West Virginia Office of Miners' Health, Safety, and Training

Bill Tucker, Administrator

Monte Hieb, Chief Engineer

# ACCIDENT PREVENTION WITH ACCURATE WELL LOCATIONS

### 500-ft Notice

## 200-ft Notice

## A. MINING WITHIN 500 FEET OF AN OIL AND GAS WELL.

The mine operator should submit three copies of Form OG-44 (Notice by Coal Operator of Intention to Extend Workings Withing 500 Feet of a Well) to the Office of Miners' Health, Safety and Training and forward one copy to the oil and gas operator by certified mail, return receipt requested.

Upon receipt, the agency will return to the mine operator a permit to allow mining as projected within the 500 foot radius. (See WV code 22A-2-75(a))

Mining must be conducted in accordance with the map projections approved by the agency. Revisions may be made by simply filing a revised map prior to conducting mining.

#### WV Code 22A-2-75(a)

(a) Before a coal operator conducts underground mining operations within five hundred feet of any well, including the driving of an entry or passageway, or the removal of coal or other material, the coal operator shall file with the Office of Miners' Health, Safety and Training and forward to the well operator by certified mail, return receipt requested, its mining maps and plans (which it is required to prepare, file and update to and with the regulatory authority) for the area within five hundred feet of the well, together with a notice, on a form furnished by the director, informing them that the mining maps and plans are being filed or mailed pursuant to the requirements of this section.

Once these mining maps and plans are filed with the office, the coal operator may proceed with its underground mining operations in the manner and as projected on such plans or maps, but shall not remove, without the consent of the director, any coal or other material or cut any passageway nearer than two hundred feet of any completed well or well that is being drilled. The coal operator shall, at least every six months while mining within the five hundred foot area, update its mining maps and plans and file the same with the director and the well operator.

## B. MINING WITHIN 200 FEET OF AN OIL AND GAS WELL. (SEE WV CODE 22A-2-75(b))

The mine operator should submit three copies of Form OG-45 (Coal Operator's Petition to Operate Within 200 Feet or to Mine Through a Well) to the Office of Miners' Health, Safety and Training and forward one copy to the well operator by certified mail, return receipt requested. The agency will hold the permit application for ten







days in anticipation of any potential request for hearing from the well operator. Should no request for hearing be made or if the well operator files a letter stating no objection to the proposed mining operations, the permit will then be issued. The application must note exactly how close the mining will take place in the vicinity of the well.

The agency has established general guidelines for safe mining around wells. They are as follows:

- Active Wells: Maximum = 100' radius; Minimum = 50' radius
   Tangent 8 degrees x overburden = distance to nearest mining.
- Abandoned wells: Maximum = 100' radius.
   Tangent 4 degrees x overburden + 10' = distance to nearest mining.
- 3. Well plugged to mine through: Maximum = 100' radius. No Spacing requirements. Refer to WV Code 22-6-24(d)(3).
- 4. Barrier pillar dimensions shall be determined in accordance with attachment.

Mining within the 200 foot radius must be done strictly in accordance with the map approved by the agency.

Revisions to permits for any changes between 150 and 200 feet of the well will require that a new map be filed showing the changes along with a copy of the original permit.

Revisions to permits within 150 feet of the well which are minor and do not affect the barrier pillar require that a new permit be filed and issued. A letter explaining the changes along with a copy of the original permit should also be submitted. The permits will require little technical review and will be issued without delay.

#### WV Code 22A-2-75(b)

(b) Application may be made at any time to the director by a coal operator for leave to conduct underground mining operations within two hundred feet of any well or to mine through any well, by petition, duly verified, showing the location of the well, the workings adjacent to the well and the mining operations contemplated within two hundred feet of the well or through such well, and praying the approval of the same by the director and naming the well operator as a respondent. The coal

Max. tan 8° \* Depth

Max. tan 4° \* Depth

To mine through

If well has not been plugged to MSHA standards it cannot be mined through.

Active

Abandoned

Plugged

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# Minimum Standards



1) As-built surface location of well-head is within 10-ft of permitted location

 $\Theta$  = 8° (for active wells), 4° (for abandoned wells)

2) Hole is drilled vertically through the "lowest minable coal bed"

LOWEST COAL BED

The MINIMUM buffer for advancing coal mines is the greater of 50<sup>1</sup>-ft. or (**D** \* Tan 8°). The law assumes holes are vertical.

<sup>1</sup> The MAXIMUM required distance is ~ 100-ft.

## **Hearing Requests**

operator shall file such petition with the director and mail a true copy to the well operator by certified mail, return receipt requested.

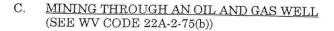
The petition shall notify the well operator that it may answer the petition within five days after receipt, and that in default of an answer the director may approve the proposed operations as requested if it be shown by the petitioner or otherwise to the satisfaction of the director that such operations are in accordance with the law and with the provisions of this article. If the well operator files an answer which requests a hearing, one shall be held within ten days of such answer and the director shall fix a time and date and give both the coal operator and well operator five days' written notice of the same by certified mail. return receipt requested. At the hearing, the well operator and coal operator, as well as the director, shall be permitted to offer any competent and relevant evidence. Upon conclusion of the hearing, the director shall grant the request of the coal operator or refuse to grant the same, or make such other decision with respect to such proposed underground operation as in its judgment is just and reasonable under all circumstances and in accordance with law and the provisions of this article: Provided, that a grant by the director of a request to mine through a well shall require an acceptable test to be conducted by the coal operator establishing that such mining through can be done safely.

If a hearing is not requested by the well operator or if the well operator gives, in writing, its consent to the coal operator to mine within closer than two hundred feet of the specified well, the director shall grant the request of the coal operator within five days after the petition's original five day answer period if the director determines that such operations are just, reasonable and in accordance with law and the provisions of this article.

The director shall docket and keep a record of all such proceedings. From any such final decision or order of the director, either the well operator or coal operator, or both, may, within ten days, appeal to the circuit court of the county in which the well subject to said petition is located. The procedure in the circuit court shall be substantially as provided in section four [29A-5-4], article five, chapter twenty-nine-A of this code, with the director being named as a respondent. From any final order or decree of the circuit court, an appeal may be taken to the supreme court of appeals as heretofore provided.

A copy of the document or documents evidencing the action of the director with respect to such petition shall promptly be filed with the chief of the office of oil and gas of the division of environmental protection.





The mine operator should submit three copies of Form OG-45 (Coal Operator's Petition to Operate Within 200 Feet or to Mine Through a Well) along with copies of the affidavit of plugging showing the plugging of the well in accordance with WV Code 22-6-24(d)(3).

#### WV Code 22-6-24(d)(3)

(3) Where a request of a coal operator or coal seam owner filed pursuant to subdivision (1) of this subsection has been granted by the director, the well shall be plugged in the manner provided in subsection (a) of this section, except that expanding cement shall be used instead of regular hydraulic cement, to a point approximately two hundred feet below the lowest workable coal bed. A one hundred foot plug of expanding cement shall then be placed in the well beginning at the point approximately tow hundred feet below the lowest workable coal bed and extending to a point approximately one hundred feet below the lowest workable coal bed. A string of casing with an outside diameter no less than four and one-half inches shall then be run into the well to a point approximately one hundred feet below the lowest workable coal bed and such string of casing shall be circulated and cemented into the surface. The casing shall then be emptied of liquid from a point approximately one hundred feet below the lowest workable coal bed to the surface, and a vent or other device approved by the director shall be installed on the top of the string of casing in such a manner that it will prevent liquids and solids from entering the well but will permit ready access to the full internal diameter of the coal protection string of casing when required. The string of casing and the vent or other device approved by the director shall extend, when finally in place, a distance of no less than thirty inches above ground level and shall be permanently marked with the well number assigned by the director. Notwithstanding the foregoing provisions of this subdivision, if under particular circumstances a different method of plugging is required to obtain the approval of another governmental agency for safe mining through said well, the director may approve such different method of plugging if the director finds the same to be as safe for mining through and otherwise adequate to prevent gas or other fluid migration from the oil and gas reservoirs as the method above specified.

(e) Any person may apply to the director for an order to clean out and replug a previously plugged well in a manner which will permit the safe mining through of such well. Such application shall be filed with the



Allows WV OMHS&T to approve alternate plugging requirements of other Regulatory Agencies.

director and shall contain the well number, a general description of the well location, the name and address of the owner of the surface land upon which the well is located, a copy of or record reference to a deed, lease or other document which entitles the applicant to enter upon the surface land, a description of the methods by which the well was previously plugged, and a description of the method by which such applicant proposes to clean out and replug the well. At the time an application is filed with the director, a copy shall be mailed by registered or certified mail to the owner or owners of the land, and the oil and gas lessee of record, if any, of the site upon which the well is located. If no objection to the replugging of the well is filed by any such landowner or oil and gas lessee within thirty days after the filing of the application, and if the director determines that the method proposed for replugging the well will permit the safe mining through of such well, the director shall grant the application by an order authorizing the replugging of the well. Such order shall specify the method by which the well shall be replugged, and copies thereof shall be mailed by certified or registered mail to the applicant and to the owner or owners of the land, and the oil and gas lessee, if any, of the site upon which such well is located. If any such landowner or oil and gas lessee objects to the replugging of the well, the director shall notify the applicant of such objection. Thereafter, the director shall schedule a hearing to consider the objection, which hearing shall be held after notice by registered or certified mail to the objectors

and the applicant. After consideration of the evidence presented at the hearing, the director shall issue an order authorizing the replugging of the well if the director determines that replugging of the well will permit the safe mining through of such well. Such order shall specify the manner in which the well shall be replugged and copies thereof shall be sent by registered or certified mail to the applicant and objectors. The director shall issue an order rejecting the application if the director determines that the proposed method for replugging the well will not

#### D. PROGRESS MAPS

permit the safe mining through of such well.

Progress maps must be filed every six months showing mining completed within the 500 foot radius. One copy only need be submitted denoting it is a progress map and with the permit number. When all mining is completed, a final progress map should be submitted stating that mining is completed and final progress map.

These progress maps are reviewed closely to ascertain permit compliance. Action will be taken for non-compliance.



WV OMHS&T maintains a database of abandoned and active mines in West Virginia



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The mine operator must submit three copies of For OG-59 (Surface Mining Agreement RE: Mining Within 200 Feet of an Oil and/or Gas Well) to the agency and forward one copy to the well operator by certified mail, return receipt requested.

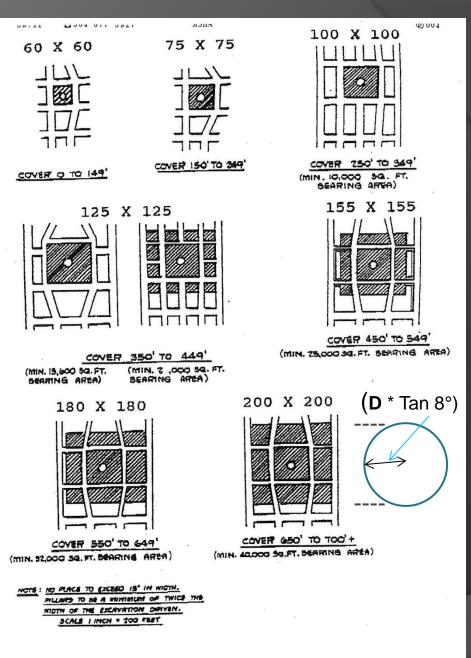
#### WV CODE 22A-2-75(c)

(c) Before a coal operator conducts surface or strip mining operations as defined in this chapter, within two hundred feet of any well, including the removal of coal and other material, the operator shall file with the director and furnish to the well operator by certified mail, return receipt requested, its mining maps and plans (which it is required to prepare, file and update to and with the regulatory authority) for the area within two hundred feet of the well, together with a notice, on a form furnished by the director, informing them that the mining maps and plans are being filed or mailed pursuant to the requirements of this section, and representing that the planned operations will not unreasonably interfere with access to or operation of the well and will not damage the well. In addition, the coal operator shall furnish the well operator with evidence that it has in force public liability insurance, with at least the minimum coverage required by article three [ §22-3-1 et seq.], chapter twenty-two of this code, and the rules promulgated thereto and thereunder.

Once these mining maps and plans are filed with the director, the coal operator may proceed with its surface or strip mining operations in the manner and as projected on such plans or maps, so long as such surface mining operations do not unreasonably interfere with access to, or operation of, the well or do not damage the well.

Public Liability Insurance See 22-3-9 (d)





EXAMPLES OF PILLAR PLANS FOR VARIOUS CAPTING OF COVER

MINERS

# STATE OF WEST VIRGINIA OFFICE OF MINERS' HEALTH, SAFETY & TRAINING #7 PLAYERS CLUB DRIVE - SUITE 2 CHARLESTON, WV 25111-1626 www.wwinessfety.org

## COAL OPERATOR'S PETITION TO OPERATE WITHIN 200 FEET OR TO MINE THROUGH A WELL

		/ Waste Disposal/ Coal Bed Methane
If Gas:	Production / Underground Storage _	/ Deep/ Shallow
Location: Elev	vation:	Watershed:
District:	County:	Quadrangle:
WELL OPERA	TOR:	AGENT:
Address:		Address:
Name of Pers	on to receive this permit:	Printed Name:
Emall Addres	6:	
The Undersign	ned coal operator hereby petitions for approv	val to do the following:
Mine	within 200 feet of said well	_
Mine	through said well when the same is properly	y plugged
	sed Gas well to be drilled within 200 feet of	
		_
	e side hereor is a copy of the map and pia n 500 feet of said well.	an of the undersigned coal operator showing its projected mine
	and Training every six months, until mining	vill file updated or new maps and plans with the Office of Miners' within 500 feet of the well had ceased or until the well has been
Operator's Re	port of Drilling, Fracturing and or Stimula	ndersigned coal operator will submit the Form WR-35, "Well sting or Physical Change" and the Form WR-38, "Affidavit of properly plugged in a manner to permit the safe mining through
Copies of this p by Code 22A-2		been sent by registered mail to the well operator, as required
	ā	Coal Operator
Ву:		Printed Name:
Title:		Email:
STATE OF COUNTY OF		
TO WIT:	-	
	racia set out both in the petition and on th	being first duly sworm, deposes and says that of the coal operator named above; that he is familiar with the he accompanying maps and plans; and that the same are true. day of
	W-6 5-40-	
	Notary Public	

	LATITUDE				
				COMOTION	
	B ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ	LEGEND PROJECTED ROOMS AND ENTRIES PROJECTED EXTRACTIONS NO SECOND MINING ROOMS AND ENTRIES PILLAR EXTRACTIONS TRACK BELT HEAD AND TAIL HITAKE AIR RETURN AIR MAIN FAN	File No.  Drawing No.  Scale  Minimum degree of accuracy, 1: (+) Denotes location of well on United States Topographic maps  Signed  R.P.E/ LL.S  Date:	PLACE SEAL HERE	
PROJEC	Coal Operator's Well NoOperator's Well No				
WV Office of MHST Mine Permit No.:  COAL OPERATOR'S PLAN TO EXTEND MINE WORKINGS WITHIN 200 FEET OF A WELL					
COAL OPERATORELEVATIONS: Surface:					
Location	MINE         SECTION         OVERBURDEN         COAL SEAM           ROOF         BOTTOM				
	STATUS: Date completed or	District	ctecres (Lease No		



REV. 07/2012

DATE:				
OPERATOR'S WELL NO.				
API WELL NO. 47 -				

## STATE OF WEST VIRGINIA OFFICE OF MINERS\* HEALTH, SAFETY & TRAINING # 7 PLAYERS CLUB DRIVE - SUITE 2 CHARLESTON, WV 25311-1525 www.wominesafety.org

## NOTICE BY COAL OPERATOR OF INTENTION TO MINE WORKINGS WITHIN 500 FEET OF A WELL

WELL OPERATOR:	AGENT:
Address:	Address:
Name of Person to receive this permit:	Printed Name:
Email Address:	
	ian of the undersigned coal operator showing its projected mine workings which the indicated well operator is in visible possession for the purpose of
mining operations in the manner and as projected on	are hereby notified that the undersigned coal operator will proceed with its said plan or maps, but will not mine or remove coal or conduct its mining consent of the Office of Miners' Health, Safety and Training.
	It will file updated or new maps ad plans with the Office of Miners' Health vithin 500 feet of the well had ceased or until the well has been mined
	Coal Operator
Ву:	Printed Name:
Title:	Email Address:
Copies with attachments to: Well Operator Designated Agent	
OG-45, "Coal Operators Petition to Operate wit	ng with any mining operations within 500 feet of a well, flies form thin 200 Feet or to Mine through a well*, such form OG-45 petition d mine workings within 500 feet of the subject well, and the form

	LATITUDE			
				томатия
	B 77777	LEGEND PROJECTED ROOMS AND ENTRIES PROJECTED EXTRACTIONS NO SECOND MINING ROOMS AND ENTRIES PILLAR EXTRACTIONS TRACK BELT MEAD AND TAIL INTAKE AIR RETURN AIR MAIN FAN	File No  Crewing No  Scale  Minimum degree of accuracy, 1:  (+) Denotes location of well on Urised States Topographic maps  Signed  R.F.E/ L.L.S	
	Latitude:			
PROJECTED DISTANCE OF NEAREST OR CLOSEST MINING TO WELL				
COAL OI Address:	COAL OPERATORELEVATIONS: Surface:			
Location	MINE			
	Farm			
	AMOUNT OF CASING IN WELL:			



DATE:	
OPERATOR'S WELL NO.	
API WELL NO. 47 -	



# STATE OF WEST VIRGINIA OFFICE OF MINERS' HEALTH, SAFETY & TRAINING #7 PLAYERS CLUB DRIVE – SUITE 2 CHARLESTON, WV 25311-1626 www.wwminesafety.org

Ι,			of
(Name	)	(Title)	_
(Coal Company Name)		(WV Permit I	Number)
(Address)		(City)	(ST) (Zip)
Agree that the	planned operations submitted in this	application will not unreasonably	interfere with access to or operation
of the well and	will not damage well No:	(API), located on	
(Farm Name)	inCo	unty.	
Signed:		Printed Name:	
Dated:			
Name of Pers	on to receive this permit:	Printed Name:	
Email Addres	ss:	_	
то wit:			
	incip set out cour in the penner un	is day of	duly sworn, deposes and says that ned above; that he is familiar with the nd plans; and that the same are true. , 20
	Notary Public		
Note: Documentation	n of public liability insurance, must acc	company this application.	

# **Important**



1) AFTER DRILLING, provide an <u>as-built</u> <u>survey</u> of each well location.



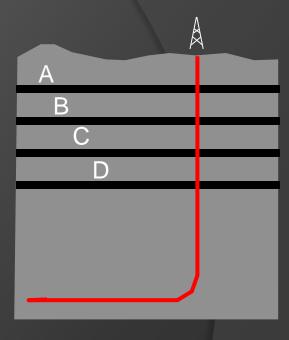
2) UPON ABANDONMENT, each well should be marked with a brass tag with its ID stamped on it, mounted permanently with steel and concrete so that when buried a metal detector can easily find.



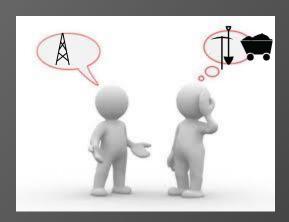
# **Important**



3) Wells must be DRILLED VERTICAL <u>until</u> <u>safely below the deepest coal bed</u> that could be conceivably mined (either now or in the future).



## 4) COMMUNICATE!



# Summation



The importance of accurate well location cannot be stressed enough. With the evolution of new technology in drilling it is hard to say how the surface location of wells will relate to the underground location of where the well will penetrate the mineable coal seams. That is of utmost concern to the Office of Miners' Health, Safety & Training. When companies submit plans to us to mine near wells and they show a location of the well on the map we expect the well to be at that location. The formulas that we use to decide on approving the applications are not only to preserve the integrity of the well so as not to damage it but also to allow for the safe mining of the coal in that area.

# Summation (cont.)



Some of the issues we have had in recent years have been with old abandoned wells whose locations were unknown and the mines have intersected those wells. There are many old wells out there which have been abandoned for years with no information available to locate them. Let's not make this mistake again. We now have the means to provide accurate information on well locations at the point that they penetrate the coal seams however this information is not always readily available. If we can prevent one incident in the future from occurring concerning inaccurate well locations it will be well worth the effort.

# Summation (cont.)



The Office of Miners' Health, Safety & Training would like to work hand in hand with the gas industry in developing an acceptable system of sharing this invaluable information so that we may continue to recover these resources while protecting our most valuable resource, the Worker.



Charleston, WV 25211-1626 Phone: 204-555-1425 Fax: 204-555-1252

Wednesday, October 16, 2013 9:43:00 AM EDT



PHOTO GALLERY MIST AT WY 150th BIRTHDAY CELEBRATION

VIEW JUNE 4, 2013 SHELTER REFIT NOTICE

MAY 25, 2013 NOTICE: EFFECTIVE JUNE 2, 2012, THE WY OFFICE OF MINERS' HEALTH, SAFETY AND TRAINING WILL ISSUE VIOLATIONS FOR NON-COMPLIANCE OF THE REQUIREMENTS IN TITLE 56, SERIES 17. (COAL DUST/ROCK DUST RATIO)

Title 35 Series 37 - Notice of Emergency Amendment to an Emergency Rule Governing Substance Abuse Screening, Standards and Procedures filed April 5, 2012 with WV Secretary

EFFECTIVE APRIL 17, 2012, THE WY OFFICE OF MINERS' HEALTH, SAFETY AND TRAINING WILL ISSUE VIOLATIONS FOR NON-COMPLIANCE OF THE REQUIREMENTS IN 22A-242(e). (EXTENSION OF CERTIFICATE OF APPROVAL).

February 5, 2012 Title 56 Series 12 - Notice of Comment Period filled with WV

Rebrusry 4, 2013

Order to Refit Approved Underground Mine Shelters and

January 22, 2012 NOTICE:

THE WY OFFICE OF MINERS' HEALTH, SAFETY AND TRAINING WILL BEGIN ISSUING THE SAFETY SENSITIVE PERSONNEL CARD ON TUESDAY, JANUARY 22, 2012.

YOU MUST VISIT ONE OF OUR OFFICES TO HAVE YOUR PHOTO MADE AND CARD ISSUED. A COMPLETED SAFETY SENSITIVE PERSONNEL FORM AND A \$10 FEE IS REQUIRED.

WV Substance Abuse Screening Requirements Substance Abuse Reporting Form Safety Sensitive Personnel List Form Safety Sensitive Personnel Form

December, 2012

2012 Independent Contractor Extension Renewal Package now

2012 WV Permit Extension Renewal Forms: Underground and Surface Mine Operations

Popular Pages

- 40 and 50 Hour Certified Training Instructors

- Forms
- Online Reporting
- USS Investigative Report

Last updated 10/11/2013 05:32 PM



State of West Virginia Earl Ray Tomblin, Governor

West Virginia Department of Commerce Keith Burdette, Cabinet Secretary

Office of Miners' Health, Safety and Training Eugene White, Director

> REMEMBER One Call Does Not Do It All

Mine Emergency Notification Phone Number: 1-866-987-2338

Mining and Industrial Tip Line 1-866-802-0875

Click on the area or county in the map below for your local Regional Office information

MHST REGIONAL OFFICES

We are now Accepting Applications for the ELECTRICAL INSTECTOR examination. Click here for application.

Do You Know a coal miner who would like to become a WI State Mine Inspector or Safety Instructor? Applications and Additional Information

The West Virginia Office of Miners' Health, Safety and Training is responsible for the enforcement of the West Virginia Mine Safety Levis and Regulations (Chapter 224

#### Online Reporting and Services

- Monthly Tonnage Reports (mines and quarries)
- Monthly Reports for Independent Contractors
- E-Pay System for Online Orders and Payments