

Application for Gas Exploration and Production

This application is to be used to obtain a permit to Drill and Operate a well, within the State for the purpose of Gas Exploration and Production

Submitted pursuant to

Title 14, Subtitle 104, of the Environment Article

Annotated Code of Maryland

For new well applications complete Sections 1-4

For permit renewals complete Sections 1 & 6

For permit modifications complete sections 1 & 5

A checklist of all required information to be submitted along with the completed Application can be found on pages 11 & 12.

How close is the nearest residence to the well?

- | | YES | NO | N/A |
|---|--------------------------|--------------------------|--------------------------|
| 6. Does the project comply with local zoning and land use plans? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Are other State, Federal, or local permits or approvals required?
(If yes provide copies of other permits or approvals) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

8. Will the drilling operation be located within?

- | | | | |
|---|--------------------------|--------------------------|--------------------------|
| Chesapeake Bay Critical Area | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2,000 feet of an existing gas well | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1,000 feet of any un-leased tract of land | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1,000 feet from any parcel of State Land | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A mineable coal seam | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| *1,000 feet of a school | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| *1,000 feet of a church or dwelling | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| *1,000 feet from a drinking water supply | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2, 000 feet from an Underground Gas Storage Reservoir | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1,000 feet from an active coal mining operation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 25 feet from wetlands? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 200 feet from any 100 year floodplain | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

*if yes, written permission from landowners is required

9. Present land uses within ¼ mile of the well: (Check all that apply)

- Rural Forest Residential Agricultural Industrial Park Lands

10. Name and Address of Surface Land Owner:

Name:

Address:

City, State, Zip:

Note: if well will be directionally drilled attach the name and address of owners for all Parcels of land drilled beneath. (A copy of the Oil/Gas lease must also be provided)

11. Name and Address of Gas owner or lessee

Name:

Address:

City, State, Zip.

Section 2. Drilling and Operating Procedures

1. Name and Address of Well Driller:

Name:

Address:

City, State Zip

2. Estimated Date drilling:

3. Estimated Completion Date:

4. Proposed total depth of well:

5. Anticipated bottom hole Geologic Formation (provide description):

6. Where and how will drill cuttings be stored during drilling operations?

7. What waste by-product(s) will be produced?

8. Describe how the wellhead will be secured to prevent unauthorized access.

9. How will the final product be stored and transported once it is produced?

10. How will the well be metered?

11. How will drinking water aquifer be protected from the drilling operation?

12. How will fresh water be identified?

13. What drilling additives will be used? Provide description of toxicity.

14. Provide casing plan with diagrams to protect fresh water. (Minimum casing must be at least 100 feet below fresh water)

15. How will blowouts from the drilling operation be prevented?

16. How will SO₂ or any gases that may have impacts to public safety be handled?

17. Will any gas flaring be done and if so how will public safety be provided?

Section 3. Reclamation Procedures:

1. How will the well site, roads, pits and tank areas be reclaimed?

2. How will any solid waste (drill cuttings) generated during drilling be disposed of?

3. If a dry hole how and when will the well be plugged?

4. Describe how the free liquid fraction and contaminated liquids will be treated or disposed of?

5. How will any containment ponds be reclaimed?

If yes please provide:

Storage Volume gallons Length Width Depth

* a MDE Dam Safety permit is required when 1) drainage area to the pond must exceed more than 640 acres; 1) the height of the pond (measured from the upstream toe to the top of dam) is greater than 20 feet; and 3) the dam must be a "low hazard" structure, the failure of which is not likely to cause loss of life or property damage. Small Pond approval will be required for impoundments not requiring Dam Safety approval.

Section 5. Permit Modification:

This section is to be used to modify an existing permit to operate a well, within the State for the purpose of gas production and storage.

1. Modification Description (check one):

- | | |
|---|--|
| <input type="checkbox"/> Recomplete a well in a different reservoir | <input type="checkbox"/> Recomplete a well to commingle production from 2 or more reservoirs |
| <input type="checkbox"/> Stimulate a zone that has been in production | <input type="checkbox"/> Deepen a well |
| <input type="checkbox"/> Skid a rig 75 feet or less | <input type="checkbox"/> Add Lateral Extension |
| <input type="checkbox"/> Other: | |

*A well completion report must be completed and submitted within 30 days following operations for: well recompletions, well stimulations, and deepening a well.

Section 6. Permit Renewal:

This section is to be used to renew a permit to operate a well, within the State for the purpose of oil or gas exploration and production and storage.

1. Has the well been drilled? If not explain why.

2. Total current affected area of well site, including access roads, and equipment storage. _____
(Acres or square footage)

Existing site conditions:

% Forest:

% Wetlands:

% Non-Vegetated.

% Agricultural.

I hereby certify that all information contained in this application is true and correct to the best of my knowledge and that any willful misrepresentation of facts will result in the suspension/revocation of this permit.

By submission of this application I hereby accept the responsibility of conducting the operation in accordance with the approved drilling and operation permit, plan maps, and any accompanying documents.

Written Name, Title.

Original Signature

Date

The following information must be submitted to for Department for review and approval prior to the issuance of the drilling and operating permit. The information, upon Departmental approval, will become a part of the permit

1. A map prepared and certified by a Maryland Registered Professional Engineer or a Maryland Registered Professional Land surveyor. The map shall include at a minimum:

- A. Vicinity Map of the tract of land to be affected
- B. Property lines & Municipality or district and county
- C. The proposed well location.
- D. The surface and bottom hole location if directional drilling is done
- E. At least two permanently established property boundary corners with bearings and distance to the proposed well.
- F. Boundaries of the leased tract or pooled unit containing the well location
- G. Boundaries of adjoining properties with name and addresses of owners
- H. Locations of all active production, abandoned, storage or injection wells within 2640 feet of the proposed well location.
- I. Any church, coal mine, school, building or occupied dwelling within 2640 feet of the proposed well.
- J. Any part of the Chesapeake Bay Critical Area, 100 year floodplain, non-tidal wetlands, tidal wetlands, streams, or other bodies of water within 200 feet of well site.
- K. Roads, railroads, or other transportation routes within one mile of the proposed well.
- L. Location of any active or underground mines within one mile of the proposed well.
- M. A legend identifying the various features on the plan.
- N. The scale shall be at 1" = 500 feet.
- O. Sediment Control Devices
- P. North Arrow
- Q. Sediment Control Details (standard details)

2. **An Environmental Assessment-** Provide a narrative that will assess the anticipated cultural and environmental impacts to the local area
3. **A certificate of liability** insurance showing personal injury and property damage liability for at least \$1,000,000.00 for each person and \$ 5,000,000.00 for each occurrence of accident.
4. **A performance bond** in an amount not to exceed \$100,000 per well or \$500,000 as a blanket bond.
5. A copy of the **gas** lease with the mineral owner(s)
6. **Certification of notification**
7. A copy of the **Zoning approval**. (If applicable)
8. A sediment **and erosion control and storm water management plan** (if required) approved by the local Soil Conservation District
9. **A reclamation map** for restoring the well site, pit, and tank areas, and showing existing, proposed, and final contours (1"= 50 ft. scale)
10. **A spill prevention, control and countermeasures plan.**
11. **A fire prevention and control plan** (must include local fire & rescue contacts).
12. For wells in which hydro fracturing will be performed; authorization of Waste Disposal and Water Appropriation must be provided to the Department.