

Proposed Action on Regulations

Transmittal Sheet PROPOSED OR REPROPOSED Actions on Regulations	Date Filed with AELR Committee	TO BE COMPLETED BY DSD
		Date Filed with Division of State Documents
		Document Number
		Date of Publication in MD Register

1. Desired date of publication in Maryland Register: 11/14/2016

2. COMAR Codification

Title Subtitle Chapter Regulation

26 08 07 .04

3. Name of Promulgating Authority

Department of the Environment

4. Name of Regulations Coordinator Telephone Number
pre-filled pre-filled

Mailing Address

1800 Washington Blvd.

City State Zip Code
Baltimore MD 21230

Email

pre-filled

5. Name of Person to Call About this Document

Jeffrey Fretwell

Telephone No.

410-537-3537

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6. Check applicable items:

New Regulations

Amendments to Existing Regulations

Date when existing text was downloaded from COMAR online: 08/09/2016.

Repeal of Existing Regulations

Recodification

Incorporation by Reference of Documents Requiring DSD Approval

Reproposal of Substantively Different Text:

: Md. R

(vol.) (issue) (page nos) (date)

Under Maryland Register docket no.: --P.

7. Is there emergency text which is identical to this proposal:

Yes No

8. Incorporation by Reference

Check if applicable: Incorporation by Reference (IBR) approval form(s) attached and 18 copies of documents proposed for incorporation submitted to DSD. (Submit 18 paper copies of IBR document to DSD and one copy to AELR.)

9. Public Body - Open Meeting

OPTIONAL - If promulgating authority is a public body, check to include a sentence in the Notice of Proposed Action that proposed action was considered at an open meeting held pursuant to State Government Article, §10-506(c), Annotated Code of Maryland.

OPTIONAL - If promulgating authority is a public body, check to include a paragraph that final action will be considered at an open meeting.

10. Children's Environmental Health and Protection

Check if the system should send a copy of the proposal to the Children's Environmental Health and Protection Advisory Council.

11. Certificate of Authorized Officer

I certify that the attached document is in compliance with the Administrative Procedure Act. I also certify that the attached text has been approved for legality by **Stephanie Cobb Williams**, Assistant Attorney General, (telephone #410-537-3040) on **September 22, 2016**. A written copy of the approval is on file at this agency.

Name of Authorized Officer

Benjamin H. Grumbles

Title

Secretary of the Environment

Telephone No.

410-537-4187

Date **[DATE OF SIGN-OFF]**

Title 26
DEPARTMENT OF THE ENVIRONMENT

Subtitle 08 Water Pollution

29.08.07 Underground Injection Control

Authority: Environment Article, §§7-204(a), 7-208, 9-313(a), and 9-314(b)(3) et seq., Annotated Code of Maryland

Notice of Proposed Action

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The Secretary of the Environment proposes to amend Regulation **.04** under **COMAR 26.08.07 Underground Injection Control**.

Statement of Purpose

The purpose of this action is to prohibit the construction of a Class II underground injection well in Maryland.

Comparison to Federal Standards

(Check one option)

There is no corresponding federal standard to this proposed action.

or

There is a corresponding federal standard to this proposed action, but the proposed action is not more restrictive or stringent.

or

In compliance with Executive Order 01.01.1996.03, this proposed action is more restrictive or stringent than corresponding federal standards as follows:

(1) Regulation citation and manner in which it is more restrictive than the applicable federal standard:

40 CFR Part 144 regulates various types of underground injection wells. Under 40 CFR §144.6, Class II wells are defined as wells which inject fluids:

“(1) Which are brought to the surface in connection with natural gas storage operations, or conventional oil or natural gas production and may be commingled with waste waters from gas plants which are an integral part of production operations, unless those waters are classified as a hazardous waste at the time of injection;

(2) For enhanced recovery of oil or natural gas; and

(3) For storage of hydrocarbons which are liquid at standard temperature and pressure.”

Proposed Regulation .04 is more stringent than 40 CFR Part 144, in that proposed Regulation .04 prohibits the construction of Class II wells in Maryland. The federal regulations allow construction of Class II wells, subject to permitting and other requirements.

(2) Benefit to the public health, safety or welfare, or the environment:

Disposal of wastewater from the hydraulic fracturing process (e.g. flowback and produced water) in Class II wells has been linked in several states with increased incidence of earthquakes. Prohibiting the construction of Class II wells will avoid this risk by preventing the underground injection of flowback and produced water in Maryland from in-State and out-of-State gas wells. Because Maryland currently has no Class II wells, this prohibition will completely eliminate any risk of earthquakes and groundwater contamination from underground injection of oil- and gas-related wastewater.

(3) Analysis of additional burden or cost on the regulated person:

The additional burden and cost to oil and gas companies is expected to be zero. There are currently no Class II wells in Maryland, and the construction of Class II wells in Maryland in the near future is very unlikely given Maryland’s geology and the resulting lack of suitable locations for Class II wells. Other methods of managing wastewater exist, including reuse for hydraulic fracturing with or without treatment, and treatment at a centralized treatment plant. While underground injection is the primary means of wastewater disposal elsewhere in the U.S., according to the U.S. EPA this is not the case in the Marcellus Region, where much of the wastewater is reused.

(4) Justification for the need for more restrictive standards:

(by determining that either:)

(a) The benefit from the more restrictive standard exceeds the burden or cost of the more restrictive standard on the regulated person or business;

As discussed above, the burden from the more restrictive standard is minimal or zero, and the prohibition on Class II wells has the benefit of preventing potential risks from increased earthquake activity or groundwater contamination due to underground injection.

(b) Conditions or circumstances specific or special to Maryland require that Maryland enact a more restrictive standard;

The construction of Class II wells in Maryland in the near future is very unlikely given Maryland's geology and the resulting lack of suitable locations for Class II wells. Class II wells are often located in depleted gas reservoirs. Maryland has only one such area near Accident in Garrett County; it is currently being used as a natural gas storage facility and is unavailable for construction of Class II wells.

- (c) *The applicable federal standard is not sufficient to protect the public health, safety, or welfare of Maryland citizens; or State law requires the adoption of a more restrictive standard.*

Comparison to Federal Standards

Submission and Response Form

Impact Statements (This form goes to DBED)

In accordance with Executive Order 01.01.1996.03 and memo dated July 26, 1996, the attached document is submitted to the Department of Business and Economic Development for review.

The proposal/emergency:

Is not more restrictive or stringent than corresponding federal standards.

Is stricter or more stringent than corresponding federal standards.

COMAR Codification:

Corresponding Federal Standard: 40 CFR Part 144

Discussion/Justification:

40 CFR Part 144 regulates various types of underground injection wells. Under 40 CFR §144.6, Class II wells are defined as wells which inject fluids:

“(1) Which are brought to the surface in connection with natural gas storage operations, or conventional oil or natural gas production and may be commingled with waste waters from gas plants which are an intergral part of production operations, unless those waters are classified as a hazardous waste at the time of injection;

(2) For enhanced recovery of oil or natural gas; and

(3) For storage of hydrocarbons which are liquid at standard temperature and pressure.”

Proposed Regulation .04 is more stringent than 40 CFR Part 144, in that proposed Regulation .04 prohibits the construction of Class II wells in Maryland. The federal regulations allow construction of Class II wells, subject to permitting and other requirements.

Disposal of wastewater from the hydraulic fracturing process (e.g. flowback and produced water) in Class II wells has been linked in several states with increased incidence of earthquakes. Prohibiting the construction of Class II wells will avoid this risk by preventing the

underground injection of flowback and produced water in Maryland from in-State and out-of-State gas wells. Because Maryland currently has no Class II wells, this prohibition will completely eliminate any risk of earthquakes and groundwater contamination from underground injection of oil- and gas-related wastewater.

The additional burden and cost to oil and gas companies is expected to be minimal or zero. There are currently no Class II wells in Maryland, and the construction of Class II wells in Maryland in the near future is very unlikely given Maryland's geology and the resulting lack of suitable locations for Class II wells. Other methods of managing wastewater exist, including reuse for hydraulic fracturing with or without treatment, and treatment at a centralized treatment plant. While underground injection is the primary means of wastewater disposal elsewhere in the U.S., according to the U.S. EPA this is not the case in the Marcellus Region, where much of the wastewater is reused.

The benefit of preventing potential risks from increased earthquake activity or groundwater contamination due to underground injection outweighs the minimal (or zero) burden on regulated oil and gas companies of not having the option of constructing a Class II injection well in Maryland in the future.

Estimate of Economic Impact

I. Summary of Economic Impact. There are currently no Class II wells in Maryland, and the construction of Class II wells in Maryland in the near future is very unlikely given Maryland's geology and the resulting lack of suitable locations for Class II wells. Other methods of managing wastewater from oil and gas production exist, such as reuse for hydraulic fracturing with or without treatment and treatment at a centralized treatment plant. According to the U.S. EPA, underground injection is not the primary means of managing wastewater from hydraulic fracturing in the Marcellus Region, which underlies parts of Western Maryland. Much of the wastewater in this area is reused. As a result, the proposed action is not expected to have an economic impact.

Revenue (R+/R-)

II. Types of Economic Impact.

Expenditure (E+/E-)

Magnitude

A. On issuing agency:

B. On other State agencies:

C. On local governments:

Benefit (+)	Magnitude
Cost (-)	

D. On regulated industries or trade groups:

E. On other industries or trade groups:

F. Direct and indirect effects on public:

III. Assumptions. (Identified by Impact Letter and Number from Section II.)

Economic Impact on Small Businesses

The proposed action **has minimal or no** economic impact on small businesses.

Impact on Individuals with Disabilities

The proposed action has no impact on individuals with disabilities.

Title 26 DEPARTMENT OF THE ENVIRONMENT

Subtitle 08 WATER POLLUTION

Chapter 07 Underground Injection Control

Authority: Environment Article, §§7-204(a), 7-208, 9-313(a), and 9-314(b)(3) et seq., Annotated Code of Maryland

.04 Prohibitions.

- A. As provided in COMAR 26.13.05.19, the underground injection of hazardous waste is prohibited in Maryland.
- B. *A person may not construct a Class II underground injection well in Maryland.*