W. Va. Code R. 35-8 Rules Governing Horizontal Well Development



P. Robert Pichardo III, Esq. WVDEP, Office of Legal Services Paul.R.Pichardo@wv.gov

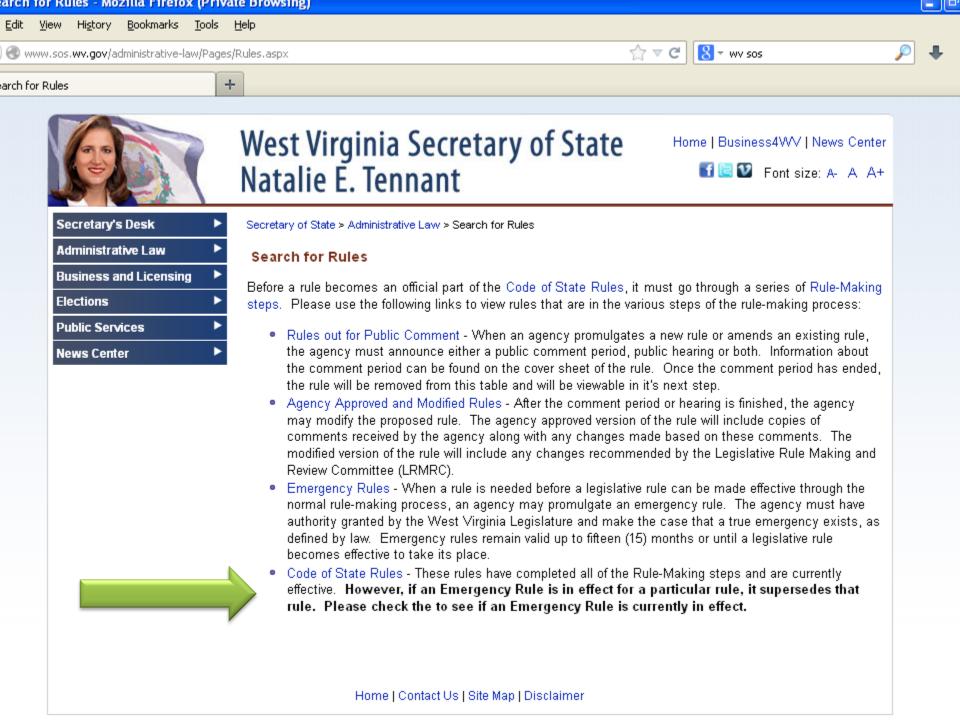


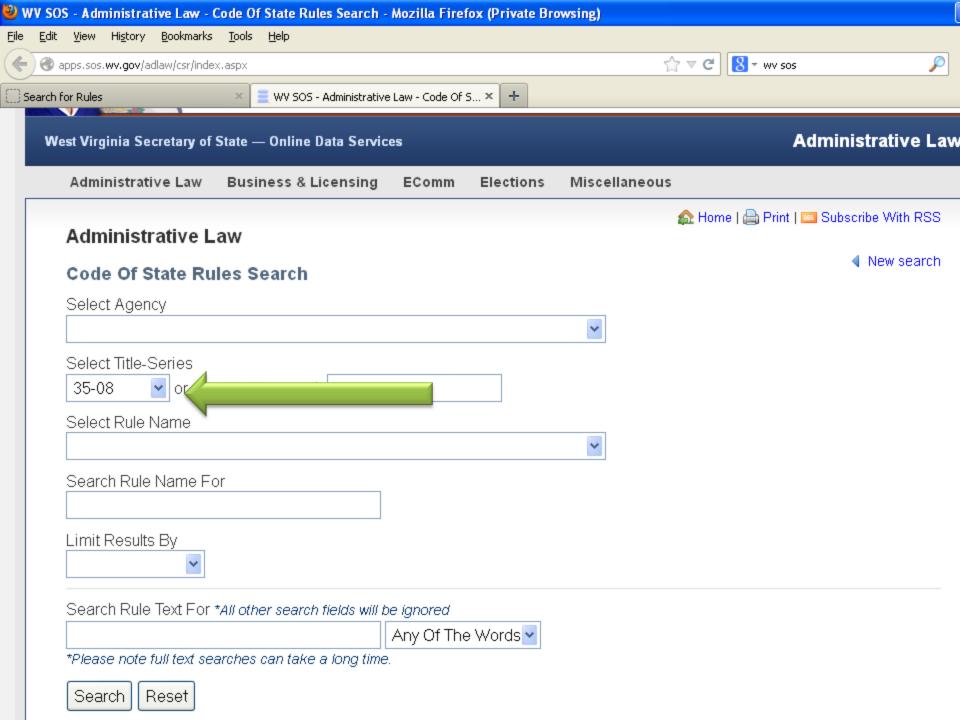


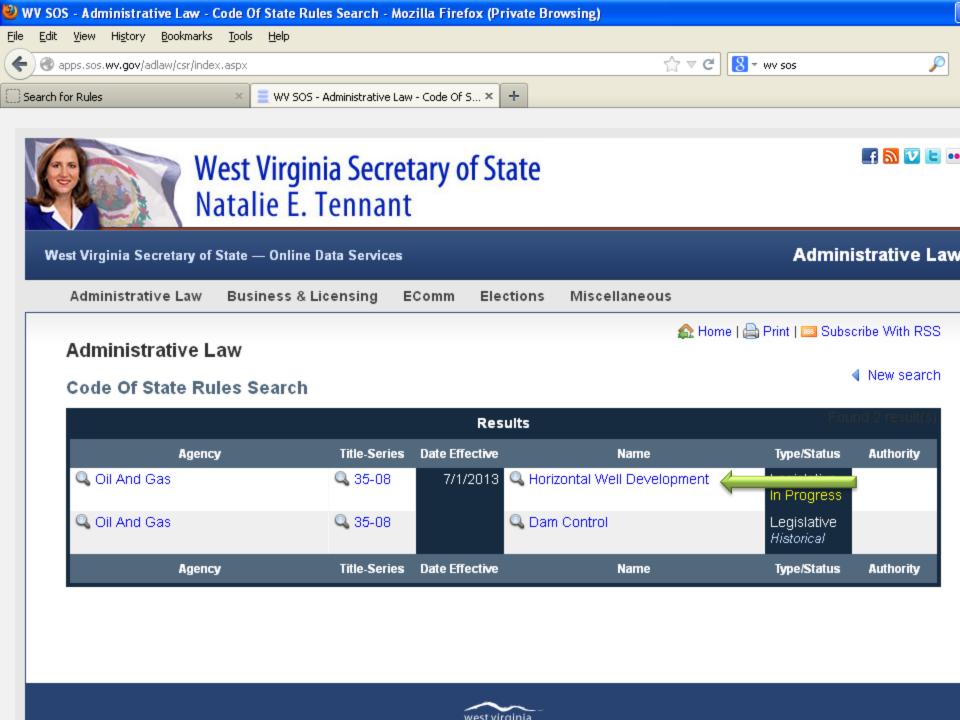
Welcome to Secretary of State Natalie Tennant's Website - Mozilla Firefox (Private Browsing)

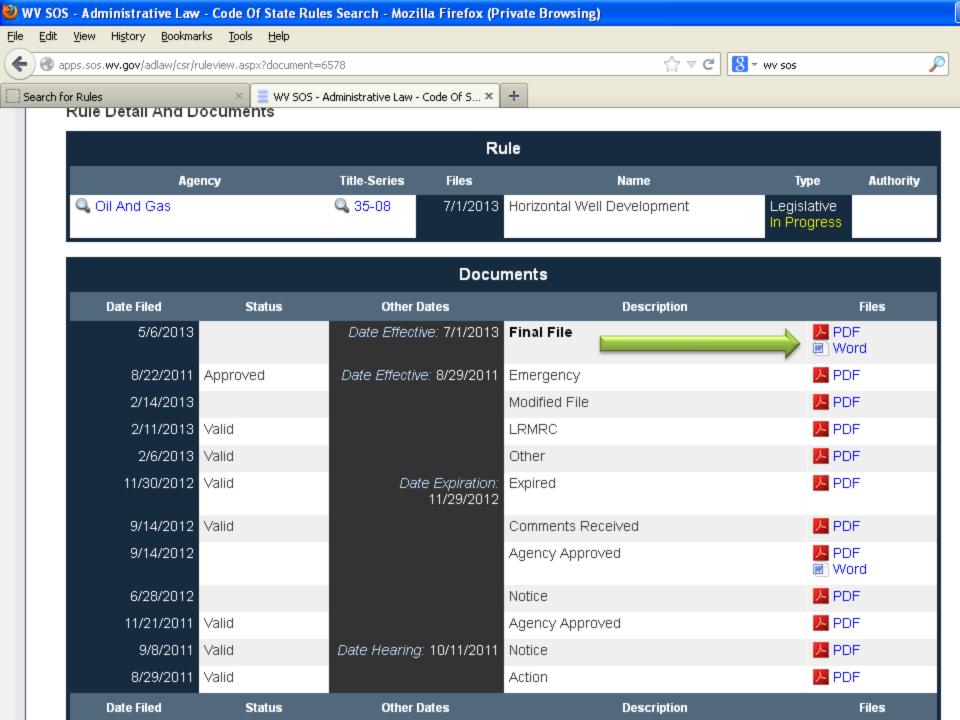


Charities Natabase









W. Va. Code R. 35-8-1

Scope

Rule shall govern/apply to proceedings under W. Va. Code 22-6A-1, et seq., related to horizontal wells. Certain portions of this rule also govern and apply to W. Va. Code 22-12-1, et seq., related to groundwater protection.

Filing Date

May 6, 2013

Effective Date

July 1, 2013

SOS Link

http://apps.sos.wv.gov/adlaw/csr/ruleview.aspx?document=6578



W. Va. Code R. 35-8-5.1.i Replacement Borehole

5.1.i. In the event an operator drilling a horizontal well encounters conditions or experiences events in the borehole prior to reaching the intended total depth of the permitted well work, which conditions or events result in the inability to drill to the intended total depth of the permitted well work, the operator may submit an application to the Chief requesting permission to drill a new, replacement borehole. The notice and comment periods provided by W. Va. Code § 22-6A-10 that accompanied the original borehole shall satisfy the notice and comment requirements for the new, replacement borehole permit application, except that the operator shall provide notice to the coal owner, operator or lessee as required by W. Va. Code § 22-6A-10(b)(3). The objection period associated with the notice to the coal owner, operator or lessee may be waived pursuant to the provisions of W. Va. Code § 22-6A-8(b). The new, replacement borehole permit application must be identical to the original well work permit application, with the exception of the location coordinates for the new, replacement borehole and any necessary revisions to the casing program or design. The new, replacement borehole must be located on the same well pad as the original borehole, and it must meet all applicable spacing requirements. The original borehole must be plugged in a manner approved by the Chief. Verbal permission to plug the existing borehole may be granted by the Chief or the Chief's designee in the event the drilling operations have been continually progressing on the hole to be plugged. Within five (5) days of commencement of plugging operations, the operator shall submit a plugging permit application to the Chief and provide notice as provided by W. Va. Code § 22-6A-10(b).

W. Va. Code R. 35-8-5.4 Erosion and Sediment Control Plan

5.4.a. Erosion and sediment control plans submitted in conjunction with applications for well work permits involving well sites that disturb three acres or more of surface (excluding pipelines, gathering lines, and roads) shall be certified by, and constructed in accordance with plans certified by, a West Virginia registered professional engineer and in compliance with best management practices (BMPs) established by the Chief and provided in the Office's erosion and sediment control field manual, and contain both a narrative and a set of drawings. The plans shall be considered conditions of the permit and be enforceable as such.



^{*} Includes other requirements under 5.4

W. Va. Code R. 35-8-5.5 Site Construction Plan

5.5.a. All applications for well work permits involving well sites that will disturb three acres or more of surface (excluding pipelines, gathering lines, and roads) shall be accompanied by a site construction plan certified by, and constructed in accordance with plans certified by, a West Virginia registered professional engineer. The plan shall describe the nature and purpose of the construction project and identify the procedures for construction that will be used to achieve site stability. The plan shall be considered conditions of the permit and be enforceable as such.



^{*} Includes other requirements under 5.5

W. Va. Code R. 35-8-5.6 Water Management Plan

5.6.a. All applications for well work permits shall include an estimation of the volume of water that will be used in conjunction with drilling, fracturing or stimulating the well for which the permit is sought and, if the drilling, fracturing or stimulating of the well requires the use of water obtained by withdrawals from waters of this State in amounts that exceed two hundred ten thousand (210,000) gallons during any thirtyday period, the application for a well work permit shall include a water management plan. The water management plan is considered a condition of the permit, and it is enforceable as such.



^{*} Includes other requirements under 5.6

W. Va. Code R. 35-8-5.7 Well Site Safety Plan

5.7.a. All applications for well work permits shall be accompanied by a well site safety plan to address proper safety measures to be employed for the protection of persons on the well site, as well as the general public in the area surrounding the well site. Each plan shall be specific to the well site described in the permit application and include the surrounding area. The plan shall encompass all aspects of the operation, including the actual well work for which the permit is sought, the anticipated MSDS Sheets, and completion, production, and work-over activities. It shall be made available on the well site during all phases of the operation and provide an emergency point of contact and twenty-four (24)-hour contact information for the well operator. At least seven (7) days before commencement of well work or site preparation work that involves any disturbance of the land, the well operator shall provide a copy of the well site safety plan to the local emergency planning committee (LEPC) for the emergency planning district in which the well work will occur or to the county office of emergency services. The operator shall also provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule. The operator should work closely with the local first responders to familiarize them with potential incidents that are related to oil and gas development, so that the local first responders have the information they need to provide the support necessary for the operator to implement the well site safety plan...

* Includes other requirements under 5.7

W. Va. Code R. 35-8-6.2.e Plats; Form and Contents.

6.2.e. Method of Showing Property Lines - The courses and distances of all farm lines both adjoining and connecting the landmarks or permanently established property corners and all mineral tract boundaries within the scope of the well location plat shall be shown thereon. All lines actually surveyed shall be shown on the plat in **solid lines**. Lines taken from deed descriptions only shall be shown by **broken lines**. **Mineral tract boundary lines and surface tract boundary lines shall be clearly distinguishable from each other**.



W. Va. Code R. 35-8-6.2.j Plats; Form and Contents.

6.2.j. Wells - All wells within the scope of the plat, whether active, drilling or abandoned, shall be shown. The scope of every plat shall be sufficient to show all wells within one thousand two hundred (1,200) feet of the surface location of the well that is the subject of the new application and within five hundred (500) feet of the horizontal section of the well bore and, in the case of an application for a gas well with a depth of three thousand (3,000) feet or more and that penetrates a coal seam, the scope of the plat shall be sufficient to show all wells within two thousand four hundred (2,400) feet of the surface location of the well that is the subject of the application and within five hundred (500) feet of the horizontal section of the well bore. To make this determination, the permit applicant may rely on all available records and locational information; the permit applicant need not conduct a physical survey of the area.



W. Va. Code R. 35-8-6.2.k.2 Plats; Form and Contents.

6.2.k.2. Occupied dwellings or buildings two thousand five hundred (2,500) square feet or larger used to house or shelter dairy cattle or poultry husbandry within six hundred twenty-five (625) feet of the center of the well pad for which the well work permit is being sought. Occupied dwellings for the purpose of this Rule shall mean dwellings that are used for human habitation on a permanent or periodic basis. An occupied dwelling is not a structure designed for temporary human habitation, i.e. a mobile camping unit, unless such unit is affixed to the ground, not capable of immediate removal, and attached to at least one public utility; tents or similar camping units; unimproved structures that are not equipped for long-term human habitation; temporary structures erected on the premises commensurate with the initiation of activity indicating the prospect of horizontal drilling activities on the site; and similar temporary structures.

W. Va. Code R. 35-8-9 Operational Criteria

- 9.1.b.3. For all water used for hydraulic fracturing of horizontal wells and for flowback water from hydraulic fracturing activities and produced water from production activities from horizontal wells, an operator shall comply with the following record-keeping and reporting requirements:
- 9.1.b.3.A. For **production activities**, the following information shall be recorded and retained by the well operator: **(1)** the quantity of flowback water from hydraulic fracturing of the well; **(2)** the quantity of produced water from the well; and **(3)** the method of management or disposal of the flowback and produced water; For the purposes of this section flowback shall be defined as the water recovered during the first thirty **(30)** days of the flowback period.
- 9.1.b.3.B. For transportation activities, the following information shall be recorded and: maintained by the operator: (1) the quantity of water transported; (2) the collection and delivery or disposal location(s) of the water; and (3) the name of the water hauling company.
- 9.1.b.3.C. The information maintained pursuant to this subdivision shall be available for inspection by the department along with other required permits and records and maintained for three years after the water withdrawal activity.

W. Va. Code R. 35-8-9.2 Operational Criteria

9.2 Casing and Cementing Standards

- 9.2.a. The operator shall prudently drill through fresh groundwater zones so as to minimize any disturbance of them. Further, the operator shall construct the well and conduct casing and cementing activities of all horizontal wells in accordance with W. Va. Code 22-6A-5(a)(10), (11), (12), and (13) and 22-6A-24 and this rule and in a manner that will provide for control of the well at all times, prevent the migration of gas and other fluids into the fresh groundwater and coal seams, and prevent pollution of or diminution of fresh groundwater.
- 9.2.b. General Casing Standards
- 9.2.c. Conductor Casing Standards
- 9.2.d. Freshwater Casing Standards
- 9.2.e. Standards for Casing through Coal Seams.
- 9.2.f. Intermediate Casing Standards
- 9.2.g. Production Casing Standards
- 9.2.h. Cementing Standards
- 9.2.i. Defective Casing or Cementing
- 9.2.j. Annual Inspection



W. Va. Code R. 35-8-9 Operational Criteria

9.2.i. Defective Casing or Cementing – The operator shall report defective, insufficient or improperly cemented casing to the oil and gas inspector or the Chief within twenty-four (24) hours of discovery of the problem and, within seventy-two (72) hours, correct the defect or submit a plan to correct the defect to the Chief for approval. If the defect cannot be corrected or a plan is not approved by the Chief, the well shall be plugged upon the issuance of a written order by the Chief.



W. Va. Code R. 35-8-10 Well Records.

Hydraulic Fracturing Chemicals

10.1.a. As part of the well completion report (Form WR-35), the operator or its service provider shall list all the additives used in the hydraulic fracturing or stimulation process, including each additive's specific trade name, supplier, and purpose. The operator or its service provider shall also list each chemical of each additive intentionally added to a base fluid for the purpose of preparing a fracturing fluid, along with each chemical's CAS registry number if applicable, its maximum concentration in the additive, and its maximum concentration as added to the base fluid, and the volume of the base fluid used. The concentrations shall be expressed as a mass percent. The operator or service provider may designate the information regarding the specific identity or concentration or both of a chemical as a **confidential trade secret** not to be disclosed to the agency or anyone else except in the event of an investigation by the office, medical emergency, or for diagnostic or treatment purposes involving the designated chemical, pursuant to subdivisions 10.1.d. and 10.1.e...

W. Va. Code R. 35-8-10 Well Records.

As-Drilled Wellbore

10.2.a. Within ninety (90) days after completing the permitted well work, the operator shall file with the Office two (2) copies of Form WR-35 containing in proper form the geological information required by W. Va. Code § 22-6A-5(a)(14) and the exact location of the as-drilled wellbore; Form WR-36 (except that, where the well has not been connected within ninety (90) days to pipelines or production tanks, Form WR-36 shall be filed no more than fifteen (15) days after connection); and Form WR-38. The forms need not repeat well record information for any work (whether permitted or not) performed prior to and not part of the permitted work to which the forms apply. The forms shall correct or add to the well log and other records made and preserved at the well location by specifying the casing, treatment or physical changes performed after completion of the permitted work, and the additional information or corrected information discovered by electric logs or other means after completion of the permitted work. The information submitted in accordance with this subdivision designated as a confidential trade secret shall not lose its status as such after the one year confidentiality period or the extension period addressed in paragraph 10.2.b.3 below.



W. Va. Code R. 35-8-11 Reports.

11.1. Annual Reports of Natural Gas, Oil, and Natural Gas Liquids Production

11.1.a. The operator shall file an annual report of natural gas, oil, and natural gas liquids production for each well on or before March 31 of the year succeeding the production. This report shall be on Form WR-39, "Report of Annual Production," or in any other form approved by the Chief, and must identify the production from every oil and natural gas well not yet plugged and abandoned, regardless of the status of the well. Oil and natural gas liquids shall be reported in barrels, and natural gas shall be reported in thousand cubic feet. The volume of natural gas liquids reported shall be those separated under the control of the well operator.



W. Va. Code R. 35-8-15 Water Supply Testing.

15.3.b. **Parameters** - The operator shall analyze samples for the following parameters:

	Chief.
15.3.b.10. Manganese	determined by the operator or the
15.3.b.9. Iron	15.3.b.20. Any others parameters
	15.3.b.19. Bacteria (total coliform)
15.3.b.8. Barium	15.3.b.18. Dissolved Propane
15.3.b.7. Arsenic	15.3.b.17. Dissolved Butane
15.3.b.6. Aluminum	15.3.b.16. Dissolved Ethane
15.3.b.5. Total Dissolved Solids (TDS)	
15.3.b.4. Sodium	15.3.b.15. Dissolved Methane
15.3.b.3. Chloride	15.3.b.14. Detergents (MBAS)
15.3.b.2. BTEX	15.3.b.13. Sulfate
Hydrocarbons (GRO, DRO, ORO)	15.3.b.12. Calcium
15.3.b.1. Total Petroleum	15.3.b.11. pH

W. Va. Code R. 35-8-17 Construction of Centralized Pits and Impoundments with Capacity of Greater Than Five Thousand (5,000) Barrels.

17.1.a. "Centralized pit or impoundment" is a pit or impoundment, as that term is defined above, with capacity of greater than five thousand (5,000) barrels, which is not associated with a specific well work permit, but which is being used by the operator for the fluid management of one or more surrounding well work locations. The operator must receive a certificate of approval from the Chief prior to constructing a centralized pit or impoundment.

17.1.b. "Certificate of approval" means the written approval issued by the Chief to a person who has applied to the Chief for a certificate that authorizes the person to place, construct, enlarge, alter, remove or repair a centralized pit or impoundment and which specifies the conditions or limitations under which the work is to be performed by the applicant.

- 17.2. All centralized pits and impoundments shall be constructed in accordance with the provisions of section 16...
- 17.3.b. Plans and Specifications
- 17.3.c. Maps and Drawings
- 17.3.d. Erosion and Sediment Control Plan
- 17.3.e. Reclamation Plan
- 17.3.f. Maintenance Plan
- 17.3.g. Monitoring and Emergency Action Plan
- 17.3.h. Water Management Plan



W. Va. Code R. 35-8-17 Construction of Centralized Pits and Impoundments with Capacity of Greater Than Five Thousand (5,000) Barrels.

- 17.4. **Notification of the Commencement of Construction** In addition to the requirements of W. Va. Code § 22-6A-10(h) and prior to the commencement of construction activities in the project area, **the operator or the operator's representative shall notify the Chief and the surface owner of record of the tract** on which the centralized pit or impoundment is to be constructed the name, address, and telephone number of the operator's and contractor's authorized contact person at the project area who is responsible for communicating with the Office and for receiving inspections reports and legal notifications, and the name, address, and telephone number of the operator's and contractor's authorized contact person at the project area whom the Chief or the surface owner can contact in case of an emergency, if those names and contact information are different.
- 17.5. Conformance with Plans
- 17.6. On-Site Documents
- 17.7. Application and Annual Registration Fees
- 17.8. Maintenance of Centralized Pits or Impoundments
- 17.9. Inspection of Centralized Pits or Impoundments
- 17.10. Removal of Centralized Pits or Impoundments
- 17.11. Transfer of a Centralized Impoundment; Transfer of a Centralized Pit Prohibited



W. Va. Code R. 35-8-18 Spill and Pollution Prevention and Control Measures; Drilling, Completion, Work-over, and Production Operations.

- 18.1. Site equipment shall be positioned and techniques shall be used on well sites so as to prevent spills of any pollutants to surface waters and ground waters of the State. Potential pollutant sources from well operations during the drilling, completion, work-over, and production phases include, but are not limited to, mobile treatment or service units, skid drop-off units, material storage, the loading and unloading of dry bulk materials and liquids, process activities, dust generating activities, improper connections or management practices, waste disposal practices, and production facilities.
- 18.3. The operator may utilize placement of linings, feltings, paddings, and support boardings of adequate qualities and strengths in the areas of the site that contain complex activities, equipment, and materials.
- 18.4. All catchment basins, synthetic linings, paddings, boardings, sumps, berms, dikes, curbings, drill pad spill containment lining systems, and diversionary structures shall be appropriately installed, of adequate quality, and maintained to intercept all spills and pollutants from operations.
- 18.5. Catchment basins, dikes, sumps, and secondary containments shall be structurally sound and appropriate for collection of stormwater. Protective measures shall be in place for adequate stormwater control and pollutant collection.

^{*} Includes other requirements under 18

W. Va. Code R. 35-8-18 Spill and Pollution Prevention and Control Measures; Drilling, Completion, Work-over, and Production Operations.

- 18.6. Secondary containments shall be installed with impermeable basins for tanks used for stored liquids other than freshwater and shall have a capacity of one hundred and ten percent (110%) of the largest tank within a battery. The Office's Water Pollution Control Rule (35 CSR 1) and federal SPCC plans may also apply to operations in this section.
- 18.7. Bulk storage of dry chemicals and materials shall be placed upon an impermeable base and protective of weather conditions and stormwater runoff.
- 18.8. The owner or operator or person in charge of operations subject to this rule shall include measures for inspections of all facilities and equipment during active drilling, completion, and work-over operations. The owner, operator or person in charge of operations must conduct site inspections at least once per week and maintain records of the inspections so that they are available for review by the oil and gas inspector.
- 18.9. The owner or operator or person in charge of operations subject to this rule shall notify the oil and gas inspector or the Chief of a reportable discharge, as that term is defined in 35 C.S.R. 1 § 3.3, by calling 1-800-642-3074 immediately, but in no case no later than twenty-four (24) hours after becoming aware of the discharge. The owner or operator or person in charge of operations shall notify the oil and gas inspector immediately of any spills or pollutant discharges that are reasonably expected to contaminate surface water or groundwater.
- * Includes other requirements under 18

Questions

P. Robert Pichardo III, Esq.

WVDEP, Office of Legal Services (304) 926-0499 Ext. 1728 Paul.R.Pichardo@wv.gov

