourage the development of training and educational programs for persons who make recommendations for the application rates for fertilizers and manures and for those persons who apply fertilizers and manures.

4.4. The commissioner will support the development of financial incentives for the implementation of best management practices and will instruct potential users of these incentives of the availability of the programs.

4.5. The commissioner reserves the right to develop mandatory best management practices by rule for the application and use of fertilizers or manures when valid groundwater data indicates that chemicals from fertilizers or manures are contaminating the groundwaters and when technology develops to indicate that the mandatory best management practices will be effective in the protection of groundwater.

4.6. The commissioner will take action to promulgate rules to

make some or all of the voluntary best management practices mandatory in a portion or all of the state when the monitoring program indicates that the chemical concentrations of residues from fertilizers or manures in groundwater are increasing or other valid data shows that contamination exceeding the water quality standards have occurred. The commissioner will utilize data averaged from at least four samples over a one year period to determine if the water quality standards have been exceeded or there is a trend of increasing concentrations of the chemical residue from fertilizers or manures.

4.7. The commissioner will review the voluntary and mandatory programs every 5 years to determine the effectiveness of the programs and will effect change in the programs if the voluntary and/or mandatory programs are not effective or if the current best available technology needs to be incorporated into these programs.

4.8. Activities conducted in this state, if consistent with the voluntary or mandatory practices outlined in this rule, shall be entitled to a rebuttable presumption that the activity is reasonable and does not constitute a hazard to groundwater. If such activity is conducted in conformity with federal and state laws and regulations, it is presumed to be an activity that does not adversely affect the public health and safety. However, a person who alters groundwater quality or character as a result of such activities regulated by the commissioner shall be liable if the alteration was negligent, reckless or intentional.

§61-6A-5. Powers and duties of commissioner.

5.1. The commissioner has the power and authority to:

5.1.a. enter and inspect, during reasonable hours, any location where fertilizers or manures are manufactured, distributed, transported, stored or used, and where records relating to the storage, manufacture, distribution, shipment, labeling or use of fertilizers or manures are kept;

5.1.b. coordinate the sampling and inspection program with all other groundwater regulatory agencies within the framework of the Department of Environmental Protection, Division of Natural Resources state groundwater management strategy and their rules relating to monitoring and analysis of groundwater;

5.1.c. utilize the Department of Environmental Protection, Division of Natural Resources data management system for data on groundwater;

5.1.d. conduct a study to determine the cause of contamination, assess remediation options for the situation, and notify the groundwater user(s) or owner(s), if known to the

commissioner, of the situation whenever contamination is predicted or is known to be occurring due to the residues of fertilizers or manures;

5.1.e. share data with other federal and state agencies for their evaluation and further investigation;

5.1.f. promote the protection of groundwater from fertilizers or manures through public education programs;

5.1.g. encourage, participate in, conduct or cause to be conducted studies on the environmental impact of the use of fertilizers and manures on the groundwaters of this state, as well as ecologically and economically sound fertilizer and manure use and application practices;

5.1.h. take action in the shortest reasonable time to revise this rule when these voluntary best management practices are found to be inadequate to protect the groundwaters in this state from contamination with residues from fertilizers or manures that affect the present and future beneficial use of the groundwaters of this state, whenever that data is found to be valid and relevant to the conditions found in this state;

5.1.i. collect and expend moneys under the terms of this rule as provided by WV Code §20-5M-1 et seq.;

5.1.j. cooperate and enter into agreements with governmental agencies of this state or other states, agencies of the federal government and foreign governments, and private associations in order to carry out the purpose and provisions of this rule;

5.1.k. make reports and recommendations to the Groundwater Coordinating Committee or to the legislature as needed to further the protection of groundwaters in this state;

5.1.l. maintain a testing laboratory or contract with other laboratories for testing;

5.1.m. conduct hearings as provided by this rule;

5.1.n. assess civil penalties, negotiate agreements and refer violations to a court of competent jurisdiction;

5.1.o. obtain court orders directing any person refusing to submit to inspection, sampling or auditing to submit;

5.1.p. issue orders requiring compliance with these rules; and

5.1.q. promulgate additional rules as necessary to

protect groundwater within statutory mandates that may include, but not limited to, permitting, licensing and certification, facility design, operational management, closure, remediation and monitoring of water quality.

\$61-6A-6. Protection of groundwater from point sources.

6.1. Any person storing fluid bulk fertilizers in undivided quantities in excess of two thousand five hundred (2,500) U.S. gallons or dry bulk fertilizers in undivided quantities exceeding 12 tons shall comply with the rules for Primary and Secondary Containment of Fertilizers (WV 61 CSR 6B) in addition to these rules. For purposes of this rule, the term "undivided" indicates the total amount of product stored at the facility which may be divided into several storage containers.

6.2. Any person maintaining more than the number of animals in a feedlot as listed in this paragraph shall obtain a Nutrient Management Plan within 5 years of the effective date of these rules and shall implement the plan within 5 years of the development of the Nutrient Management Plan.

6.2.a. Number of animals maintained: 1,000 slaughter or feeder cattle; 700 mature dairy cattle (whether milked or dry cows); 2,500 swine each weighing over 25 kilograms (approximately 55 pounds); 500 horses; 10,000 sheep or lambs; 55,000 turkeys; 100,000 laying hens or broilers (if the facility has continuous overflow watering); 30,000 laying hens or broilers (if the facility has a liquid manure handling system); 5,000 ducks; or 1,000 animal units.

6.3. Any person maintaining more than the animals in a feedlot as listed in this paragraph in an area where the potential for impairment of existing groundwater quality is high; such as in a karst limestone area, in an area with sandy soils, in an location near sinkholes or near wells that do not meet the Water Well Design Standards set by WV 64 CSR 46 et seq.; shall obtain a Nutrient Management Plan within 5 years of the effective date of these rules and shall implement the plan within 5 years of the development of the Nutrient Management Plan.

6.3.a. Number of animals maintained: 300 slaughter or feeder cattle; 200 mature dairy cattle (whether milked or dry cows); 750 swine each weighing over 25 kilograms (approximately 55 pounds); 150 horses; 3,000 sheep or lambs; 16,500 turkeys; 30,000 laying hens or broilers (if the facility has continuous overflow watering); 9,000 laying hens or broilers (if the facility has a liquid manure handling system); 1,500 ducks; or 300 animal units.

6.4. Any person storing an amount of manure that would be produced if that person had a feedlot shall comply with the

applicable provisions of sections 6.2. and 6.3.

6.5. Each person should store and handle fertilizers and manures in a manner to prevent pollution by minimizing losses to the groundwaters in this state.

6.6. Each person should store fertilizers inside a sound structure or device having a cover or roof top, sidewalls, and a base sufficient to prevent contact with precipitation and surface water. Each person should store manure in a facility that meets or exceeds the standards of the Soil Conservation Service Field Office Technical Guide. If these conditions are not met then no person should store fertilizer or manure:

6.6.a. without a tarpaulin or other suitable covering to prevent seepage or run-off to surface or groundwater;

6.6.b. on land within 100 feet of springs, shallow wells, or wells that do not meet the Water Well Design Standards set by WV 64 CSR 46 et seq.;

6.6.c. on land within 50 feet from surface water, including springs, ponds, wet areas or other collection points for surface water;

6.6.d. on land within 50 feet of an open portal of a sinkhole;

6.6.e. on land that has a slope greater than 15%;

6.6.f. on land that has a seasonable groundwater table that is less than 2 feet from the surface;

6.6.g. on land that has less than 20 inches of soil over bedrock or an impervious pan; or

6.6.h. on land that has a reasonable expectation of having a flood event resulting from a 25 year - 24 hour frequency storm during the storage period.

6.7. Each person should conduct mixing and loading operations for liquid fertilizers or for fertilizers containing pesticides at least 100 feet from any wellhead or within a watertight loading pad.

6.8. When cleaning equipment used for storing or applying fertilizers or manures, each person should use extreme care that waste water or spillage from the operation is recovered and applied at normal agronomic rates or otherwise disposed of in a manner that will not contaminate groundwater.

6.9. All persons operating a feedlot should maintain it in

such a manner that contamination of wells or groundwater may not occur.

6.10. All persons owning a dry or abandoned well in the area where fertilizers or manures are stored and used should plug the well according to the Water Well Design Standards WV 64 CSR 46 et seq.

6.11. All persons practicing fertigation should use a proper antibacksiphon device.

§61-6A-7. Protection of groundwater from non-point sources

7.1. No person should apply manure or fertilizers containing nitrogen to land:

7.1.a. with less than 10" of soil over fractured bedrock;

7.1.b. that is snow-covered, frozen or saturated;

7.1.c. that is a field that has an average slope of greater than 20%;

7.1.d. within 50 feet of a wellhead;

7.1.e. that is in imminent danger of being inundated by floodwater; or

7.1.f. that drains into a sinkhole with an open portal unless that sinkhole has a 20 foot vegetative buffer zone with at least 90% of the land in the buffer zone covered with vegetation.

7.2. No person should apply fertilizers containing nitrogen to land that has coarse textured soils when the application occurs in the fall, unless that application is made to support the growth of a fall cover crop.

7.3. Each person applying fertilizers or manures should:

7.3.a. utilize alternate crop rotations to reduce the amount of fertilizers or manures needed to maintain crop production and to utilize nitrogen residuals in the soil;

7.3.b. utilize practices to enhance soil condition that reduces nitrate leaching (such as practices to improve soil tilth and increase organic matter of the soil);

7.3.c. utilize conservation tillage, grassed waterways, contouring, vegetative buffer zones or other effective conservation practices to reduce fertilizer or manure residue runoff into

sinkholes, wells or other potential sites for groundwater contamination;

7.3.d. plan the application of fertilizers containing nitrogen so that the application is made as close as practically possible to the time when the crop requires the nitrogen;

7.3.e. apply fertilizers or manures based at a rate recommended after soil tests, plant tissue testing and/or manure content testing;

7.3.f. apply nitrogen from a combination of fertilizer and/or manure at rates that supply no more than 125% of the demonstrated need of the crop, based on soil test, plant tissue test or estimated from yield goal, previous crop, manure management, and soil properties as recommended by a laboratory or soils specialist/agronomist; and

7.3.g. calibrate application equipment to assure proper application rates.

§61-6A-8. Hearings.

8.1. The commissioner will offer a person an opportunity for an informal hearing prior to issuing an order in all cases, except where the protection of the public health requires immediate action to protect groundwaters in this state.

§61-6A-9. Civil and criminal penalties.

9.1. The commissioner may assess civil and criminal penalties only to violations of the mandatory practices or actions that were performed in a grossly negligent, reckless or intentional manner.

9.2. When determining the assessment of civil or criminal penalties, the commissioner shall consider the following factors in determining the unreasonableness of any harm referred to in this rule which shall include, but need not be limited to:

9.2.a. the extent of harm to the public health, the environment, or the beneficial use of the groundwater;

9.2.b. the burden and fairness of requiring a person to bear the loss;

9.2.c. the causing of harm in the conduct of reasonable activities utilizing practices conducted in conformity with federal and state laws and regulations;

9.2.d. the person's history of compliance that may

indicate continued noncompliance or disregard for compliance;

9.2.e. the person's knowledge of the rules and regulations that were violated; and

9.2.f. activities that were conducted in a negligent, reckless or intentional manner, where negligence means a failure to exercise reasonable care.



STATE OF WEST VIRGINIA
DEPARTMENT OF AGRICULTURE

State Capitol
Charleston, WV 25305

June 15, 1992

Cleve Benedict
Commissioner

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SECRETARY OF STATE
FILED

The Honorable Ken Hechler
Secretary of State
Ground Floor, W-157, State Capitol
Charleston, West Virginia 25305

Dear Mr. Hechler:

The Commissioner of Agriculture announces that he has scheduled public hearings for the proposed rules affecting groundwater in addition to the hearings listed on the "Notice of Public Hearing on a Proposed Rule" filed with you on June 5, 1992.

The additional hearings will all be held in Room 315/316 Percival Hall, Forestry Building, Evansdale Campus, West Virginia University, Morgantown, WV according to the following schedule:

- Non-Bulk Pesticide Rules for Permanent Operational Areas (61-12I)
Thursday July 23 3 PM
- General Groundwater Protection Rules for Fertilizer and Manures (61-6A)
Thursday July 23 5PM
- Primary and Secondary Containment of Fertilizers (61-6B)
Thursday July 23 7PM
- General Groundwater Protection Rules for Pesticides (61-12G)
Friday July 24 8AM
- Bulk Pesticide Operational Rules (61-12H)
Friday July 24 10AM
- Generic State Management Plan for Pesticides and Fertilizer in Groundwater (61-22)
Friday July 24 1PM
- Best Management Practices for Temporary Operational Areas of Non- Bulk Pesticides (61-22A) Friday July 24 2:30PM

Please publish this notice in the State Register.

Sincerely,

Barbara J. Smith
Director, Compliance Division
(304)-558-2226 FAX: - 3594

BJS:pfhear.hec