

In The Matter of
FMC Corporation
FMC@ Westvaco
Mine I.D. No. 48-00152

PETITION FOR MODIFICATION

Docket No. M-2014-002-M

PROPOSED DECISION AND ORDER

On January 15, 2014, FMC Corporation (FMC) filed a petition seeking a modification of the application of 30 C.F.R. § 57.22305 to its FMC@ Westvaco mine in Green River, Sweetwater County, Wyoming. The mine is a Category III gassy mine in accordance with 30 C.F.R. § 57.22003(a)(3).¹ The petitioner alleges that the alternative method in the petition to allow the use of low-voltage or battery-powered non-permissible electronic testing and diagnostic equipment in or beyond the last open crosscut would at all times guarantee no less than the same measure of protection afforded to the miners by the standard. The non-permissible equipment includes laptop computers, oscilloscopes, vibration analysis machines, infrared temperature devices, signal analyzer devices, ultrasonic measuring devices, electronic component testers, cable fault detectors; multi-meters; and electronic megometers.

30 C.F.R. § 57.22305, Approved equipment (III mines) provides:

Equipment used in or beyond the last open crosscut and equipment used in areas where methane may enter the air current, such as pillar recovery workings, longwall faces and shortwall faces, shall be approved by MSHA under the applicable requirements of 30 CFR parts 18 through 36. Equipment shall not be operated in atmospheres containing 1.0 percent or more methane.

MSHA investigators conducted an investigation relevant to the merits of the petition and filed a report of their findings with the Administrator for Metal and Nonmetal Mine Safety and Health. After a careful review of the entire record, including the petition and MSHA's investigative report, this Proposed Decision and Order is issued.

Findings of Fact and Conclusions of Law

FMC @ WESTVACO is an underground Trona mine approximately 1,500 feet below the surface consisting of about 3,500 miles of tunnels and covering approximately 36

¹ Under 30 C.F.R. § 57.22003, "*Category III* applies to mines in which noncombustible ore is extracted and which liberate a concentration of methane that is explosive, or is capable of forming explosive mixtures with air, or have the potential to do so based on the history of the mine or the geological area in which the mine is located." See 30 C.F.R. § 57.22003(a)(3) (Table 1: "Relation Between Quantitative Composition and Explosibility of Mixtures of Methane and Air").

square miles. FMC operates 3 shifts per day seven days a week. The mine is a Category III gassy mine.

The petitioner states that it is requesting to use low-voltage or battery-powered non-permissible electronic testing and diagnostic equipment to perform preventative diagnostics on mining equipment. In doing so, problems can be detected before failures occur and maintenance can be performed at a pre-determined time and in a pre-determined areas to minimize risks to the miners. In addition, the equipment will be used to diagnose equipment failures without having to move the equipment outby the last open crosscut which will minimize risks to the miners.

The alternative method proposed by the petitioner, as amended by the terms and conditions in this Proposed Decision and Order will at all times guarantee no less than the same-measure of protection afforded the miners under 30 C.F.R. § 57.22305 for the following non-permissible equipment which MSHA evaluated during its investigation of the petition: (1) FLIR T640 thermal imaging camera; (2) Ultraprobe 201 Grease Caddy; and (3) AMR CD-710 cable fault detector.

This modification does not permit the use of laptop computers (specifically Panasonic or Lenova T530 Thinkpad); oscilloscopes, vibration analysis machines (specifically the Emerson Process Management CSI 2140 Machinery Health Annalyzer); signal analyzer devices, electronic component testers, and electronic megometers because the petitioner has failed to establish that the use of such non-permissible equipment is not a possible ignition source for a methane explosion. The use of non-permissible equipment in an atmosphere containing an explosive level of methane could result in an ignition that could be catastrophic to all miners in the area where an explosion occurred. A primary purpose of the requirement in 30 C.F.R. § 57.22305 that all equipment used in or beyond the last open crosscut and equipment used in areas where methane may enter the air current, such as pillar recovery working, longwall faces and shortwall faces, be approved by MSHA is to ensure that such equipment will not cause a mine explosion or mine fire. In addition, the Fluke 28-11 multi-meter that was evaluated during the MSHA investigation is permissible equipment (MSHA approval #18-A100015-0); therefore, it is not included in this PDO.

Order

Wherefore, pursuant to the authority delegated by the Secretary of Labor to the Administrator for Metal and Nonmetal Mine Safety and Health, and pursuant to Section 101(c) of the Federal Mine Safety and Health Act of 1977, 30 U.S.C. § 811(c), it is ordered that FMC's Petition for Modification of the application of 30 C.F.R. § 57.22305 in the FMC @ WESTVACO mine is hereby: **GRANTED**, for the use of the low-voltage or battery-powered non -permissible electronic testing and diagnostic equipment consisting of: (1) FLIR T640 thermal imaging camera; (2) Ultraprobe 201 Grease Caddy; and (3) AMR CD-710 cable fault detector, conditioned upon compliance with the following terms and conditions:

(1) Production on the longwall face must cease prior to electronic or diagnostic activities occurring except for the time necessary to troubleshoot longwall mining equipment under actual mining conditions.

(2) The following procedures must be undertaken on longwall equipment prior to the above-listed non-permissible electronic or diagnostic equipment being utilized, except for the time necessary to troubleshoot longwall mining equipment under actual mining conditions.

a. Power to the hydraulic pump assembly and traction drive assemblies must be removed. The cutter head visual disconnect on the shearer must be opened and locked out when persons are inby the face areas.

b. No persons shall be allowed inby the face area during analysis of the headgate and tailgate, when power is not locked out on these units.

(3) The above-listed non-permissible equipment shall be examined prior to its use by a competent person as defined in 30 C.F.R. § 57.2 to ensure the equipment is maintained in a safe condition.

(4) The above-listed non-permissible equipment shall not be used if methane is detected in concentrations at or above 1 percent methane.

(5) Tests for methane (CH₄) to assure that levels are below 1% shall be conducted by a qualified person with an MSHA approved hand held multi-gas detector immediately prior to conducting diagnostic activities. The tests shall be conducted in the following areas: the headgate, the tailgate, and the shearer continuous methane monitoring system, prior to the above listed non-permissible equipment being brought to or used at the longwall face. Methane levels shall be measured within six (6) inches of the above-listed non-permissible equipment with an MSHA-approved hand held multi-gas detector immediately prior to using the non-permissible equipment.

(6) The mine atmosphere at the longwall face shall be continuously monitored by the longwall continuous methane monitors located at the shearer, the headgate, and the tailgate, while the above-listed non-permissible equipment is used. Monitoring also must be conducted with an MSHA-approved hand held multi-gas meter detector that is capable of providing both visual and audible alarms in accordance with 30 C.F.R. § 57.22227 at least every 10 minutes while the non-permissible equipment is used to conduct diagnostic activities.

(7) The above-listed non-permissible equipment shall not be used if methane is detected in concentrations at or above 1.0 percent methane. When 1.0 percent or more of methane is detected while the nonpermissible equipment is being used, the

equipment shall be deenergized immediately and withdrawn outby the last open crosscut.

(8) The quantity of air coursed through the last open crosscut in pairs or sets of entries or through other ventilation openings nearest the longwall face while these diagnostic activities are occurring shall be at least 9,000 cubic feet per minute in accordance with 30 C.F.R. § 57.22213.

(9) All persons utilizing these procedures and affected miners shall receive training from the mine operator or person designated by the operator to ensure that they are aware of the requirements in this PDO. The mine operator must document that this training has been completed. Training documentation must include: (a) the instructor's name; (b) the person's name; (c) the date training given; and (d) the subject matter and length of instruction. This documentation must be provided to MSHA on request.

(10) The mine operator must verify that all persons using the above-listed non-permissible equipment at the longwall face or in or beyond the last open crosscut are qualified to use such equipment in a Category III gassy mine.

(11) The above-listed non-permissible electronic testing and diagnostic equipment shall be used only when equivalent permissible equipment is not available.

(12) The above-listed non-permissible equipment shall be attended to while it is in an area where permissible equipment is required.

(13) All methane detectors used in complying with the conditions of this PDO shall be bump tested prior to use each day.

Any party to this action desiring a hearing must file a request for hearing within 30 days after service of the Proposed Decision and Order, in accordance with 30 C.F.R. § 44.14, with the Administrator for Metal and Nonmetal Mine Safety and Health, 1100 Wilson Boulevard, Arlington, Virginia 22209-3939. If a hearing is requested, the request shall contain a concise summary of position on the issues of fact or law desired to be raised by the party requesting the hearing, including specific objections to the Proposed Decision and Order. A party other than the petitioner who has requested a hearing shall also comment on all issues of fact or law presented in the petition. Any party to this action requesting a hearing may indicate a desired hearing site. If no request for a hearing is filed within 30 days after service, this Proposed Decision and Order will become final and must be posted by the operator on the mine bulletin board at the mine.

_____/s/_____
 Neal Merrifield
 Administrator for Metal and Nonmetal
 Mine Safety and Health