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.
Section 1. Applicant Information

1. Applicants Name:

2. Applicants Address:

3. Workers Compensation Number:

4. Is the applicant a Corporation or Limited Partnership    □yes    □No
   (If yes, list date of registration with the Maryland Department of Assessments and Taxation: )

Permit Transaction Type:

□Original Permit      □Permit Modification      □Permit Renewal

Complete Sections 1 & 5          Complete Sections 1 & 6

Application Type

□Natural Gas      □Gas Storage      □Coal Bed Methane

□Other

Well Location Information:

1. Well Name:
2. County:

3. Location of Well, (directions from nearest town)

4. Tax Map & Parcel Number: Map#      Parcel#

5. Latitude & Longitude:

GPS location in Maryland State Plane NAD 83 (meters) coordinates:

Surface Elevation of Well:

Total affected area of site. (Include access roads, equipment storage)      acres
How close is the nearest residence to the well?

6. Does the project comply with local zoning and land use plans?  
   [ ] YES  [ ] NO  [ ] N/A

7. Are other State, Federal, or local permits or approvals required?  
   (If yes provide copies of other permits or approvals)  
   [ ] YES  [ ] NO  [ ] N/A

8. Will the drilling operation be located within?
   - Chesapeake Bay Critical Area
   - 2,000 feet of an existing gas well
   - 1,000 feet of any un-leased tract of land
   - 1,000 feet from any parcel of State Land
   - A mineable coal seam
   - *1,000 feet of a school
   - *1,000 feet of a church or dwelling
   - *1,000 feet from a drinking water supply
   - 2,000 feet from an Underground Gas Storage Reservoir
   - 1,000 feet from an active coal mining operation
   - 25 feet from wetlands?
   - 200 feet from any 100 year floodplain

   *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?
Section 4. Marcellus Shale Wells/Hydro Fracturing Addendum:

1. Well Type  
   - [ ] Vertical Well  
   - [ ] Vertical Well with Horizontal laterals.
   No. of Laterals? __________

2. What will be the length of the laterals from the vertical borehole? (Must show on well location map.)
   *Please list the name and address of all surface owners above the location of a proposed lateral. (Attachment A.)
   *Indicate whether any of these parcels are currently in Agricultural Preservation. (or any other easement)

3. Water Withdrawals:
   - Enter the estimated amount of water to be used for drilling: gallons/day
   - Enter the estimated amount of water to be used for Hydro-fracing: gallons/day

4. Identify the source and location of withdrawal point of water

*For surface and groundwater withdrawals in Maryland, application must be made for a Water Appropriation and Use permit. Applications are available at: http://www.mde.state.md.us/Permits/WaterManagementPermits/water_permits/index.asp

6. Water Treatment Disposal:
   Name the location of the treatment facility(s) where all wastewater, including drilling and fracing water will be taken for disposal? (Provide verification of approval).

7. If wastewater is not taken to a Wastewater Treatment Facility how will it be disposed of?

8. Pits, Impoundments and Dams
   Will a centralized pit or impoundment be used to contain fresh water?  [ ] Yes  [ ] No
   Will a pit or impoundment be used to contain fresh water?  [ ] Yes  [ ] No
   Will a pit or impoundment be used to contain Frac-Throwback  [ ] Yes  [ ] No
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):

☐ Recomplete a well in a different reservoir  ☐ Recomplete a well to commingle production from 2 or more reservoirs
☐ Stimulate a zone that has been in production  ☐ Deepen a well
☐ Skid a rig 75 feet or less  ☐ Add Lateral Extension
☐ 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.
3. How is the well metered?

4. How is the product stored or transported once it is produced?

5. How is any waste by-product stored and transported once it’s produced? List the name and location number of Disposal Facility.

6. If the well is not anticipated to remain active for the renewal period, how and when will it be plugged?

7. Provide any testing results to show any leaks or structural integrity of the well performed in the last five years.
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 the 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.

*This Notice is provided pursuant to § 10-624 of the State Government Article of the Maryland Code. The personal information requested on this form is intended to be used in processing your application. Failure to provide the information requested may result in your application not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment ("MDE") is a public agency and subject to the Maryland Public Information Act (Md. Code Ann., State Gov’t §§ 10-601, et seq.). This form may be made available on the Internet via MDE’s website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or State law.*