Land and Materials Administration • Minerals, Oil & Gas Division 1800 Washington Blvd. • Suite 655 • Baltimore Maryland 21230 (410) 537-3557 • 1-800-633-6101 • https://mde.maryland.gov

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.

MDE USE ONLY	MDE 8-Digit Watershed Code:
Well Permit #	
USGS Quad Name:	Bond #
OSGS Quad Marrie.	Bonu #
API # -	
Section 1. Appli	cant Information
1. Applicants Name:	
2. Applicants Address:	
11	
3. Workers Compensation Number:	
5. Workers Compensation Number.	
4. Is the applicant a Corporation or Limited Partners	<u> </u>
(If yes, list date of registration with the Maryland De	partment of Assessments and Taxation:)
Permit Transaction Type:	
Original Permit Permit Modi	fication Permit Renewal
Complete Section	<u>—</u>
Application Type	D 134.4
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:	
CDC1 (' ' M 1 1C() DI NAD 02 ()	, r
GPS location in Maryland State Plane NAD 83 (meter	rs) coordinates:
Surface Elevation of Well:	
Total affected area of site. (Include access roads, equ	ipment storage) acres
Total affected area of site. (metade access foads, equ	iphient storage) acres

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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)			
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 Expression of the well: (Check all that apply Rural Rural Residential Rural Ru		Park Lands	
10. Name and Address of Surface Land Owner: Name:			
Address:			
City, State, Zip:			

Form Number MDE/LMA/PER.045 Revision Date 08/16/2021 TTY Users 1-800-735-2258

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 fee below fresh water)
15. How will blowouts from the drilling operation be prevented?

. How will SO ₂ or any gases that may have impacts to public safety be handled?	
. Will any gas flaring be done and if so how will public safety be provided?	
Section 3. Reclamation Procedures:	
How will the well site, roads, pits and tank areas be reclaimed?	
How will any solid waste (drill cuttings) generated during drilling be disposed of?	
If a dry hole how and when will the well be plugged?	
and the state of t	
Describe how the free liquid fraction and contaminated liquids will be treated or disposed or	of?
How will any containment ponds be reclaimed?	

If yes please provide: Storage Volume	gallons	Length	Width	Depth	
the pond (measured from	the upstream toe to nich is not likely to	the top of occurrence cause loss	dam) is greater than	nust exceed more than 640 acres; 1) the 20 feet; and 3) the dam must be a "low amage. Small Pond approval will be red	hazard"
			Permit Modific		
This section is to be used production and storage.	to modify an exi	sting permi	t to operate a well,	within the State for the purpose of ga	as
1. Modification Descripti	on (check one):				
Recomplete a well in a	different reservoir	. [Recomplete a well	to commingle production from 2 or mo	re reservoirs
Stimulate a zone that ha	as been in product	ion [Deepen a well		
☐Skid a rig 75 feet or les	S		Add Lateral Extens	ion	
Other:					
*A well completion report stimulations, and deepening		ed and subm	itted within 30 days	following operations for: well recomple	etions, well
This section is to be used and production and store	_		5. Permit Reneve a well, within the	wal: State for the purpose of oil or gas ex	ploration
1. Has the well been Yes No	drilled?	If not exp	lain why.		
2. Total current affec (Acres or square footage		site, inclu	uding access roac	ls, and equipment storage.	
Existing site condition	ns:				
% 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.

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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

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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. At least two permanently established property boundary corners with bearings and distance to the proposed well.
- E. Boundaries of the leased tract or pooled unit containing the well location
- F. Boundaries of adjoining properties with name and addresses of owners
- G. Locations of all active production, abandoned, storage or injection wells within 2640 feet of the proposed well location.
- H. Any church, coal mine, school, building or occupied dwelling within 2640 feet of the proposed well.
- I. 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.
- J. Roads, railroads, or other transportation routes within one mile of the proposed well.
- K. Location of any active or underground mines within one mile of the proposed well.
- L. A legend identifying the various features on the plan.
- M. The scale shall be at 1" = 500 feet.
- N. Sediment Control Devices
- O. North Arrow
- P. 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).