

**WEST VIRGINIA
SECRETARY OF STATE
JOE MANCHIN, III
ADMINISTRATIVE LAW DIVISION**

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OFFICE WEST VIRGINIA
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Form #6

**NOTICE OF FINAL FILING AND ADOPTION OF A LEGISLATIVE RULE AUTHORIZED
BY THE WEST VIRGINIA LEGISLATURE**

AGENCY: Department of Environmental Protection - Water Resources TITLE NUMBER 47

AMENDMENT TO AN EXISTING RULE: YES NO

IF YES, SERIES NUMBER OF RULE BEING AMENDED- _____

TITLE OF RULE BEING AMENDED- _____

IF NO, SERIES NUMBER OF RULE BEING PROPOSED- 57B

TITLE OF RULE BEING PROPOSED- Groundwater Protection Standards At Dominion *Generation
Steam Electric Generating Facility, Mt. Storm, West Virginia

THE ABOVE RULE HAS BEEN AUTHORIZED BY THE WEST VIRGINIA LEGISLATURE.

AUTHORIZATION IS CITED IN (house or senate bill number) HB4163

SECTION 64-3-1, PASSED ON March 3, 2002

THIS RULE IS FILED WITH THE SECRETARY OF STATE. THIS RULE BECOMES EFFECTIVE ON THE
FOLLOWING DATE: June 1, 2002


Authorized Signature

SCANNED

FILED

TITLE 47
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 DIVISION OF WATER RESOURCES
 SERIES 57B
 GROUNDWATER PROTECTION STANDARDS AT STEAM ELECTRIC
 GENERATING FACILITY

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§47-57B-1. General.

1.1. Scope. --- Variances may be granted by the legislature to allow groundwater quality standards to be exceeded for a source or a class of sources which by their nature cannot be conducted in compliance with the requirements of W.Va. Code §22-12-5, "Groundwater Protection Act". The benefits of granting the variance must out weigh the benefits of complying with existing groundwater quality standards and demonstrate that there is no reasonable and prudent alternative available, and that granting the variance is more in the public interest than adherence to existing groundwater quality standards.

1.1.a. A study was initiated by Virginia Electric and Power Company, doing business as Dominion Generation, and conducted by Resource International, Ltd., to ascertain the existing ground water quality at the Mount Storm steam electric generating facility located at Mount Storm, Grant County, West Virginia. The study concluded that five (5) metals (beryllium, cadmium, chromium, lead, and nickel) were consistently exceeding groundwater quality standards at the coal storage area.

1.1.b. The purpose of this legislative rule is to grant relief from existing groundwater quality standards by establishing groundwater protection standards (GWPS) for the variance applicable area, which is the coal storage site at the Mount Storm steam electric generating facility.

1.2. Authority. - W.Va. Code §22-12-5(1).

1.3. Filing Date. - April 1, 2002

1.4. Effective Date. - June 1, 2002

§47-57B-2. Definitions

2.1. "Act" means the West Virginia Groundwater Protection Act, W.Va. Code §22-12-1 et seq.

2.2. "Class of sources" means a group of sources which engage in similar types of activities and release, or have the potential to release, similar types of pollutants to the groundwater.

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

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

2.5. "Groundwater Protection Standard" or "GWPS" means the concentration of a specified constituent, statistically calculated, which is achievable with a 95% (percent) confidence level, or greater.

2.6. "Groundwater Quality Standards" means the standards of purity and quality for groundwater of the state promulgated by the Environmental Quality Board pursuant to section 4 of the Act.

2.7. "ppb" - means parts per billion or $\mu\text{g}/\text{l}$ (micrograms per liter).

2.8. "Preventative Action Limit" or "PAL" means a numeric value expressing the concentration of a substance in groundwater that, if exceeded, causes action to be taken to assure that standards of purity and quality of groundwater are not violated.

2.9. "Receptor" means a surface water body, a public or private drinking water supply and any off-site migration onto adjacent properties of groundwater for which the variance is granted.

2.10. "Secretary" means the Secretary of the Department of Environmental Protection.

2.11. "Source" means any facility or activity which has caused a release or is reasonably likely to cause a release.

2.12. "Variance" means a legislative rule modifying groundwater quality standards or preventative action limits, or both, for a source or class of sources, for one or more specific constituents.

2.13. "Variance applicable area" means a geographic area for which the variance is allowed and is further delineated by geographic coordinates listed in section 3.0 of this rule.

§47-57B-3. Variance Applicable Area.

3.1. Variance applicable area for the coal storage site at the Mt. Storm electric power generating facility is described by the following coordinates:

Southwest corner marker: $39^{\circ}12'08.249''$, $79^{\circ}16'05.256''$

Northwest corner marker: $39^{\circ}12'20.227''$, $79^{\circ}16'10.457''$

Northeast corner marker: $39^{\circ}12'22.912''$, $79^{\circ}16' 01.294''$

Southeast corner marker: $39^{\circ}12'08.366''$, $79^{\circ}15'57.272''$

3.2. Variance applicable areas shall be permanently marked by stationary monuments or other highly visible alternative methods. These monuments shall be protected from damage or removal as long as the variance is in effect.

3.3. The facility shall communicate to the Secretary as to which method is used to mark the variance applicable areas.

§47-57B-4. Groundwater Protection Standards and Preventative Action Limits.

4.1 Groundwater protection standards, preventative action limits and compliance monitoring stations are hereby established in Table 57B-4 and for the following individual constituents: beryllium, cadmium, chromium, nickel, and lead.

4.2. The groundwater protection standards and preventative action limits are established for the coal storage site at the variance applicable area referenced in Section 3 of this rule. The variance shall not pertain to any other activities or areas at the facility.

4.3. Compliance with preventative action limits shall also be determined at the same monitoring stations as the groundwater protection standards.

4.4. If any groundwater protection standard (GWPS) or preventative action limit (PAL) is exceeded, the Secretary shall cause such action to be taken as specified in Section 5 of this rule, "Terms and Conditions" to assure that standards of purity and quality are not violated.

§47-57B-5. Terms and Conditions.

5.1. Any constituent for which a variance is granted shall not cause a violation of water quality standards or groundwater quality standards at any receptor.

5.2. A sufficient number of monitoring wells of approved design and construction shall be installed and maintained between the variance applicable area and the receptor. If the Secretary reasonably believes the current number and location of compliance monitoring wells is no longer adequate to monitor the variance applicable area, the Secretary may order the installation of additional wells.

5.3. Groundwater protection standards and preventative action limits will be applied on intrawell comparisons; that is, each compliance monitoring well would stand alone, and not be collectively averaged with all other wells monitoring the variance applicable area.

5.4. Preventative action limits have been statistically calculated to establish a concentration for the specified constituent that is achievable with a 95% (percent) confidence level.

5.5. Any expansion of the existing coal storage area outside of its variance applicable area is prohibited; unless the expanded area employs all relevant mitigation practices in accordance with applicable rules promulgated pursuant to Chapter 22, Article 12 et.seq., "Groundwater Protection Act" .

5.6. Compliance monitoring shall begin on the effective date of this rule and shall continue in accordance with this section, "Terms and Conditions" of this rule.

5.7. Compliance monitoring of the variance applicable area shall be quarterly provided that three (3) successive preventative action limit (PAL) exceedences shall result in an increased monitoring frequency to monthly. Compliance monitoring will continue on a monthly basis until such time as the reason for the exceedences is resolved or the pattern of exceedences is broken by two (2) successive sampling events below the preventative action limits (PAL).

5.8. The Secretary upon determining that an exceedence of the preventative action limit (PAL) has occurred for any constituent shall notify the facility by certified mail that a verification sample shall be taken within thirty (30) days receipt of such notification to substantiate such exceedence. A verification sample which exceeds a preventative action limit (PAL) shall be deemed a second exceedence for purposes of establishing a pattern of exceedences.

5.9. If three (3) successive exceedences of the PAL should occur, the facility will initiate an assessment of the variance applicable area which may include groundwater modeling to determine the cause of such exceedences. The results of such an assessment shall be reported to the Secretary.

5.10. If four (4) successive exceedences or five (5) exceedences of the PAL within a six (6) month period should occur, then the facility shall initiate a plan of mitigation to be approved by the Secretary in order to assure that groundwater protection standards are not violated.

5.11. If a groundwater protection standard is exceeded, sampling shall immediately be increased from quarterly to monthly. Compliance monitoring will continue on a monthly basis until such time as a reason for the exceedence is resolved, or until such time as there are two (2) successive sampling events below the preventative action limit (PAL).

5.12. The Secretary upon determining that an exceedence of the Groundwater Protection Standard (GWPS) has occurred for any constituent shall notify the facility by certified mail that a verification sample shall be taken within thirty (30) days receipt of such notification to substantiate such exceedence. A verification sample which exceeds a groundwater protection standard (GWPS) shall be deemed a second exceedence.

5.13. If a second successive exceedence of the groundwater protection standard (GWPS) should occur, the facility shall sample the receptor, and conduct an assessment of the variance applicable area which may include groundwater modeling to determine the cause of such exceedence. The results of which shall be reported to the Secretary.

5.14. If a third successive exceedence of the groundwater protection standard (GWPS) should occur, or if there are four (4) exceedences of the Groundwater Protection Standard (GWPS) within a six (6) month period, the facility will initiate remedial action, including an evaluation of environmental and human health risks.

§47-57B-6 Periodic Review.

6.1. No less frequently than every five (5) years the Secretary shall review all prior decisions granting these variances to determine their continual consistency with 47CSR57, "Groundwater Quality Standard Variances". Should the Secretary determine that any modification of such a decision is appropriate, the Secretary shall initiate rule making pursuant to W.Va. Code §29A-3.

TABLE 57B-4

Mount Storm Coal Storage Area			
Compliance Monitoring Stations: MW-14, MW-15, and MW-16.			
Variance Candidate	Existing Groundwater Quality Standard (GQS)	Proposed Groundwater Protection Standard (GWPS)	Preventative Action Limit (PAL)
Beryllium (ppb)	4	125.88	100.7
Cadmium (ppb)	5	88.24	70.59
Chromium (ppb)	100	421.25	337
Lead (ppb)	15	185	148
Nickel (ppb)	100	3900	3120