STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS COALBED METHANE PERMIT APPLICATION

1) Well	Operato	r:	2) Well Name		
3) Operator's Well Number 4) Elevation			4) Elevation		
5) Propo	•	get Formation(s), Depths and Thickness:			
6) Propo	sed Tota	al Depth: feet			
7) Appro	oximate	Fresh Water Strata Depths:			
8) Appro	oximate	Salt Water Depths:			
9) Appro	oximate	Coal Seam Depths:			
10)	Does	Land Contain Coal Seams Tributary to Act	tive Mines? Yes/ No/		
11)	(a)	Proposed Well Work:			
(b)	If Stimulation Proposed, Describe Means to be Used to Stimulate Well:				
12)	(a)		avert an existing well (as defined in W. Va. Code a coalbed methane well? Yes/ No/		
(b)	If yes, please attach to this Application a list of all formations from which production is anticipated and a description of any plans to plug any portion of the well.				
13)	(a)	• •	be completed in some but not all coal seams for at hole proposed to be converted to a well)?		
(b)	If yes, please attach to this Application a plan and design for the well which will protect all workable coal seams which will be penetrated by the well.				
14)	(a)	Does the proposed operation include hor Yes/ No/	rizontal drilling of a well commenced on the surface?		

(b) If yes, please attach to this Application a description of such operations, including both the vertical and horizontal alignment and extent of the well from the surface to total depth.

TYPE

SPECIFICATIONS

CEMENT

CASING AND TUBING PROGRAM

FOOTAGE INTERVALS

	Size	Grade	Weight per ft.	For Drilling	Left in Well	Fill-up (cu. ft.)
Conductor						
Fresh Water						
Coal						
Intermediate						
Production						
Tubing						
Liners						
PACKERS:						
FRESH WATER DEPTH						

Coal Seam Name	Тор	Bottom	Target (yes or no)

Page 3 of
WW-5A (8/1998)
Owner, Operator and Lessee Copy

Name _____

Address _____

1) Date:
2) Operator's well number
3) API Well No: 47
State County Permi

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A COALBED METHANE WELL PERMIT

-)	Surface Owner(s):		(d) Natural Gas Owner(s):
,	(a) Name		Name
	Address		Address
	(b) Name		Name
	Address		Address
	(c) Name		(e) Natural Gas Lessee(s):
	Address		Name
			Address
5)	Other Parties Noticed:		
	(a) Coal Owner(s):		Name
	Name		Address
	Address		
	Name		(f) Natural Gas Operator(s):
	Address		Name
			Address
	(b) Coal Lessee(s):		
	Name		Name
	Address		Address
	Name	6)	Inspector
	Address		Address
			Telephone
	(c) Coal Operator(s):	Oil and	Gas Privacy Notice
	NameAddress	The Off	fice of Oil and Gas processes your personal information, and phone number, as a part of our regulatory duties. tion may be disclosed to other State agencies or third

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyoffier@wv.gov.

Page 4 of	1) Date:
WW-5A (8/1998)	2) Operator's well number
Owner, Operator and Lessee Copy	
	3) API Well No: 47
	State County Permit
TO THE PERSONS NAMED ABO	VE - TAKE NOTICE THAT:
The well operator named below is applying for a per operate, deepen or stimulate a coalbed methane well, to well commenced from the surface or to convert an existing	conduct horizontal drilling of a coalbed methane
Well Operator:	
Ву:	
Its:	
Well Operator Designated Agent: Name:Address:	
Telephone:	
 (7) The well operator certifies that pursuant to W. Va. Coal location plat, erosion and sediment control plan have be Personal Service (affidavit attached) Certified Mail (return receipt requested) 	
(8) The well operator certifies that, as required by W. V. has been or within ten days of filing will be published in which the proposed Coalbed Methane well is to be located Virginia Department of Environmental Protection, Office Affidavit of Publication (attached) Affidavit of Publication (forthcoming)	a newspaper of general circulation in the county in ed all information required by statute and the West
Subscribed and sworn before me this day of _	
My commission expires	

Page 5 of	1) Date:		
WW-5A (8/1998)	2) Operator's well number		
Owner, Operator and Lessee Copy			
	3) API Well No: 47-		

INSTRUCTIONS TO PERSONS NAMED ABOVE*

YOU ARE NOT REQUIRED TO FILE ANY COMMENT BUT MAY BE ENTITLED TO DO SO. HOWEVER, IF YOU WISH TO FILE COMMENTS OR OBTAIN ADDITIONAL INFORMATION, PLEASE CONTACT:

Chief, Office of Oil and Gas OR
Department of Environmental Protection
601 57th St., SE
Charleston, West Virginia 25304
(304) 926-0450

District Oil and Gas Inspector (Name and address listed Page 1)

State County Permit

<u>Time limits and methods for filing comments</u>. The law provides that certain parties are to receive copies of an application for a coalbed methane well permit prior to the filing of the application. You have **FIFTEEN** (15) **DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Office of Oil and Gas within that time. You may call the Office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling.

Comments must be in writing. Your comments must include your name, address, and telephone number (if you have a telephone), the well operator's name and well number, and the approximate location of the proposed well site, including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

<u>List of Water Testing Laboratories</u>. The Office of Oil and Gas maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Office to obtain a copy.

<u>Permits</u>. Permits for coalbed methane wells may be granted or derived as provided in Article 21 of Chapter 22 of the West Virginia Code. The Chief of the Office of Oil and Gas has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons;
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies; or
- 5) The Applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation. You may request additional information and/or request notice of the permit decision from the Chief.

^{*}If you believe you were provided notice of this application in error, please contact the well operator listed above and the Office of Oil and Gas at (304) 926-0450 immediately.

Page 6 of	1) Date:
WW-5A (8/1998)	2) Operator's well number
Owner, Operator and Lessee Copy	
	3) API Well No: 47
	State County Permit
VOLUNTADV STAT	TEMENT OF NO OBJECTION
	CE OF CBM WELL PERMIT APPLICATION
DITERSON RECEIVING NOTIC	E OF COM WELL I ERVIII ATTERCATION
therein.	ection to the planned work described in these materials, and based on those materials.
and I have no objection to a permit being iss	ded based on those materials.
I further state that I am aware that	t the proposed well is within 1,600 feet of another CBM
well, and I have no objection to this spacing.	
FOR EXECUTION BY A NATURAL PERSON	FOR EXECUTION BY A CORPORATION,
ETC. Date	Company
Date	Name
Signature	By

Its

Signature

Date

Date

IMPORTANT: If you have been notified by the well operator of the proposed coalbed methane well and you signed the <u>Voluntary Statement of No Objection</u> to the planned work described in these materials, then the permit may be issued at any time. If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Office of Oil and Gas.

CONSENT AND AGREEMENT TO DRILL A HORIZONTAL DEGASIFICATION BOREHOLE

We, the undersigned	of coal	seams located on certain
tracts or parcels of land in	District of	County, State of
West Virginia, have received a "notice and	nd Application to Drill" a Horiz	ontal Degasification
Borehole No in which stimulat	ion of thec	oal seam is proposed do
hereby consent and agree to stimulation of	of the coal seam pursuant to We	st Virginia Code § 22-21-7.
	Owner Name:	
	Ву:	
	Its:	
	Date:	
STATE OF WEST VIRGINIA		
COUNTY OF, to		
	, a Notary Publ	
hereby certify that		
for, 20, has this day in n		
to be the act and deed of said corporation		owledged the said witting
Given under my hand and office	cial seal this the day of _	, 20
My commission expires		
	·	
	Notary Public	

{SEAL}

CONSENT AND AGREEMENT TO STIMULATE A COALBED METHANE WELL

We, the undersign	ed coal owner and/or operator of coal seams located	on certain tracts or parcels of
	County, State of West Virginia have	
	a Coalbed Methane Well No	
	by consent and agree to stimulation of the coal seam I	pursuant to West Virginia Co
21-7. We also have no	problem with the 1600-foot spacing requirement.	
Ow	ner/Operator Name	
	By	
	Its	
	Date	
	TIRGINIA, to-wit:, a Notary Public	c of said County, do
	, who si	
	bearing	
	, has this day in my said County, before me, ackno	
to be the act and deed		writing
Given und	er my hand and official seal this the day of	, 20
My commi	ission expires	
	·	
	Notary Public	

{SEAL}

API Number	47	
Operator's W	ell No	

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name	OP Code
Watershed (HUC 10)	Quadrangle
Do you anticipate using more than 5,000 bbls of water to comp	plete the proposed well work? Yes No
Will a pit be used? Yes No	
If so, please describe anticipated pit waste:	
Will a synthetic liner be used in the pit? Yes	No If so, what ml.?
Proposed Disposal Method For Treated Pit Wastes:	
Reuse (at API NumberOff Site Disposal (Supply form W	it Number)
Will closed loop systembe used? If so, describe:	
Drilling medium anticipated for this well (vertical and horizon	tal)? Air, freshwater, oil based, etc.
-If oil based, what type? Synthetic, petroleum, etc	
Additives to be used in drilling medium?	
Drill cuttings disposal method? Leave in pit, landfill, removed	l offsite, etc
-If left in pit and plan to solidify what medium will be	e used? (cement, lime, sawdust)
-Landfill or offsite name/permit number?	
	Gas of any load of drill cuttings or associated waste rejected at any d within 24 hours of rejection and the permittee shall also disclose
on April 1, 2016, by the Office of Oil and Gas of the West Vi provisions of the permit are enforceable by law. Violations of or regulation can lead to enforcement action. I certify under penalty of law that I have personall application form and all attachments thereto and that, based on	conditions of the GENERAL WATER POLLUTION PERMIT issued reginia Department of Environmental Protection. I understand that the any term or condition of the general permit and/or other applicable law by examined and am familiar with the information submitted on this amy inquiry of those individuals immediately responsible for obtaining ate, and complete. I am aware that there are significant penalties for or imprisonment.
Company Official Signature	
Company Official (Typed Name)	
Company Official Title	
Subscribed and sworn before me thisday of	, 20
	Notary Public

My commission expires_____

Operator's	Well No.	
------------	----------	--

osed Revegetation Trea	tment: Acres Disturbed	Preveg etation pl	i
Lime	Tons/acre or to correct to pH _		
Fertilizer type			
Fertilizer amount_	lbs/:	acre	
Mulch	Tons/aci	re	
	Seed N	<u>Mixtures</u>	
Te	emporary	Perma	nent
Seed Type	lbs/acre	Seed Type	lbs/acre
ch: s(s) of road, location, pided). If water from the V), and area in acres, of	it and proposed area for land application pit will be land applied, provide wate the land application area.	on (unless engineered plans includ	ling this info have been
ch: s(s) of road, location, prided). If water from the V), and area in acres, of	it and proposed area for land application pit will be land applied, provide wate	on (unless engineered plans includ	ling this info have been
ch: s(s) of road, location, prided). If water from the 7), and area in acres, of occopied section of involutions.	it and proposed area for land application pit will be land applied, provide wate the land application area.	on (unless engineered plans includer volume, include dimensions (L,	ding this info have been W, D) of the pit, and dimen
Sh: s(s) of road, location, pided). If water from the (7), and area in acres, of ocopied section of involutional and the complete section of the compl	it and proposed area for land application pit will be land applied, provide water the land application area. Ived 7.5' topographic sheet.	on (unless engineered plans includer volume, include dimensions (L,	ding this info have been W, D) of the pit, and dimen
ch: (s) of road, location, pided). If water from the (r), and area in acres, of ocopied section of involved by:	it and proposed area for land application pit will be land applied, provide wate the land application area. Ived 7.5' topographic sheet.	on (unless engineered plans includer volume, include dimensions (L,	ding this info have been W, D) of the pit, and dimen
ch: s(s) of road, location, pided). If water from the 7, and area in acres, of ocopied section of involved by:	it and proposed area for land application pit will be land applied, provide wate the land application area. Ived 7.5' topographic sheet.	on (unless engineered plans includer volume, include dimensions (L,	ding this info have been W, D) of the pit, and dimen
Sh: s(s) of road, location, pided). If water from the (7), and area in acres, of ocopied section of involutional and the complete section of the compl	it and proposed area for land application pit will be land applied, provide wate the land application area. Ived 7.5' topographic sheet.	on (unless engineered plans includer volume, include dimensions (L,	ding this info have been W, D) of the pit, and dimen
Sh: s(s) of road, location, pided). If water from the (7), and area in acres, of ocopied section of involutional and the complete section of the compl	it and proposed area for land application pit will be land applied, provide wate the land application area. Ived 7.5' topographic sheet.	on (unless engineered plans includer volume, include dimensions (L,	ding this info have been W, D) of the pit, and dimen
Sh: s(s) of road, location, pided). If water from the (7), and area in acres, of ocopied section of involutional and the complete section of the compl	it and proposed area for land application pit will be land applied, provide wate the land application area. Ived 7.5' topographic sheet.	on (unless engineered plans includer volume, include dimensions (L,	ding this info have been W, D) of the pit, and dimen
ch: s(s) of road, location, prided). If water from the V), and area in acres, of ocopied section of involutional involutions. Approved by:	it and proposed area for land application pit will be land applied, provide wate the land application area. Ived 7.5' topographic sheet.	on (unless engineered plans includer volume, include dimensions (L,	ding this info have been W, D) of the pit, and dimen
ch: s(s) of road, location, prided). If water from the V), and area in acres, of ocopied section of involutional involutions. Approved by:	it and proposed area for land application pit will be land applied, provide wate the land application area. Ived 7.5' topographic sheet.	on (unless engineered plans includer volume, include dimensions (L,	ding this info have been W, D) of the pit, and dimen
ch: s(s) of road, location, prided). If water from the V), and area in acres, of ocopied section of involutional ments:	it and proposed area for land application pit will be land applied, provide wate the land application area. Ived 7.5' topographic sheet.	on (unless engineered plans includer volume, include dimensions (L,	ding this info have been W, D) of the pit, and dimer

	Page	 of	
API Number 4	7	 	
Operator's Wel	l No		

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS GROUNDWATER PROTECTION PLAN

Op	perator Name:
W	atershed (HUC 10): Quad:
Fa	rm Name:
1.	List the procedures used for the treatment and discharge of fluids. Include a list of all operations that could contaminate the groundwater.
2.	Describe procedures and equipment used to protect groundwater quality from the list of potential contaminant sources above.
3.	List the closest water body, distance to closest water body, and distance from closest Well Head Protection Area to the discharge area.
4.	Summarize all activities at your facility that are already regulated for groundwater protection.

5. Discuss any existing groundwater quality data for your facility or an adjacent property.

WW-9- GPP Rev. 5/16	Page of API Number 47 Operator's Well No
6. Provide a statement that no waste material wil	l be used for deicing or fill material on the property.
7. Describe the groundwater protection instruct provide direction on how to prevent groundwater	tion and training to be provided to the employees. Job procedures shall ater contamination.
Provide provisions and frequency for inspecti	ions of all GPP elements and equipment.
Signature:	
Date:	-

WW-71CBM (Rev. 5/98)

COALBED METHANE WELL WORK PERMIT APPLICATION NOTICE BY PUBLICATION

Notice is hereby given:

Pursuant to West Virginia Code 22-21-9, notice is hereby given that the undersigned well operator-applicant proposes to file a Notice of an Application for a Coalbed Methane Well Permit, a plat or map showing the well location, and (unless the application is to plug a well) a Construction and Reclamation Plan with the Chief of the Office of Oil and Gas of the West Virginia Department of Environmental Protection, with respect to a well on the surface of a tract of land describe

describ	ed as follows:	
	Acres	
	Watershed	
	District	_
	County	
	Public road access	-
	Generally used farm name	-
	The well work for which a permit is sought is generally described as follows:	
This pu	blication may be the only notice that surface, gas, coal; and coalbed methane or	wners of record will receive.
roads of provide within	Pursuant to West Virginia Code 22-21-10, (1) The owners of record of the methane well is to be located; (2) The owners of record of the surface of a or other land disturbance; (3) Each coal owner and each coal operator (i) frow d for in 22-21-7 is required, or (ii) whose coal seam will be penetrated by the perseven hundred fifty feet of any portion of the well bore; and (4) Each owner and ral gas surrounding the well bore and existing in formations above the top	my tract which is to be utilized for m whom a consent and agreement roposed coalbed methane well or is I lessee of record and each operator

coalbed roads o provide within of natu "Onondaga Group" or at a depth less than six thousand feet, whichever is shallower, may file comments with the chief as to the location or construction of the applicant's proposed well within fifteen days after the application is filed with the chief.

Pursuant to West Virginia Code 22-21-11 the owner or operator of any coal seam whose interests may be adversely affected by a coalbed methane well may, within fifteen days after the application is filed with the chief, file objections in writing to such proposed drilling with the chief, setting out the grounds on which such objections are based.

Copies of the Notice and Application and accompanying documents may be obtained from the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, 601 57th St., SE, Charleston, WV 25304 (Telephone (304)926-0450).

WELL OPERATOR-APPLICANT	
ADDRESS	
TELEPHONE	
TELEFHONE	

WW-71CBM-U (Rev. 5/98)

COALBED METHANE UNIT APPLICATION NOTICE BY PUBLICATION

TO THE PERSON(S) IDENTIFIED AS FOLLOWS:
[INSERT THE NAME(S) OF THOSE PERSON NOT LOCATED AND REQUIRED TO BE NOTICED AS REQUIRED BY CODE 22-21-16]
Pursuant to Regulation 34-1-3.1.e, notice of conference and hearing is hereby given that the undersigne
well operator-applicant proposes to file a Notice of an Application for a Coalbed Methane Well Unit with the
Coalbed Methane Review Board (CBMRB) of the West Virginia Department of Environmental Protection with
respect to a well on the surface of a tracts of land described as follows:
Agras
Acres
Watershed
District
County
Public road access Generally used farm name(s)
Generally used farm name(s)
This publication may be the only notice that surface, gas, coal; and coalbed methane owners of record will receive. This applicant is requesting the CBMRB issue an order establishing a unit and pooling all the rights, interests, and estates of every individual or entity having an interest in the coalbed methane underlying the tracts in the unit, whether known or unknown.
A conference and hearing is scheduled for: [Insert date/time given by the board]
Conference Date:
Time:
Hearing Date:
Time
Place:
Copies of the Notice and Application and accompanying documents may be obtained from the Coalbe Methane Review Board of the West Virginia Department of Environmental Protection, Office of Oil and Ga 601 57 th St., SE, Charleston WV 25304 Telephone: (304) 926-0450.
WELL OPERATOR-APPLICANT
ADDRESS
TELEPHONE

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West Virginia Department of Environmental Protection Office of Oil and Gas

NOTICE TO SURFACE OWNERS

The well operator named below is preparing to file for a permit from the state to drill a new well. Before a well work permit can be filed with the Chief of the Office of Oil and Gas, the well operator is required to have given notice of the right to request water well or spring analytical testing. This notice shall be given to the owners or occupants of land which have a water well or spring being utilized for human consumption, domestic animals, or other general use and which is located within 1000 feet of the proposed well site.

With this form, the operator is giving you notice of your right to request analytical testing. The operator is required to sample and analyze the water wells or springs of all owners or occupants who request it. Therefore, if you wish to have your water well or spring tested, contact the operator named below.

All sampling shall be completed prior to drilling. Within thirty (30) days of the receipt of such sample analyses the operator shall submit the results to the Chief of the Office of Oil and Gas and to the owners or occupants who may have requested them.

If no water well or spring is located within 1000 feet, the Chief may require the operator to sample and analyze water from a water well or spring within 2000 feet of the proposed well site.

Be advised, you have the right to sample and analyze any water supply at your own expense.

The laboratory used by the operator to analyze the samples will be approved by the Chief. The operator named below has decided to use the following laboratory to analyze the water samples:

Contractor Name Well operator's priv	ate laboratory		
Well Operator _ Address			
Telephone			

FOR OPERATOR'S USE ONLY: Below, or on an attached page, list those persons which were given this notice. Place an asterisk beside the one(s) that contacted you and requested sampling and analyses. If there were no requests made, indicate by underling which one you have selected to sample and analyze. If there are no water wells or springs within 1000 feet of the proposed site please indicate such.

COAL OPERATOR, OWNER, OR LESSEE WAIVER

perator Operator's Well Number		
INSTRUCTIONS TO COAL OPERATOR, OWNER, OR LESSEE		
To the coal operator, owner, or lessee named on page WW2-A. You are hereby notified that any objection you wish to make or are required to make by WV Code 22-6-15, 16 or 17, must be filed with the Chief of the Office of Oil and Gas within fifteen (15) days after the receipt of this application by the Office. Mail objections to:		
Chief, Office of Oil and Gas Department of Environmental Protection 601 57 th St. SE Charleston, WV 25304 (304) 926-0499 extension 1654		
WAIVER		
The undersigned coal operator/ owner/ lessee/ of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.		
FOR EXECUTION BY A NATURAL PERSON	FOF	R EXECUTION BY A CORPORATION, ETC.
Date	Company Name	
Signature	By Its	Date
		Signature Date