e: 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 includes the summary of a petition for modification submitted to the Mine Safety and Health Administration (MSHA) by the party 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 AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit your comments including the docket number of the petition by any of the following methods:

1. Electronic Mail: 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: Jessica D. Senk, 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 copies 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: Jessica D. Senk, Office of Standards, Regulations, and Variances at 202-693-9440 (voice), Senk.Jessica@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 (CFR) 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 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, sections 44.10 and 44.11 of 30 CFR establish the requirements for filing petitions for modification.

II. Petition for Modification

Docket Number: M-2021-026-C

Petitioner: Marion County Coal Resources, Inc., 151 Johnnycake Road, Metz, West Virginia (Zip 26585).

Mine: Marion County Mine, MSHA ID No. 46-01433, located in Marion 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 oil and gas wells at the mine. The operator is petitioning to plug two gas wells in the Marcellus shale.

The petitioner states that:

(a) The Marion County Mine desires to plug two "unconventional" gas wells in the Marcellus shale not covered by the Consent Order at docket No. 2017- MSA-06. These are:

(1) The Esther Clark 1H Marcellus Gas Well American Petroleum Institute (API) #: 47-061-01616; and

(2) The Esther Clark 3H Marcellus Gas Well API #: 47-061- 01623.

(b) The Marion County Mine employs approximately 712 miners and produces approximately 25,000 tons of bituminous coal per day from the Pittsburgh #8 coal seam with an average mine height of 84 inches. At this time, there are no coal seams being mined stratigraphically down section from the Pittsburgh seam. The mine is accessed through one slope and eight airshafts. The mine operates three production shifts per day, five days per week, on three working sections -- one longwall, an advancing gate section, and a mains section utilizing continuous mining machines. The mine liberates 9,000,000 cubic feet of methane on a daily basis.

(c) On July 5, 2018, MSHA and Marion County entered into a settlement concerning the contest of certain conditions in a Proposed Decision and Order concerning 30 CFR 75.1700 at docket No. 2017- MSA-06. That agreement specifically excluded certain types of wells as follows: Unconventional wells in the Marcellus and Utica, and all other unconventional shale oil and gas wells are not subject to this modification.

The petitioner proposes the following alternative method:

(a) District Manager approval required.

(1) The mine operator shall maintain a safety barrier of 300 feet in diameter around the Esther Clark 1H and 3H Gas Wells until the District Manager approves to proceed with mining.

(2) Prior to mining within the safety barrier around these wells, the mine operator shall provide to the District Manager a sworn affidavit or declaration executed by the company official who is in charge of health and safety at the mine stating that all mandatory procedures for cleaning out, preparing, and plugging each gas well have been completed. The affidavit or declaration must be accompanied by all logs, electronic or otherwise, described below in section (b) (7) and any other records the District Manager requires.

(3) This petition applies to all types of underground coal mining at the mine.

(b) The petitioner proposes to use the following mandatory procedures, when cleaning out and preparing the Ester Clark IH and 3H Gas Wells prior to plugging.

(1) The mine operator shall test for gas emissions inside the hole before cleaning out, preparing, and plugging gas wells. The District Manager shall be contacted if the well is actively producing gas.

(2) Since these wells are unconventional and greater than 4,000 feet in depth, a diligent effort shall be made to remove all the casing in the well and clean the well down to the original arrowset packer installed just above the "kick off point" in the well. The mine operator shall completely clean out the well from the surface to at least the same arrowset packer originally installed. The mine operator shall provide the District Manager with all information it possesses concerning the geological nature of the strata and the pressure of the well. The mine operator shall make a diligent effort to remove all material from the entire diameter of the well, wall to wall.

(3) Since these wells are no longer producing and are being cleaned and prepared subject to this petition, the operator must attempt to remove all of the casing using a

diligent effort, and comply with all other applicable provisions of the decision and order.

(4) To make a diligent effort to remove the casing, the operator shall pull a minimum of 150% of casing string weight and/or have made at least three attempts to spear or overshot to grip the casing for the required minimum pull effort. The operator shall keep a record of these efforts, including casing length and weight, and make the record available for MSHA review.

(5) Perforations or rips are required at least every 50 feet from 400 feet below the base of the Pittsburgh #8 coal seam up to 100 feet above the uppermost mineable coal seam. The mine operator must take appropriate steps to ensure that the annulus between the casing and the well walls are filled with expanding (minimum 0.5% expansion upon setting) cement and contain no voids.

(6) Jet/sand cutting is one method for cut, ripping, or perforating casing with three or more strings of casing in the Pittsburgh #8 coal seam in preparation for mining. This method uses compressed nitrogengas and sand to cut the well casings. On active wells, cuts start at 200 feet above the bottom of the casing at 200 feet intervals, to 200 feet below the bottom of the Pittsburgh coal seam.

(7) The mine operator shall prepare down-hole logs for each well. Logs shall consist of a caliper survey, a bond log if appropriate, a deviation survey, and a gamma survey for determining the top, bottom, and thickness of all coal seams down to the coal seam to be mined or the lowest mineable coal seam, whichever is lower, potential hydrocarbon producing strata, and the location of any existing bridge plug. In addition, a journal shall be maintained describing: the depth of each material encountered; the nature of each material encountered; bit size and type used to drill each portion of the hole; length and type of each material used to plug the well; length of casing(s) removed, perforated or ripped, or left in place; any sections where casing was cut or milled; and other pertinent

information concerning cleaning and sealing the well. Invoices, work-orders, and other records relating to all work on the well shall be maintained as part of this journal and provided to MSHA upon request.

(8) The mine operator shall make a diligent effort to remove the casing down to the arrowset packer installed just above the "kick off point" (where the well transitions from vertical to horizontal). If all of the vertical casing above the existing packer can be removed, the mine operator shall prepare the well for plugging and use seals described below. MSHA may retain the right to review and direct the mine operator's sealing protocol, in the event geologic or well conditions require further measures.

(9) If the District Manager concludes that the completely cleaned-out well is emitting excessive amounts of gas, the mine operator must place additional mechanical bridge plugs in the well.

(10) The mechanical bridge plug must be placed in a competent stratum at least 400 feet below the base of the lowest mineable coal seam, but above the top of the uppermost hydrocarbon-producing stratum, unless the District Manager requires a greater distance based on his judgment that it is required due to the geological strata or the pressure within the well. The mine operator shall provide the District Manager with all information he possesses concerning the geological nature of the strata and the pressure of the well. If it is not possible to set a mechanical bridge plug, an appropriately sized packer may be used. The mine operator shall document what has been done to "kill the well" and plug the hydrocarbon producing strata.

(11) If the upper-most hydrocarbon-producing stratum is within 300 feet of the base of the Pittsburgh #8 coal seam, the mine operator shall properly place mechanical bridge plugs as described above in section (b) to isolate the

hydrocarbon-producing stratum from the expanding cement plug.

(12) The mine operator shall place a minimum of 400 feet of expanding cement below the Pittsburgh #8 coal seam, unless the District Manager requires a greater distance based on his judgment that it is required due to the geological strata or due to the pressure within the well.

(c) The petitioner proposes to use the following mandatory procedures for plugging the Ester Clark 1H and 3H Gas Wells to the surface, after completely cleaning out the well.

(1) Cement is specified to be used as a plugging material.

(2) The mine operator shall pump cement slurry down the well to form a plug which runs from the original arrowset packer installed just above the "kick off point" in the well to 400 feet below the Pittsburgh #8 coal seam. The cement will be placed in the well under a pressure of at least 200 pounds per square inch. The mine operator shall pump expanding cement slurry down the well to form a plug which runs from 400 feet below the Pittsburgh #8 coal seam to the surface. The District Manager can modify the cementing plan based on his judgment due to the geological strata or the pressure within the well.

(3) The mine operator shall embed steel turnings or other small magnetic particles in the top of the cement near the surface to serve as a permanent magnetic monument of the well. In the alternative, a 4-inch or larger diameter casing, set in cement, shall extend at least 36 inches above the ground level with the API well number engraved or welded on the casing. When the hole cannot be marked with a physical monument (e.g. prime farmland), high-resolution GPS coordinates (one-half meter resolution) are required.

(d) The petitioner proposes to use the following alternate procedures for preparing and plugging or replugging the Ester Clark IH and 3H Gas Wells.

(1) If it is not possible to remove all of the casing, the mine operator shall notify the District Manager before any other work is performed.

(2) If the well cannot be cleaned out or the casing removed, the mine operator shall prepare the well as described below from the surface to at least 400 feet below the base of the Pittsburgh #8 coal seam, unless the District Manager requires cleaning out and removal of casing to a greater depth based on his judgement as to what is required due to geological strata or the pressure within the well.

(3) If the casing cannot be removed from the total depth, the well must be filled with cement from the lowest possible depth to 400 feet below the Pittsburgh #8 coal seam, and the other applicable provisions in this petition still apply; or

(4) If the casing cannot be removed, the casing shall be perforated from 400 feet below the Pittsburgh #8 coal seam, the annuli shall be cemented or otherwise filled, and the other applicable provisions in this petition still apply.

(5) If the casing cannot be removed, the casing must be cut, milled, perforated, or ripped at sufficient intervals to facilitate the removal of any remaining casing in the coal seam by the mining equipment. Any casing which remains shall be cut, perforated, or ripped to permit the injection of cement into voids within and around the well. All casing remaining at the Pittsburgh #8 coal seam shall be cut, perforated, or ripped at least every 5 feet from 10 feet below the coal seam to 10 feet above the coal seam.

(6) If the mine operator, using a casing bond log, can demonstrate to the District Manager's satisfaction that all annuli in the well are already adequately sealed with cement, the mine operator will not be required to perforate or rip the casing for that particular well. When multiple casing and tubing strings are present in the coal horizon(s), any casing which remains shall be ripped or perforated and filled with expanding cement as indicated above. An acceptable casing bond log for each

casing and tubing string is needed if used in lieu of ripping or perforating multiple strings.

(e) The petitioner proposed to use the following mandatory procedures when mining within a 100-foot diameter barrier around the Esther Clark 1H and 3H Gas Wells.

(1) A representative of the mine operator, a representative of the miners, the appropriate State agency, or the MSHA District Manager may request that a conference be conducted prior to intersecting any plugged well. Upon receipt of any such request, the District Manager shall schedule such a conference. The party requesting the conference shall notify all other parties listed above within a reasonable time prior to the conference to provide opportunity for participation. The purpose of the conference shall be to review, evaluate, and accommodate any abnormal or unusual circumstance related to the condition of the well or surrounding strata when such conditions are encountered.

(2) The mine operator shall intersect a well on a shift approved by the District Manager. The mine operator shall notify the District Manager and the miners' representative in sufficient time prior to intersecting a well to provide an opportunity to have representatives present.

(3) When using continuous mining methods, the mine operator shall install drivage sites at the last open crosscut near the place to be mined to ensure intersection of the well. The drivage sites shall not be more than 50 feet from the well. When using longwall-mining methods, distance markers shall be installed on 5-foot centers for a distance of 50 feet in advance of the well in the headgate entry and in the tailgate entry.

(4) When either the conventional or continuous mining method is used, the mine operator shall ensure that fire-fighting equipment including fire extinguishers, rock dust, and sufficient fire hose to reach the workingface area of the well intersection

is available and operable during all well intersections. The fire hose shall be located in the last open crosscut of the entry or room. The mine operator shall maintain the water line to the belt conveyor tailpiece along with a sufficient amount of fire hose to reach the farthest point of penetration on the section. When the longwall mining method is used, a hose to the longwall water supply is sufficient.

(5) The mine operator shall ensure that sufficient supplies of roof support and ventilation materials shall be available and located at the last open crosscut. In addition, emergency plugs and suitable sealing materials shall be available in the immediate area of the well intersection.

(6) On the shift prior to intersecting the well, the mine operator shall service all equipment and check it for permissibility. Water sprays, water pressures, and water flow rates used for dust and spark suppression shall he examined and any deficiencies corrected.

(7) The mine operator shall calibrate the methane monitor(s) on the longwall, continuous mining machine, or cutting machine and loading machine on the shift prior to intersecting the well.

(8) When mining is in progress, the mine operator shall test for methane with a handheld methane detector at least every 10 minutes from when mining with the continuous mining machine or longwall face is within 30 feet of the well until the well is intersected. During the actual cutting process, no individual shall be allowed on the return side until the well intersection has been completed and the area has been examined and declared safe. All workplace examinations on the return side of the shearer will be conducted while the shearer is idle. The mine operator's most current Approved Ventilation Plan will be followed at all times unless the District Manager deems a greater air velocity for the intersect is necessary.

(9) When using continuous or conventional mining methods, the working place shall be free from accumulations of coal dust and coal spillages, and rock dust shall be placed on the roof, rib, and floor to within 20 feet of the face when intersecting the well. On longwall sections, rockdusting shall be conducted and placed on the roof, rib, and floor up to both the headgate and tailgate gob.

(10) When the well is intersected, the mine operator shall de-energize all equipment and thoroughly examine and determine the area to be safe before permitting mining to resume.

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

(12) If the casing is cut or milled at the coal seam level, the use of torches should not be necessary. However, in rare instances, torches may be used for inadequately or inaccurately cut or milled casings. No open flame shall be permitted in the area until adequate ventilation has been established around the well bore and methane levels of less than 1.0% are present in all areas that will be exposed to flames and sparks from the torch. The mine operator shall apply a thick layer of rock dust to the roof, face, floor, ribs, and any exposed coal within 20 feet of the casing prior to the use of torches.

(13) Non-sparking (brass) tools will be available and will be used exclusively to expose and examine cased wells.

(14) No person shall be permitted in the area of the well intersection except those actually engaged in the operation, including company personnel, representatives of the miners, personnel from MSHA, and personnel from the appropriate State agency.

(15) The mine operator shall alert all personnel in the mine to the planned intersection of the well prior to their going underground if the planned intersection is to occur during their shift. This warning shall be repeated for all shifts until the well has been mined through.

(16) The well intersection shall be under the direct supervision of a certified individual. Instructions concerning the well intersection shall be issued only by the certified individual in charge.

(17) If the mine operator cannot find the well in the longwall panel or if a development section misses the anticipated intersection, the mine operator shall cease mining to examine for hazardous conditions at the projected location of the well, notify the District Manager, and take reasonable measures to locate the well, including visual observation/inspection or through survey data. Mining may resume if the well is located and no hazardous conditions exist. If the well cannot be located, the mine operator shall work with District Manager to resolve any issues before mining resumes.

(18) The provisions of this petition do not impair the authority of representatives of MSHA to interrupt or halt the well intersection and to issue a withdrawal order when they deem it necessary for the safety of the miners. MSHA may order an interruption or cessation of the well intersection and/or a withdrawal of personnel by issuing either a verbal or written order to that effect to a representative of the mine operator. Operations in the affected area of the mine may not resume until a representative of MSHA permits resumption. The mine operator and miners shall comply with verbal or written MSHA orders immediately. All verbal orders shall be committed to writing within a reasonable time as conditions permit.

(19) A copy of the decision and order shall be maintained at the mine and available to the miners.

(20) If the well is not plugged to the total depth of all minable coal seams identified in the core hole logs, any coal seams beneath the lowest plug will remain subject to the barrier requirements of 30 CFR 75.1700, should those coal seams be developed in the future.

(21) All necessary safety precautions and safe practices according to Industry Standards and required by MSHA regulations and State regulatory agencies having jurisdiction over the plugging site will be followed to provide the upmost protection to the miners involved in the process.

(22) All miners involved in the plugging or re-plugging operations will be trained on the contents of the decision and order prior to starting the process, and a copy of the decision and order will be posted at the well site until the plugging or re-plugging has been completed.

(23) Mechanical bridge plugs should incorporate the best available technologies that are either required or recognized by the State regulatory agency and/or oil and gas industry.

(24) Within 30 days after the decision and order becomes final, the mine operator shall submit proposed revisions for its approved 30 CFR Part 48 training plan to the District Manager. These proposed revisions shall include initial and refresher training on compliance with the terms and conditions stated in the decision and order. The mine operator shall provide all miners involved in well intersection with training on the requirements of the decision and order prior to mining within 150 feet of the well intended to be mined through.

(25) The responsible person required under 30 CFR 75.1501 (Emergency evacuations) is responsible for well intersection emergencies. The well intersection procedures should be reviewed by the responsible person prior to any planned intersection.

(26) Within 30 days after the decision and order becomes final, the mine operator shall submit proposed revisions for its approved mine emergency evacuation and firefighting program of instruction required under 30 CFR 75.1502. The mine operator will revise the program of instruction to include the hazards and evacuation procedures to be used for well intersections. All underground miners will be trained in this revised plan within 30 days of submittal.

The petitioner asserts that the alternate method proposed will at all times guarantee no less than the same measure of protection afforded the miners under the mandatory standard.

Jessica Senk,

Director,

Office of Standards, Regulations, and Variances.

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