



Billing Code: 4520-43-P

DEPARTMENT OF LABOR

Mine Safety and Health Administration

Petition for Modification of Application of Existing Mandatory Safety Standard

AGENCY: Mine Safety and Health Administration, Labor.

ACTION: Notice.

SUMMARY: This notice is a summary of a petition for modification submitted to the Mine Safety and Health Administration (MSHA) by the parties listed below.

DATES: All comments on the petition must be received by MSHA's Office of Standards, Regulations, and Variances on or before [INSERT DATE 30 DAYS FROM DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit your comments, identified by "docket number" on the subject line, by any of the following methods:

1. Email: zzMSHA-comments@dol.gov Include the docket number of the petition in the subject line of the message.

2. Facsimile: 202-693-9441.

3. Regular Mail or Hand Delivery: MSHA, Office of Standards, Regulations, and Variances, 201 12th Street South, Suite 4E401, Arlington, Virginia 22202-5452, Attention: Sheila McConnell, Director, Office of Standards, Regulations, and Variances. Persons delivering documents are required to check in at the receptionist's desk in Suite

4E401. Individuals may inspect a copy of the petition and comments during normal business hours at the address listed above.

MSHA will consider only comments postmarked by the U.S. Postal Service or proof of delivery from another delivery service such as UPS or Federal Express on or before the deadline for comments.

FOR FURTHER INFORMATION CONTACT: Sheila McConnell, Office of Standards, Regulations, and Variances at 202-693-9440 (voice), McConnell.Sheila.A@dol.gov (email), or 202-693-9441 (facsimile). [These are not toll-free numbers.]

SUPPLEMENTARY INFORMATION: Section 101(c) of the Federal Mine Safety and Health Act of 1977 and Title 30 of the Code of Federal Regulations Part 44 govern the application, processing, and disposition of petitions for modification.

I. Background

Section 101(c) of the Federal Mine Safety and Health Act of 1977 (Mine Act) allows the mine operator or representative of miners to file a petition to modify the application of any mandatory safety standard to a coal or other mine if the Secretary of Labor (Secretary) determines that:

1. An alternative method of achieving the result of such standard exists which will at all times guarantee no less than the same measure of protection afforded the miners of such mine by such standard; or
2. The application of such standard to such mine will result in a diminution of safety to the miners in such mine.

In addition, the regulations at 30 CFR 44.10 and 44.11 establish the requirements for filing petitions for modification.

II. Petition for Modification

Docket Number: M-2019-057-C.

Petitioner: Marfork Coal Company, LLC, P.O. Box 457, Whitesville, WV 25209.

Mine: Black Eagle, MSHA I.D. No. 46-09550, located in Raleigh County, West Virginia.

Regulation Affected: 30 CFR 75.1700 (Oil and gas wells).

Modification Request: The petitioner requests a modification of the existing standard, 30 CFR 75.1700, as it relates to vertical oil and gas wells at the Black Eagle mine. The operator is petitioning in order to mine through existing wells as they are met.

The petitioner states that:

(1) The Black Eagle mine extracts coal from the Eagle coal seam. The Black Eagle mine operates one continuous miner section that produces coal 5 to 6 days per week.

(2) There are many vertical oil and gas wells which exist in the reserve area of the Black Eagle mine.

(3) The Black Eagle mine will employ the continuous mining room and pillar method of mining. It is expected that each vertical wellbore will only be mined through once in any seam.

The petitioner proposes the following alternative method:

(a) With respect to vertical mines, the petitioner proposes to modify 30 CFR 75.1700 to allow mining through vertical wellbores as encountered and whenever the safety barrier diameter is reduced to a distance less than the MSHA District Manager would approve pursuant to 30 CFR 75.1700 for plugged oil or gas wells penetrating the Eagle Coal Seam and other mineable coal seams.

(b) The petitioner proposes to use the following procedures when cleaning out and preparing oil and gas wells prior to plugging:

(1) A diligent effort will be made to clean the borehole to the original total depth. If this depth cannot be reached, and the depth of the well is less than 4,000 feet, the operator will clean the well from the surface to at least 200 feet below the lowest mineable coal seam's base. If the well depth is equal to or greater than 4,000 feet, the operator must clean out the well from the surface to at least 400 feet below the lowest mineable coal seam's base. The operator must remove all materials that are within the well, throughout the entire diameter of the well, and from wall to wall.

(2) Down-hole logs will be prepared by the operator for each well. The logs, which collect subsurface information for each well, will use the following data measurement tools: a caliper survey, a gamma log, a bond log, and a deviation survey for determining the top and bottom of the lowest mineable coalbed, potential hydrocarbon producing strata, and the location for the bridge plug. If approved by the MSHA District Manager, down-hole camera surveys may be approved used instead of down-hole logs. A journal will be maintained to describe the depth and nature of material(s) encountered, the drilling information, the length of the plug, casing(s) effected, and other information related to cleaning and sealing the well. This information will be kept for MSHA to inspect, should MSHA request it.

(3) When cleaning the well, a diligent effort will be made to remove all the casing in the well. Once it is cleaned and the casings are removed, the well must be plugged by pumping cement slurry and pressurizing to 200 psi. If the casing cannot be removed, the remaining casing which remains will be cut, milled, perforated, or ripped to facilitate removing remaining casings. Any remaining casing must be perforated or ripped to allow cement to be injected in order to fill in voids throughout the well. Remaining casings must be perforated or ripped a minimum of 5 feet from 10 feet below to 10 feet above the coal seam. Perforations or

rips are required at intervals spaced close enough (at least every 50 feet) to permit expanding cement slurry to infiltrate the annulus between the casing and the well wall for a distance of at least 200 feet below the base of the lowest mineable coalbed, for wells less than 4,000 feet deep and 400 feet below the lowest mineable coal seam, up to 100 feet above the uppermost part of the coal seam. If it is not possible to remove the casing, the operator will contact the MSHA District Manager before continuing work. If the well cannot be cleaned or the casing cannot be removed, then the operator must prepare the well as described above (if the well is less than 4,000 feet in depth) from the surface to at least 200 feet below the base of the lowest mineable seam; if the seam well is 4,000 feet or greater, then it must be prepared from the surface to 400 feet below the lowest mineable coal seam, unless the MSHA District Manager requires cleaning out the well due to a greater depth. If the operator can show, to the satisfaction of the MSHA District Manager, that the well is sealed properly, then the operator will not be required to perforate or rip the casings. A casing bond log is required for each casing and tubing string in lieu of ripping or perforating strings.

(4) In the event that the cleaned-out well produces excessive gas, a mechanical bridge plug will be placed in the borehole in a competent stratum at least 200 feet below the base of the lowest mineable coalbed, but above the top of the uppermost hydrocarbon-producing stratum, unless the MSHA District Manager requires a larger distance. If it is not possible to set a mechanical bridge plug, an appropriately sized packer may be used in place of the mechanical bridge plug. The mine operator must provide the MSHA District Manager will any information on the geological formation of the strata and the well pressure. The mine operator must record what actions have been taken to plug the hydrocarbon producing strata.

(5) If the uppermost hydrocarbon-producing stratum is within 300 feet of the base of the lowest mineable coalbed, properly placed mechanical bridge plugs or a suitable brush plug, described in subparagraph (b)(4) above, will be used to isolate the hydrocarbon-producing stratum from the expanding cement plug. A minimum of 200 feet of expanding cement will be placed below the lowest mineable coalbed.

(c) After cleaning out the well, as specified above, the petitioner proposes to use the following procedures when plugging or replugging oil and gas wells to the surface:

(1) A cement plug will be set in the wellbore by pumping an expanding cement slurry down the well to create a plug that runs from at least 200 feet below the base of the coal seam that is being mined. The cement must be placed in the well under a pressure of at least 200 pounds per square inch. Portland cement or a light-weight cement mixture may be used to fill in the area from approximately 100 feet above the top of the lowest mineable coalbed to the surface.

(2) A small quantity of steel turnings, or other small magnetic particles, will be embedded in the top of the cement near the surface to serve as a permanent magnetic monument of the borehole.

(d) The petitioner proposes to use the following procedures when plugging oil or gas wells for subsequent use as degasification boreholes:

(1) A cement plug will be set in the wellbore by pumping an expanding cement slurry down the tubing to displace the gel and provide at least 200 feet of expanding cement (400 feet if the depth is 4,000 feet or greater) below the lowest mineable coalbed at a pressure of at least 200 pounds per square inch. The top of the expanding cement will extend upward at least 50 feet

above the top of the coalbed being mined, unless the MSHA District Manager requires a greater distance.

(2) The operator must grout a suitable casing into the bedrock of the upper part of the degasification well in order to protect it.

(3) The operator must fit a wellhead to the top of the degasification casing, as required by the MSHA District Manager in the approved ventilation plan. This equipment can include check valves, shut-in valves, sampling ports, flame arrestor equipment, and security fencing.

(4) The degasification well must be addressed in the approved ventilation plan, including periodic tests of methane levels and limits on the minimum methane concentrations extracted.

(5) Once an area of the coal mine is degassed by a sealed well or if the coal mine is abandoned, the operator must plug all degasification wells using the following procedures:

(i) The operator must insert a tube to the bottom of the well, or at least to 100 feet above the coal seam being mined; blockage must be removed to allow the tube to reach this depth.

(ii) The operator will set a cement plug in the well, pumping Portland cement or a lightweight cement mixture until the well is filled to the surface.

(iii) The operator must embed steel turnings or other small magnetic particles in the top of the cement near the surface as permanent magnetic monuments for the well.

An alternative is a 4 inch or larger casing, set in cement, which extends 36 or more inches above the ground level with the API number engraved or welded on the casing.

(e) As an alternative procedure for preparing and plugging or replugging oil or gas wells that cannot be cleaned completely:

(1) The operator must drill a hole adjacent and parallel to the well, at least 200 feet deep, below the coal seam to be mined or at the lowest mineable coal seam (whichever is lower). The operator will locating remaining casings using geophysical sensing devices.

(2) If casings are detected then the operator must drill into the well from the parallel hole. Between 10 feet above to 10 feet below the coal seam, the operator must perforate or rip all casings every 5 feet. Beyond that distance, the operator must perforate or rip at every 50 feet from at least 200 feet below the base of the coal seam to be mined or the lowest mineable coal seam, whichever is lower, up to 100 feet above the seam that is being mined.

(3) The annulus between the degasification casing and the borehole wall will be cemented.

(4) If there is insufficient casings in the well to allow for (e)(3) to be completed, the operator must use a horizontal hydrolic fracturing technique to intercept the original well.

(5) The operator must prepare down-hole logs for each well consisting of a caliper survey, gamma log, a bond log, and a deviation survey for determining the diameters of the coal seam to be mined or the lowest mineable coal seam, whichever is lower.

(6) A journal must be maintained to describe the depth and nature of material encountered, the drilling information, length of plug, casing(s) effected, and other information related to cleaning and sealing the well. This information will be kept for MSHA to inspect, should MSHA request it.

(7) After the operator has plugged the well described in (e), the operator must plug the adjacent hole using Portland cement or a lightweight cement mixture.

(8) The operator must embed steel turnings or other small magnetic particles in the top of the cement near the surface as permanent magnetic monuments for the well. An

alternative is a 4 inch or larger casing, set in cement, which extends 36 or more inches above the ground level with the API number engraved or welded on the casing.

(f) Once mining has been granted by the MSHA District Manager, the following procedures will take place:

(1) A conference may be requested by any of the following: the representative of the miners, a state agency, or the MSHA District Manager. The conference will be scheduled by the MSHA District Manager, to review, evaluate, and accommodate any abnormal or unusual circumstances that relate to the condition of the well or surrounding strata.

(2) The intersection of a well by the operator must be conducted on a shift approved by the MSHA District Manager. The operator must notify the MSHA District Manager and the miners' representative prior to the intersection so that representatives can be present.

(3) Drivage sites must be installed by the operator not more than 50 feet from the well, at the last open crosscut near the area to be mined to ensure intersection of the well. For longwall mining, distance markers will be installed on 5-foot centers 50 feet in advance of the well in the headgate entry and in the tailgate entry.

(4) Firefighting equipment, including fire extinguishers, rock dust, and sufficient fire hose to reach the working face area of the mining-through will be available when either the conventional or continuous mining method is used. The fire hose will be located in the last open crosscut of the entry or room. The operator will maintain the water line to be able to reach the farthest point of penetration on the section.

(5) Sufficient supplies of roof support and ventilation materials will be available and located at the last open crosscut. In addition, an emergency plug and/or plugs will be available in the immediate area of the mine-through.

(6) Equipment will be checked for permissibility and serviced on the shift prior to mining-through the well; water sprays, water pressures and water flow rates will be checked and any issues will be corrected.

(7) The methane monitor on the continuous mining machine will be calibrated on the shift prior to mining-through the well.

(8) When mining is in progress, tests for methane will be made with a hand-held methane detector at least every 10 minutes from the time that mining with the continuous mining machine is within 30 feet of the well until the well is intersected and immediately prior to mining through. During the actual cutting through process, no individual will be allowed on the return side until mining-through has been completed and the area has been examined and declared safe.

(9) The working place will be free from accumulations of coal dust and coal spillages, and rock dust will be placed on the roof, rib and floor within 20 feet of the face when mining through or near the well on the shift or shifts during which the cut-through will occur.

(10) When the wellbore is intersected, all equipment will be deenergized and the area thoroughly examined and determined safe before mining is resumed.

(11) After a well has been intersected and the working place determined safe, mining will continue inby the well at a sufficient distance to permit adequate ventilation around the area of the wellbore.

(12) When a torch is necessary for poorly cut or milled casings, no open flames will be permitted in the area until adequate ventilation has been established around the wellbore and methane levels of less than 1 percent are present in all areas affected by flames or sparks from the torch.

(13) Non-sparking (brass) tools will be used only to expose and examine cased wells. These tools will be located on the working section.

(14) No person will be permitted in the area of the mining-through operation except for those actually engaged in the operation, company personnel, representatives of the miners, personnel from MSHA, and personnel from the appropriate State agency.

(15) The operator must alert all personnel in the mine of a planned intersection of the well before going underground if it is to occur during the shift.

(16) The mining-through operation will be under the direct supervision of a certified official. Instructions concerning the mining-through operation will be issued only by the certified official in charge.

(17) If the mine operator cannot find the well or if the anticipated intersection is missed, the operator must cease mining to assess for hazardous conditions, notify the MSHA District Manager, and use reasonable methods of locating the well. If the well cannot be located, the mine operator must notify the MSHA District Manager to resolve issues before mining resumes.

(18) This modification does not affect the ability for MSHA representatives to interrupt or halt well intersection or to issue a withdrawal notice when deemed necessary. MSHA may issue a withdrawal of persons in the mine or a cessation of the well intersection verbally or by written order, including the basis for the order. The MSHA representative then needs to permit resumption for mining operations in the affected area to restart.

(19) If the well is not plugged to the depth of all mineable coal seams that have been identified in the core hole logs, then any coal seams below the lowest plug will remain subject to the barrier requirements dictated by 30 CFR 75.1700, if developed in the future.

(20) All involved miners will be trained on the contents of this petition prior to starting the process of plugging or re-plugging.

(21) Mechanical bridge plugs will utilize the best available technologies required or recognized by the state regulatory agency and/or the oil and gas industry.

(22) Within 30 days after the Proposed Decision and Order (PDO) becomes final, the operator will submit proposed revisions to be approved by the MSHA District Manager, as part of the 30 CFR 48 training plan. This will include initial and refresher training. The revisions are to include training on the above terms for all miners involved in well intersection prior to mining within 150 feet of the well which is to be mined through.

(23) The required person under 30 CFR 75.1501 Emergency Evacuations is responsible for emergencies relating to the intersection and this person will review intersection procedures before the intersection occurs.

(24) Within 30 days of when this PDO is finalized, the operator will submit a revised emergency evacuation and firefighting training program, required by 30 CFR 75.1502. The operator must revise the program to incorporate hazards and evacuation plans used for well intersection. All underground miners will be trained in the above plan revisions within 30 days of submittal.

(25) The petitioner asserts that the proposed alternative method will at all times guarantee no less than the same measure of protection from the potential hazards against which the existing standard for 30 CFR 75.1700 is intended to guard.

Sheila McConnell,

Director,

Office of Standards, Regulations, and Variances.

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