



Approval and Certification Center

MSHA -Technical Support

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From the Center Chief's Desk



Greetings from Triadelphia. Thank you for taking the time to read about the Approval and Certification Center.

My computer is acting up today so I'm writing this note with my trusty #2 pencil. This pencil has qualities similar to the dedicated employees of the A&CC . . . dependable and reliable. I have had to call employees in the middle of the night and on weekends for accident investigations and other difficult jobs, and the response is always the same . . . immediate, high-quality service with a good attitude.

We continue to examine our approval process closely. I am pleased to report that we have significantly reduced our average approval turnaround time compared to 2006. While we will **never** cut corners on our product safety testing and engineering evaluations, we will continue to take a close look at reducing unnecessary administrative steps that do not contribute to safety.

To that end, we are currently evaluating

the costs/benefits of reducing our approval cancellation time period from six months to three. Our goal is to move our product approvals more efficiently through the system, eliminate unnecessary "hang time," and get newer technologies underground sooner for the benefit of our most important customers, the U.S. Miners. If you would like to comment on this proposed change or have other recommendations for improvement, you can reach me at 304.547.2029. I value your feedback.

Stay safe and enjoy the remainder of the summer season.

With kind regards,

John

John P. Faini
A&CC: More, Better, Sooner for the Miners.

Tracking Technologies

The A&CC formed a committee in early 2006 to identify and evaluate communications and tracking technologies used in various industries for potential application to the underground coal mine environment.

The January 2007 newsletter outlined some of the committee's activities, including giving presentations at various conferences and seminars and participating in the NIOSH-led Emergency Communication and Tracking Partnership.

To date, more than 140 parties have submitted suggested solutions to MSHA for communications and tracking systems. Many of those parties have continuing efforts in developing systems for use in underground coal mines. The A&CC's committee has consulted with over 50 applicants and potential applicants regarding MSHA intrinsic safety and explosion proof criteria, approval procedures, etc. Members of the committee have witnessed over 20 field demonstrations of various communications and tracking systems to date. The committee continues to work with the NIOSH Partnership to arrange for demonstrations of additional systems, assist in the review of proposals, and present at industry meetings to promote a cooperative effort in achieving wireless communications and tracking systems solutions underground.

The A&CC has reassigned some Center resources to assist the Electrical Safety Division (ESD) with its communications and tracking systems approval work. To help address the industry's urgent need for improved technology, ESD is prioritizing communications and tracking system applications. Since the Sago accident, the A&CC has increased its rate of completed electrical/electronic approvals by 26 percent. For more information please contact

David Chirdon at
chirdon.david@dol.gov



M/NM New Miner Training CD

The mining industry has been "booming" in recent years. Prices for mined commodities have increased, necessitating a real drive for increased productivity, hiring new workers, and continual emphasis on system safety processes. Most operations will tell you there is a definitive shortage of experienced miners. Because of the shortage, it is becoming necessary for mining companies to employ inexperienced miners. Therefore, a comprehensive and effective training program for new miners is an industry imperative in order to prevent history repeating itself (i.e., 1970's mining boom and associated new miner accidents). As operations continually recruit new people into this growing industry, they are not only relying on this new labor to integrate into a highly trained and experienced workforce, but are asking these inexperienced miners to replace their highly trained and experienced predecessors.

In-depth research by the Applied Engineering Division (AED) was conducted from 2000 – 2005 for M/NM Mines. This research indicated three distinct categories that were causing fatalities of inexperienced miners and four distinct categories that seriously injure inexperienced miners as seen below.

Leading Categories for **Fatally Injuring**
New Miners

Operating Mobile Equipment
Fall Protection – Falling from Suspended Areas
Conveyor Belts

Leading Categories for **Seriously Injuring**
New Miners

Handling Supplies and Materials
Maintenance
Hand tools
Getting on and off Equipment

Recognizing a plan was needed to address these accidents, a training tool was developed by AED in the form of a CD. The goal of this new miner training CD is to supplement current training programs and to encourage mining operations to go above and beyond Part 46 and Part 47 of the 30 CFR. A similar approach was made for Coal in 2005 and was received well by our stakeholders. It is our hope that this CD will be received with the same enthusiasm by our stakeholders in the M/NM sector and assist in the reduction of serious accidents and fatalities.

To obtain a copy of the Coal or M/NM New Miner CD's, please contact Ben Gandy at 304.547.2322 or gandy.benjamin@dol.gov



Annual International IECEx Meeting to be held in Denver

The annual meeting of the International Electrotechnical Commission for Certification to Standards Relating to Equipment for Use in Explosive Atmospheres (IECEx) is scheduled to take place in Denver, Colorado from September 24 - September 28, 2007.

The IECEx Certified Equipment Program provides a single International Certificate of Conformity that requires manufacturers to successfully complete testing and assessment of samples for compliance with standards; assessment and auditing of manufacturers' premises; and on-going surveillance audits of manufacturers' premises.

The goal of IECEx is to facilitate international trade in electrical equipment intended for use in explosive atmospheres (Ex equipment) by eliminating the need for multiple national certifications while preserving an appropriate level of safety. IECEx provides the means for manufacturers of Ex equipment to obtain certificates of conformity that will be accepted at the

national level in all participating countries.

MSHA's A&CC has been participating in IECEx activities for the past seven (7) years. The purpose of A&CC participation is to provide support of Title 30 Code of Federal Regulations (30 CFR) Part 6. MSHA promulgated 30 CFR Part 6 "Testing and Evaluation by Independent Laboratories and Non-MSHA Product Safety Standards" in June 2003. This regulation includes provisions that would permit the use of international standards, such as the International Electrotechnical Commission (IEC) standards, once MSHA determines such standards in their existing or modified form provide at least the same degree of protection as current 30 CFR requirements. MSHA recently finalized an evaluation of the IEC 60079-1 Flameproof Enclosure standard and published its findings in the Federal Register.

The annual IECEx meeting is scheduled to take place at the Denver Marriott City Center. Details can be found at <http://www.iecex.com>.



Field Complaints

The Quality Assurance and Materials Testing Division (QA&MTD) investigates field complaints about MSHA-approved products. These complaints may come from MSHA enforcement, mine operators, miners, distributors, or product manufacturers. These complaints may concern products that do not meet the approval requirements, products that do not perform as intended, or products that are misrepresented as MSHA approved. Products may have to be recalled or retrofitted to achieve compliance. If the manufacturer is unable to achieve compliance, MSHA can revoke the manufacturer's approval number.

MSHA recently issued two program information bulletins (PIB) based on separate field complaints that were received by the QA&MTD. Both PIBs dealt with permissible mobile diesel-powered equipment.

PIB 07-14 re-emphasized the 30 CFR requirements that fastenings used for joints of flame-arresting paths on intake or exhaust systems for permissible diesel-powered equipment should be used only for attaching parts that are essential in maintaining the explosion-proof integrity. The manufacturers are in the process of correcting the equipment in the field.

PIB07-15 addressed a potential safety hazard on equipment with wet (water) scrubber systems. The potential safety hazard concerned a weld bead crack failure that may allow flames, sparks, or

hot diesel engine exhaust gas to enter the mine atmosphere. The manufacturer redesigned the insert to prevent recurrence of the weld bead failure and is currently distributing the redesigned inserts as needed.

Additional information on these two PIBs can be found on the Internet by accessing MSHA's home page at <http://www.MSHA.gov> and then choosing Compliance Info, and Program Information Bulletins.

The A&CC encourages you to contact the QA&MTD if you suspect a problem with an MSHA-approved product. For more information or questions, contact James Erlinger at 304.547.2306 or erlinger.james@dol.gov.



Key Contacts

Center Chief – John P. Faini,
304.547.2029, faini.john@dol.gov

Acting Chief, Electrical Safety Division -
Kenneth J. Porter, 304.547.2030,
porter.kenneth@dol.gov

Chief, Mechanical and Engineering
Safety Division – Dennis L. Ferlich,
304.547.2058, ferlich.dennis@dol.gov

Chief, Applied Engineering Division –
Joseph F. Judeikis, 304.547.2039,
judeikis.joseph@dol.gov

Chief, Quality Assurance and Material
Testing Division - Kenneth A. Sproul,
304.547.2038, sproul.kenneth@dol.gov

Team Leader, Center Operations
Division
David M. Diegmiller, 304.547.2041
diegmiller.david@dol.gov

The MSHA A&CC Newsletter provides information of general interest to the mining industry. It is published twice yearly in January and July and can be accessed at (<http://www.msha.gov/techsupp/acc/newletters/newsletters.asp>). You can subscribe to the “Safety and Health Information” mailing list (<http://www.msha.gov/subscriptions/subscribe.aspx>) to be notified when a new issue is published

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zzMSHA-MinersTips@dol.gov or contact the Applied Engineering Division at 304.547.2032.

Individuals who wish to submit a suggestion to the Slogan of the Month Contest can do so at:

(<http://www.msha.gov/techsupp/safetycontests/safetycontests.htm>)