# **WEST VIRGINIA SECRETARY OF STATE**

KEN HECHLER

## **ADMINISTRATIVE LAW DIVISION**

Form #5

Aug 23 12 08 PM '98

SECRETARY OF STATE

#### NOTICE OF AGENCY ADOPTION OF A PROCEDURAL OR INTERPRETIVE RULE OR A LEGISLATIVE RULE EXEMPT FROM LEGISLATIVE REVIEW

BUREAU OF ENVERONMENT-DIVISION   AGENCY: OFFICE OF WATER RESOURCES	ENVIRONMENTAL PROTECTION TITLE NUMBER: 47
CITE AUTHORITY: WV Code 22-11-	10
RULE TYPE: PROCEDURAL INT	ERPRETIVE X
EXEMPT LEGISLATIVE RULE CITE STATUTE(s) GRANTING EXI	EMPTION FROM LEGISLATIVE REVIEW
AMENDMENT TO AN EXISTING RULE: YES.	(, NO
IF YES, SERIES NUMBER OF RULE BEING AI	MENDED:
TITLE OF RULE BEING AMENDED	D:Class 5 Injection Well Type
Description Rule	
IF NO. SERIES NUMBER OF NEW RULE BEIN	NG ADOPTED:
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•••••	
THE ABOVE RULE IS HEREBY ADOPTED A	IND FILED WITH THE SECRETARY OF STATE. TH
EFFECTIVE DATE OF THIS RULE IS	September 28, 1998
	Authorized Signature



#### **BUREAU OF ENVIRONMENT**

CECIL H. UNDERWOOD
GOVERNOR

10 McJunkin Road Nitro, WV 25143-2506

MICHAEL P. MIANO COMMISSIONER

August 21, 1998

Ms. Judy Cooper Director Administrative Law Division Capitol Complex Charleston, WV 25305

RE: 47CSR9A - "Class 5 Injection Well Type Description Rule"

Dear Ms. Cooper:

This is to advise that I am giving approval to file the above referenced Interpretive rule as "Notice of Agency Adoption of Interpretive Rule".

Your cooperation in this regard is very much appreciated. If you have any questions or require additional information, please feel free to contact Carrie Chambers in my office at 759-0515.

Sincerely yours

Michael P. Miano Commissioner

MPM:cc

**Attachment** 

cc: Ca

Carrie Chambers Ellen Herndon

# TITLE 47 INTERPRETIVE RULE BUREAU OF ENVIRONMENT DIVISION OF ENVIRONMENTAL PROTECTION OFFICE OF WATER RESOURCES

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OFFICE OF WATER RESOURCES

SERIES 9A

OFFICE OF WATER RESOURCES

OFFICE OF WATER RESOURCES

#### SERIES 9A CLASS 5 INJECTION WELL TYPE DESCRIPTIONS RULE

#### §47-9A-1. General.

- 1.1. Scope. -- This is a new interpretive rule which provides Class 5 well type descriptions used in the Underground Injection Control Program. This rule is applicable to any person who owns or operates facilities or conducts activities subject to the provisions of WV Code §22-11-8.
  - 1.2. Authority. -- WV Code 22-11-10.
  - 1.3. Filing Date. -- August 26, 1998
  - 1.4. Effective Date. -- September 28, 1998

#### §47-9A-2. Well Code Definitions.

For the purpose of this rule the term well means the same as that defined in subsection 4.5 of 47CSR13.

- 2.1. Drainage Wells (a.k.a. Dry Wells).
- 2.1.a. "5F1" (Agricultural Drainage Wells) -- receive irrigation tailwaters, other field drainage, animal yard, feedlot, or dairy runoff, etc.
- 2.1.b. "5D2" (Storm Water Drainage Wells) -- receive storm water runoff from paved areas, including parking lots, streets, residential subdivisions, building roofs, highways, etc.
- 2.1.c. "5D3" (Improved Sinkholes) -- receive storm water runoff from developments located in karst topographic areas.
- 2.1.d. "5D4" (Industrial Drainage Wells) -- wells located in industrial areas which primarily receive storm water runoff but are susceptible to spills, leaks, or other chemical discharges.
- 2.1.e. "5G30" (Special Drainage Wells) -- used for disposing water from sources other than direct precipitation. Examples of this well type include: landslide control drainage

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wells, potable water tank overflow drainage wells, swimming pool drainage wells, and lake level control drainage wells.

- 2.2. Geothermal Reinjection Wells.
- 2.2.a. "5A5" (Electric Power Reinjection Wells) -- reinject geothermal fluids used to generate electric power deep wells.
- 2.2.b. "5A6" (Direct Heat Reinjection Wells) -- reinject geothermal fluids used to provide heat for large buildings or developments deep wells.
- 2.2.c. "5A7" (Heat Pump/Air Conditioning Return Flow Wells) -- reinject groundwater used to heat or cool a building in a heat pump system shallow wells.
- 2.2.d. "5A8" (Groundwater Aquaculture Return Flow Wells) reinject groundwater or geothermal fluids used to support aquaculture. Non-geothermal aquaculture disposal wells are also included in this category (e.g. Marine aquariums in Hawaii use relatively cool sea water).
  - 2.3. Domestic Wastewater Disposal Wells.
- 2.3.a. "5W9" (Untreated Sewage Waste Disposal Wells) -- receive raw sewage wastes from pumping trucks or other vehicles which collect such wastes from single or multiple sources. (No treatment)
- 2.3.b. "5W10" (Cesspools) -- including multiple dwelling, community, or regional cesspools, or other devices that receive wastes and which must have an open bottom and sometimes have perforated sides. Must serve greater than twenty (20) persons per day if receiving solely sanitary wastes. (Settling of solids)
- 2.3.c. "5W11" (Septic Systems [Undifferentiated Disposal Method]) -- used to inject the waste or effluent from a multiple dwelling, business establishment, community, or regional business establishment septic tank. Must serve greater than twenty (20) persons per day if receiving solely sanitary wastes. (Primary Treatment)
- 2.3.d. "5W31" (Septic Systems [Well Disposal Method]) -- examples of wells include actual wells, seepage pits, cavities, etc. The largest surface dimension is less than or equal to the depth dimension. Must serve greater than twenty (20) persons per

- day if receiving solely sanitary wastes. (Less treatment per square area than 5W32)
- 2.3.e. "5W32" (Septic Systems [Drainfield Disposal Method]) -- examples of drainfields include drain or tile lines, and trenches. Must serve more than twenty (20) persons per day if receiving solely sanitary wastes. (More treatment per square area than 5W31)
- 2.3.f. "5W12" (Domestic Wastewater Treatment Plant Effluent Disposal Wells) -- dispose of treated sewage or domestic effluent from small package plants up to large municipal treatment plants. (Secondary or further treatment)
  - 2.4. Mineral and Fossil Fuel Recovery Related Wells.
- 2.4.a. "5X13" (Mining, Sand, or Other Backfill Wells) used to inject a mixture of fluid and sand, mill tailings, and other solids into mined out portions of subsurface mines whether what is injected is a radioactive waste or not. Also includes special wells used to control mine fires and acid mine drainage wells.
- 2.4.b. "5X14" (Solution Mining Wells) -- used for in-situ solution mining in conventional mines, such as stops leaching.
- 2.4.c. "5X15" (In-situ Fossil Fuel Recovery Wells) -- used for in-situ recovery of coal, lignite, oil shale, and tar sands.
- 2.4.d. "5X16" (Spent-Brine Return Flow Wells) -- used to reinject spent brine into the same formation from which it was withdrawn after extraction of halogens or their salts.
  - 2.5. Oil Field Production Waste Disposal Wells.
- 2.5.a. "5X17" (Air Scrubber Waste Disposal Wells) -- inject wastes from air scrubbers used to remove sulfur from crude oil which is burned in steam generation for thermal oil recovery projects. (If injection is used directly for enhanced recovery and not just disposal it is a Class 2 well.)
- 2.5.b. "5X18" (Water Softener Regeneration Brine Disposal Wells) -- inject regeneration wastes from water softeners which are used to improve the quality of brines used for enhanced recovery. (If injection is used directly for enhanced recovery and not just disposal it is a Class 2 well.)
  - 2.6. Industrial/Commercial/Utility Disposal Wells.

- 2.6.a. "5A19" (Cooling Water Return Flow Wells) -- used to inject water which was used in a cooling process, both open and closed loop processes.
- 2.6.b. "5W20" (Industrial Process Water and Waste Disposal Wells) used to dispose of a wide variety of wastes and wastewaters from industrial, commercial, or utility processes. Industries include refineries, chemical plants, smelters, pharmaceutical plants, laundromats, dry cleaners, tanneries, laboratories, petroleum storage facilities (e.g., storage tank condensation water), electric power generation plants (mixed waste stream of laboratory drainage fireside water and boiler blowdown), car wash (mixed waste stream of detergent oil, grease and paved area washdown), electroplating industries (spent solvent wastes), etc.).
- 2.6.c. "5X28" (Automobile Service Station Disposal Wells) -- repair bay drains connected to a disposal well.
  - 2.7. Recharge Wells.
- 2.7.a. "5R21" (Aquifer Recharge Wells) -- used to recharge depleted aquifers and may inject fluids from a variety of sources such as lakes, streams, domestic wastewater treatment plants, other aquifers, etc.
- 2.7.b. "5B22" (Saline Water Intrusion Barrier Wells) -- used to inject water into fresh water aquifers to prevent intrusion of salt water into fresh water aquifers.
- 2.7.c. "5S23" (Subsidence Control Wells) -- used to inject fluids into a non-oil or gas producing zone to reduce or eliminate subsidence associated with overdraft of fresh water and not used for the purpose of oil or natural gas production.
  - 2.8. Miscellaneous Wells.
- 2.8.a. "5N24" (Radioactive Waste Disposal Wells) -- all radioactive waste disposal wells other than Class 4 wells.
- 2.8.b. "5X25" (Experimental Technology Wells) -- wells used in experimental or unproven technologies such as pilot scale in-situ solution mining wells in previously unmined areas.
- 2.8.c. "5X26" (Aquifer Remediation Related Wells) -- wells used to prevent, control or remediate aquifer pollution, including but not limited to Superfund sites.

- 2.8.d. "5X29" (Abandoned Drinking Water Wells) -- used for disposal of waste.
- 2.8.e. "5X27" (Other Wells) -- any other unspecified Class 5 wells. Well type/purpose and injected fluids must be specified.

#### **BUREAU OF ENVIRONMENT**

### WEST VIRGINIA DIVISION ENVIRONMENTAL PROTECTION

# 47CSR9A - CLASS 5 INJECTION WELL TYPE DESCRIPTION INTERPRETIVE RULE

**COMMENT PERIOD ENDING August 12, 1998** 

47CSR9A was filed for comment period on July 13, 1998. The comment period ended on August 12, 1998 at 5:00 p.m., and no comments were received by the Division of Environmental Protection.