

In The Matter of
Solvay Chemicals, Inc.
Solvay Chemicals, Inc.
Mine I.D. No. 48-01295

PETITION FOR MODIFICATION

Docket No. M-2010-002-M

PROPOSED DECISION AND ORDER

Background

On May 26, 2010, a petition was filed by Solvay Chemicals, Inc., seeking a modification of the application of 30 C.F.R. § 57.22305 to petitioner's Solvay Chemicals, Inc. Mine (Solvay) located in Green River, Sweetwater County, Wyoming the mine is classified as a Category III gassy mine in accordance with 30 C.F.R. 57.22003(a)(3)¹. The petitioner alleged that the alternative method outlined in the petition that operating non-permissible electronic diagnostic equipment for the purpose of thermographic measurements in or beyond the last open crosscut would at all times guarantee no less than the same measure of protection afforded by the standard. The non-permissible equipment is an infrared camera for the purpose of preventative maintenance. The infrared camera will be utilized as part of Solvay's preventative maintenance program. The thermographic measurements that are provided from the infrared camera can detect problems before failures occur and maintenance can be performed in pre-determined areas to minimize the risk to miners. Methane levels would be continuously monitored during data collection use by longwall continuous methane monitors located at the shear, headgate, and the tailgate and approved hand held multi-gas meter prior to diagnostic activities occurring at the mine.

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 C.F.R. § 18 through 36. Equipment shall not be operated in atmospheres containing 1.0 percent or more methane.

¹ *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. The concentration of methane in such mines is explosive or is capable of forming explosive mixtures if mixed with air as illustrated by Table 1 below, entitled "Relation Between Quantitative Composition and Explosibility of Mixtures of Methane and Air".

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

The alternative method set forth in this Proposed Decision and Order will at all times guarantee no less than the same-measure of protection afforded miners under 30 C.F.R. § 57.22305 in that safety features installed on non-permissible an infrared camera working at the longwall face allow this equipment to safely operate in areas where methane gas may occur or be present.

Compliance with this Order entitles Solvay Chemicals, Inc., to a modification of the application of 30 C.F.R. § 57.22305 to its Solvay Chemicals, Inc. Mine.

Order

Wherefore, pursuant to the authority delegated by the Secretary of Labor to the Administrator, 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 a modification of the application of 30 C.F.R. 57.22305 to Solvay Chemicals, Inc., as it pertains to using non-permissible infrared camera at Solvay Chemicals, Inc., underground mine, is hereby:

GRANTED, conditioned upon compliance with the following:

- (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 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 Bretby Channel and face areas.
 - b. At no time must persons be allowed inby the Bretby Channel and face areas during analysis of the Headgate or Tailgate when power is not locked out on these units.

(3) Non-permissible infrared camera used shall be examined by a competent person to ensure the equipment is maintained in a safe condition.

(4) Non-permissible infrared camera 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 approved hand held multi-gas meter prior to diagnostic activities occurring in addition to the continuously monitored during data collection use by longwall continuous methane monitors located at the shear, headgate, and the tailgate. Test areas shall include: the headgate, tailgate, and shear continuous methane monitoring system prior to an infrared camera being brought to or used at the longwall face. Methane levels will be measured within six (6) inches of the non-permissible infrared camera immediately prior to its use.

(6) The mine atmosphere at the longwall face must be continuously monitored during data collection use by longwall continuous methane monitors located at the shear, headgate, and the tailgate. Testing also must be conducted with a hand held multi-gas meter capable of providing both visual and audible alarms in accordance with 30 C.F.R. § 57.22227 at least one time per hour while non-permissible an infrared camera is used to conduct diagnostic activities. If methane levels exceed 1% during this period, all diagnostic activities being conducted with non-permissible an infrared camera shall cease and the equipment turned off.

(7) 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.

(8) 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 petition. The mine operator must document that this training has been completed. Training documentation must include: (a) instructor's name; (b) person's name; (c) date training given; and (d) subject matter and length of instruction. This documentation must be provided to MSHA on request.

(9) The mine operator must verify that non-mine employees utilizing non-permissible an infrared camera at the longwall face are qualified to use such equipment in a Category III gassy mine.

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

Neal Merrifield
Administrator for Metal and Nonmetal
Mine Safety and Health