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PROGRAM INFORMATION BULLETIN NO. P08-11

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SUBJECT: Temporary Suspension of MSHA Approval of MICON Seal  
Designs

### **Scope**

Underground bituminous coal mine operators, miners' representatives, independent contractors, Coal Mine Safety and Health (CMS&H) enforcement and Technical Support personnel, manufacturers of seal materials, and other interested parties need this information.

### **Purpose**

This Program Information Bulletin (PIB) notifies the mining industry of an immediate temporary suspension of the Mine Safety and Health Administration's (MSHA) approval of all MICON seal designs currently being constructed in underground coal mines. This PIB also informs the mining industry of the need to immediately increase inspections of newly-constructed MICON seals.

### **Information**

Until further notice, MSHA is immediately suspending its approvals of MICON seal designs and has notified MICON of this action. MSHA is taking this action to reduce risk to underground coal miners from MICON seals that are self-generating heat shortly after construction and prior to reaching design strength. Mine operators with an approved MICON seal in their ventilation plan must cease construction of these seals immediately until MSHA can determine the cause of the heating and promptly take appropriate measures to resolve the problem. Where mine operators have begun to construct a set of seals, but construction of all seals in the same set has not been completed, mine operators may submit to the District Manager a revised site-specific plan addressing the method and type of seal that the operator intends to use to complete the seal set. MSHA acknowledges that a number of mine operators will not need to apply to the District Manager for approval to install a different seal design,

since their existing ventilation plans contain approval for installation of at least two MSHA-approved seals from different seal manufacturers.

Additionally, mine operators must examine at least once every 24 hours all recently-constructed MICON seals that have not reached design strength. The increased examination frequency is required for a limited period of 30 days from the day the seal was completed, or for a lesser period, if the mine operator provides evidence to the District Manager that the seal has cooled to the ambient mine atmosphere. MSHA expects the mine operator to produce quality control samples of the polyurethane or material of the seal along with core-temperature sampling results and provide all sample results to MSHA. To more effectively examine seals for heating hazards, mine operators must check for unusual circumstances at the seal and in the atmosphere near the seal, such as increased temperatures, the presence of elevated concentrations of carbon monoxide, and any unusual smells or odors. Certified persons must take measurements to evaluate the core temperature. Mine operators must notify the District Manager of any abnormal conditions related to the seals.

MSHA intends to proceed expeditiously with its investigation and resolution of the heating problem in MICON seals. On June 4, 2008, the Agency commenced a series of tests at its Approval and Certification Center to evaluate and determine ignition temperatures of the MICON seal construction materials. The testing is projected to end June 20, 2008, provided no further testing is necessary to determine the source of the problem. MSHA will issue further guidance upon completion of its investigation. The Agency intends to address additional seal issues if they develop during this investigation process.

### **Background**

On May 22, 2008, a MICON 120-psi seal, constructed at the Buchanan Mine in Virginia, showed evidence of what appeared to be extensive heating in the core of the seal. The heating was discovered by a mine examiner while conducting required examinations of seals under § 75.360(b)(5) for preshift examination. The operator notified MSHA. The seal was partially removed and the heating subsided. On May 28, 2008, an MSHA investigator examined the seal in question and observed that a large portion of the center of the seal appeared to have either melted or scorched. Consequently, MSHA removed polyurethane and wood samples from the seal for testing the ignition temperatures. MSHA will also subject each sample to a temperature of 330°F for a period of twenty-four hours.

This PIB applies to the following MICON seals with an MSHA design approval (formerly posted on MSHA's web page):

- \*120-75.336.1.07.03.0 MICON seal
- \*120-75.336.1.07.03.1 MICON seal with Dowel coupler changes (for entries 5.5 feet to 8.5 feet and 24 feet in width)
- \*120-75.336.1.07.23.0 MICON seal (for entries 9 feet to 16 feet and 26 feet in width)
- \*120-75.336.1.07.26.0 MICON Gob Isolation Seal (for entries 4 feet to 16 feet and 26 feet in width)
- \*120-75.336.1.07.27.1 MICON 120-psi District Seal (for entries 4 feet to 16 feet and up to 28 feet in width)
- \*120-75.336.1.07.27.2 MICON 120-psi District Seal (for entries 4 feet to 16 feet and up to 28 feet in width) with revision to installation instructions
- \*120-75.336.1.07.30.0 MICON 4ft to 16ft Longwall Gob Isolation Seal
- \*50-75.336.1.08.08.0 MICON Longwall Gob Isolation Seal (for entries from 3 feet to 21 feet in height up to 28 feet in width)

### **Authority**

The Federal Mine Safety and Health Act of 1977, as amended, 30 U.S.C. § 801 et seq., and 30 C.F.R. §§ 75.335, 75.360(b)(5), and 75.364(b)(4).

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### **Distribution**

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