



# Approval and Certification Center

MSHA -Technical Support

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## From the Center Chief's Desk



Hello again from Triadelphia. We appreciate your time and interest in the A&CC and miners' safety.

Over the years, our stakeholders have often praised the technical services provided by A&CC employees. While you may already be aware of their technical competence, I would like to share with you another side of our employees .... their character. They recently earned the Federal United Way Campaign's "Gold Award" by contributing a record amount this year. This award exemplifies the typical A&CC employee - someone who goes out of their way to help others - whether they are miners, manufacturers, fellow MSHA employees, or people in the community that have fallen on hard times.

In this issue, you can read about the recent Approval Workshops jointly hosted by the National Mining Association and the A&CC. The goal of the workshops was to demystify our approval process and to provide a forum for discussing possible process improvements. We believe the workshops will pay dividends, helping the A&CC and manufacturers to more

efficiently provide newer technology products for the benefit of our nation's miners.

Good character, increased efficiencies, and benefits to miners ... these keep the wind in our sails. We wish you smooth sailing this summer.

Sincerely,

*John*

John P. Faini

**A&CC: More, Better, Sooner for the Miners.**

## NMA/MSHA Approval Workshops

On May 21 and 22, MSHA, along with the National Mining Association (NMA), hosted two approval workshops at the Approval and Certification Center (A&CC). These workshops were an outgrowth of a meeting that John Faini had with the NMA in which different ideas were discussed for addressing the approval backlogs that exist at the A&CC.

One of the items discussed in this meeting was inadequate documentation that is often submitted with original MSHA approval applications. Bruce Watzman, Doug Hardman and others from the NMA

suggested that it would be helpful if MSHA did more to educate the approval applicants on the approval process. For this reason, we prepared a workshop that included details on the MSHA approval process along with suggestions on what approval applicants can do to streamline and expedite the process. The response to the workshop invitation was so overwhelming that we had to add a second day to the workshop to accommodate all the interested parties.

The workshop included a series of presentations from each division within the A&CC. Questions were addressed, and lively discussion was generated. Based on the evaluation forms received, it appears the workshops were effective. Stay tuned for more A&CC workshops in the future.

The Powerpoint presentations delivered at the workshops are posted under "More Resources" at ([http://www.msha.gov/techsupp/acc/acc\\_home.htm](http://www.msha.gov/techsupp/acc/acc_home.htm)).

Please contact Dave Chiridon at [chiridon.david@dol.gov](mailto:chiridon.david@dol.gov) with any questions or feedback on the workshops.



## Hazard Awareness Packages

Whenever a trend of related accidents or fatalities emerges, the Applied Engineering Division (AED) analyzes the contributing factors, gathers data, and assembles and targets distribution of Hazard Awareness Packages. These packages are meant to supplement existing mine safety programs by increasing hazard awareness and providing safe practice recommendations.

They typically contain:

- Accident and fatality statistics
- Links to government and industry web sites
- Links to relevant Miner Tips, Safety Ideas, Hazard Alerts, posters and other information from the MSHA web site ([www.msha.gov](http://www.msha.gov))
- Booklets, videos, Best Practice cards, and training materials from the Mine Safety and Health Academy 's catalog
- Related reports and articles

The following are successful examples of, in part, using this approach: From January 1984 to April 1994, there were 16 fatalities related to roof bolting, 14 of these involving the drill boom. In 1994, an appointed MSHA Roof Bolting Committee generated a report of findings and **mass mailed** it to the entire U.S. underground mining industry. The report contained 10 specific recommendations to prevent repeat roof bolting machinery accidents.

In the 14 years since the mass mailing, there have been 3 fatalities involving entanglements/pinchpoints on roof bolting machines. This represents a trend change from 1.6 fatalities per year to fewer than

0.23 fatalities per year - an 86% reduction.

In response to upward trends in other fatalities, the AED developed two targeted packages: *Surge Pile Safety Procedures*, massed mailed in 2000 and 2004 and *Safe Operation and Maintenance of Continuous Miners*, massed mailed in 2004. Following the distribution of these packages, surge pile mobile equipment related fatalities went from 10 between 1980 and 2000, to none since 2000. Continuous mining crushing fatalities went from 29 between 1984 and 2004 to none from June 2004 to March 2008.

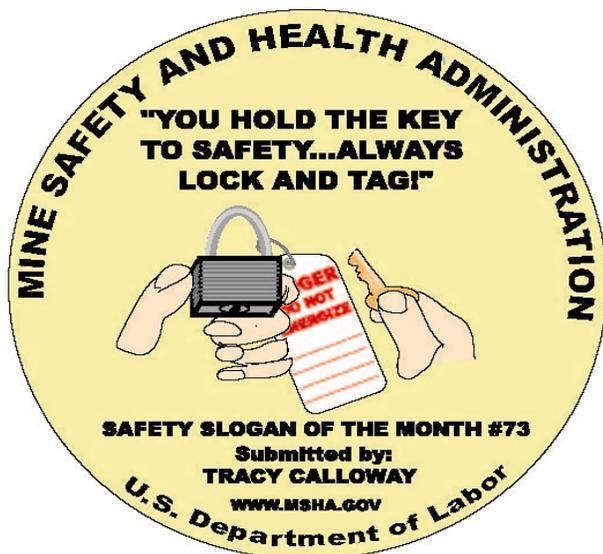
AED is currently examining all fatal mining accidents occurring since 2000, to target the major 21<sup>st</sup> Century areas needing hazard awareness packages developed. These packages will be completed and targeted mass distribution will begin shortly. However, accident history has shown that these hazard awareness efforts must be repeated at least every four years to remain effective due to the revolving workforce. To that end, copies of *Surge Pile Safety Procedures* and *Safe Operation and Maintenance of Continuous Miners* can be obtained by contacting Carlene Falck at 304.547.2007 or [falck.carlene@dol.gov](mailto:falck.carlene@dol.gov).

## Proximity Detection Update

On April 18, 2008, a 43-year old continuous miner operator with 3 ½ years' experience was fatally injured while operating a continuous miner with an attached mobile bridge conveyor system. As the victim was positioning the continuous miner in a crosscut turning right, the inby mobile bridge operator felt an unusual bouncing of the bridge and failed to get a radio response from the miner operator. The bridge operator shut the system down using the emergency stop switch and crawled toward the face and discovered the victim pinned between the basket of the bridge and the left rib.

This unfortunate accident was a sad reminder that potentially lifesaving proximity detection technology is not being utilized. Although several mine operators have expressed interest and have cooperated with field testing at their mine sites, and two proven, MSHA-approved proximity detection systems have been available for 2 years, currently no systems are in operation in U.S. underground mines. It has been the goal of the proximity detection investigators within MSHA's Office of Technical Support to achieve industry adoption of this important technology.

If you would like to get on board with proximity detection or have any questions about MSHA's experience with this technology, please contact Dave Chirdon at [chirdon.david@dol.gov](mailto:chirdon.david@dol.gov).



## Intrinsic Safety Approval Applications Backlog and Part 6

The Electrical Safety Division (ESD) continues to focus on processing the large number of intrinsic safety approval applications received in the last 2 years. This surge – first noted in October 2005 and further exacerbated by communications and tracking applications submitted in response to the Sago, Aracoma, and Darby accidents - has resulted in an unprecedented workload within the ESD. The ESD received 93 communications and tracking approval applications in 2006 and 2007, compared with 13 for 2004 and 2005. Since 2006, we have approved 48 communications or tracking applications and have 46 in progress.” To date, the overall backlog of approval requests within the ESD has been reduced from 70 to 42.

Although we can start to see the “light at the end of the tunnel,” there are options available to approval applicants to help expedite their applications. We are currently promoting our Part 6 program which allows MSHA to accept test and evaluation results from independent laboratories. With Part 6, an applicant may select an independent laboratory that has been accredited by the Occupational Safety and Health Administration through their Nationally Recognized Testing Laboratory program or the IECEx. The selected laboratory must conduct the tests and evaluations according to MSHA requirements, and the applicant must submit the test report with the necessary approval documentation to MSHA. MSHA will be available to the applicant and the laboratory to answer questions on test requirements or procedures.

Please contact Dave Chirdon at [chirdon.david@dol.gov](mailto:chirdon.david@dol.gov) or Ken Porter [porter.kenneth@dol.gov](mailto:porter.kenneth@dol.gov) for more information regarding the MSHA Part 6 program.



## Diesel-Electric Evaluations

The A&CC has revised the program for evaluating electrical systems on permissible diesel-powered equipment. The manufacturer of the diesel-electric system may now submit an application directly to the A&CC, rather than having the evaluation completed as part of a diesel equipment approval investigation. The program technical requirements have not changed, but the investigative process has been streamlined by minimizing the number of contacts.

The new Diesel Electric (DE) Evaluation program permits a diesel approval applicant to specify and use another company’s diesel electric evaluation or pursue an independent evaluation. The Standard Application Procedure (ASAP 2031) explaining the basic investigative process and the minimum documents and requirements necessary to initiate an

investigation leading to the issuance of a Diesel Electric evaluation or Extension of Diesel Electric evaluation is available at (<http://www.msha.gov/techsupp/acc/application/asap2031.pdf>).

Please contact Ken Porter at 304.547.2030 or [porter.kenneth@dol.gov](mailto:porter.kenneth@dol.gov) with any questions.

## Communications and Tracking Update

So far in 2008, the A&CC has approved a new tracking system, a new leaky feeder system, several additional RFID tracking tags, and a text messaging device. Currently 46 communications and tracking device/system approval applications are under evaluation. Of those 46, a half dozen are for wireless mesh systems.

Because of the heightened interest in how these new technologies perform underground, the A&CC has initiated a program to evaluate system performance after a new technology communication and/or tracking system has been approved by MSHA and has been deployed. The information obtained from these evaluations is available at (<http://www.msha.gov/techsupp/commoandtracking.asp>).

Please contact Dave Chirdon at [chirdon.david@dol.gov](mailto:chirdon.david@dol.gov) with any questions.

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The MSHA A&CC Newsletter is published twice yearly in January and July and can be accessed at (<http://www.msha.gov/techsupp/acc/newsletters/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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