

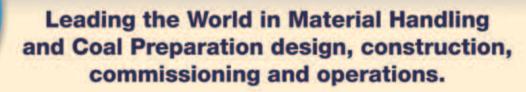


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Cover image courtesy of offices of Governor Joe Manchin III

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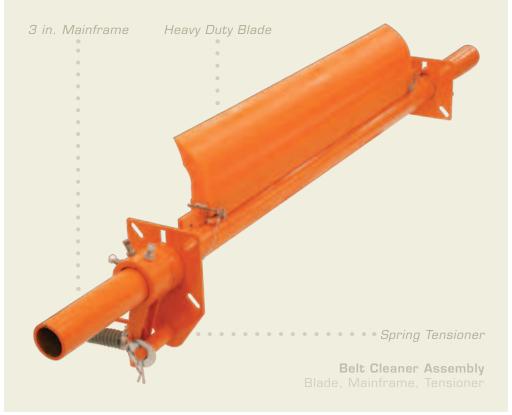
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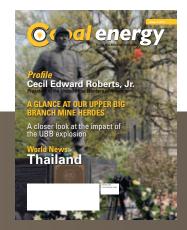


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## letter from the publisher

Welcome to the second edition of Coal Energy in 2010. You will notice quite a delay in the timing of the issue. This was due to our staff dedicating much time and effort to our recent special edition tribute to the Upper Big Branch miners who lost their lives earlier this year. I would like to take a special moment to give a big thank you to all of our sponsors who helped make the issue possible. Also, a moment of silence to remember our lost heroes. You will notice we also briefly remember each miner in this issue. For a more in depth look at the miners and their lives and the loved ones they leave behind, please take a few minutes to view the memorial at www.coalenergyonline.com or request a copy via email to maria@ martonickpublications.com.

#### **Editor's Notes**

Coal Energy would like to apologize for a recent error in our memorial edition. It was stated that the mother of James Eddie Mooney was named Ruby and survived her son. James's mother was actually named Mary and had already passed at the time of her son's death. We apologize for any confusion this may have caused.

Coal Energy would like to thank and give credit to Usibelli Coal Mine, Inc for the Issue 1 2010 cover image. In this issue we meet Cecil Roberts from the United Mine Workers of America. We also join lawyers Donnie Adkins and Jeffrey Foster in examining the impact of the federal response to the Upper Big Branch mining tragedy.

As always, thank you for your loyal readership and for trusting us to bring you some highlights of the coal industry's news in the last quarter. Remember the Coal Energy directory will be coming out soon, and will reach all 4 coal related industry associations. If your goal is to market your company to the major players in the industry, take a look at the members of each association (ACC, NCTA, ACAA & RMEL) and remember Coal Energy is your sole source to reach all 4 simultaneously. Thank you to our already committed advertisers for allowing us to help you reach your target market!

Stay tuned for 2011 developments such as the re-launching of our website with our new online supplier directory.

Warmest regards,

President

Martonick Publications, Inc.



# **Association Comparisons**

## AMERICAN SOCIETY OF MINING AND RECLAMATION

#### Mission

ASMR, American Society of Mining and Reclamation, was established in 1983 to serve the mining and reclamation community as an outlet for scientific research and demonstration papers through annual National meetings. These reclamation projects include activities associated with all kinds of drastically disturbed lands.

Originated in: 1983 Dues: \$50 - \$1000 For more information: http://fpl.ca.uky.edu/asmr/

## AMERICAN COAL ASH ASSOCIATION

#### Mission

The ACAA advances the management and use of coal combustion products in ways that are environmentally responsible, technically sound, commercially competitive and more supportive of a sustainable global community.

Originated in: Not listed Dues: \$1650 - \$13500 For more information:

www.acaa-usa.org

## **RMEL**

#### Mission

It is RMEL's mission to provide a forum for education and the sharing of ideas to better serve the electric energy industry and its customers.

Originated in: 1903 Dues: \$200 - \$3250 For more information:

www.rmel.org

## NATIONAL MINING ASSOCIATION

#### Mission

NMA is the public policy voice of one of America's great basic industries whose primary mission is helping the nation realize the contribution made to our economic well-being and quality of life by resources derived from mining.

Originated in: Not listed **Dues:** Not listed

For more information:

www.nma.org





#### **AMERICAN COAL COUNCIL**

#### Mission

The American Coal Council (ACC) is dedicated to advancing the development and utilization of coal as an economic, abundant/secure and environmentally sound energy fuel source. The Association promotes the lawful exchange of ideas and information regarding the coal industry. It serves as an essential resource for companies that mine, sell, trade, transport or consume coal. The ACC provides educational programs, advocacy support, peer-topeer networking forums and market intelligence that allow members to advance their marketing and management capabilities.

Originated in: 1982

**Dues:** \$2500

For more information: www.americancoalcouncil.org

## NATIONAL COAL TRANSPORTATION ASSOCIATION

#### Mission

The Mission of the NCTA is to provide education and facilitation for the resolution of coal transportation issues in order to serve the needs of the general public, industry, and all modes of transportation. This is accomplished through the sponsoring of educational forums and providing opportunities for the lawful exchange of ideas and knowledge with all elements of the coal transportation infrastructure.

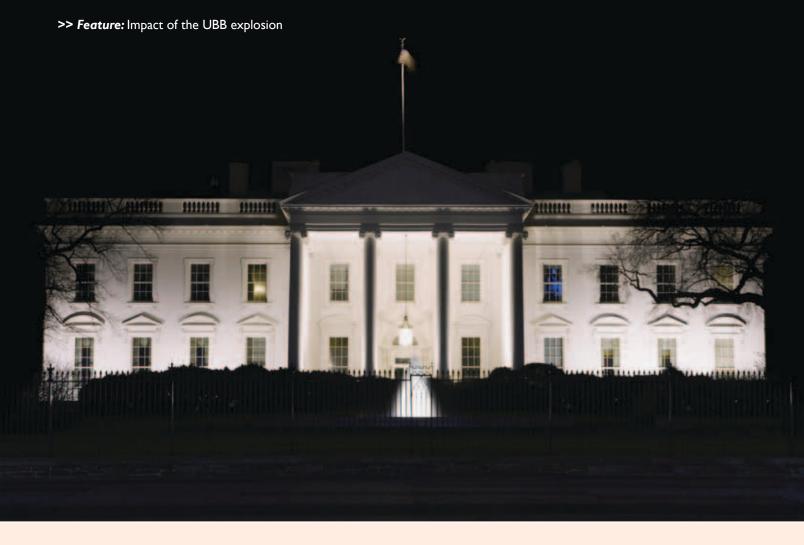
Originated in: Not listed

**Dues:** \$1250

For more information:

www.nationalcoaltransportation.org

To have your coal industry association or organization included in the next issue of Coal Energy, please send information to info@martonickpublications.com.



## UPPER BIG BRANCH MINE EXPLOSION AND THE FEDERAL RESPONSE

HOW WILL FEDERAL ACTIONS ULTIMATELY IMPACT WEST VIRGINIA'S COAL MINING INDUSTRY?

DONNIE L. ADKINS II, JEFFREY A. FOSTER

This article discusses the UBB mine explosion, the federal response, the potential response and the possible impact on West Virginia's coal industry. There has already been a considerable federal response in the short time since the accident but there will likely be much stronger and more aggressive action by the federal government. The article will provide a brief summary of relevant information concerning the UBB accident and summarize the ensuing federal response.

As has been widely reported, on April 5, 2010, at 3:27 p.m., there was an explosion at Massey Energy's UBB under-

ground coal mine located in Montcoal, Raleigh County, West Virginia. Twentynine miners were killed in the explosion that occurred about 1,000 feet underground.

On April 26, Massey Energy released a letter to its stakeholders. The letter advised that the UBB mine had ceased operations pending a determination of the cause of this explosion and that it was unclear when it would resume production. It also indicated that company personnel, along with federal and state investigators, would be investigating the accident. Since then, three teams of investigators have been involved in

a methodical inspection of the mine in an effort to determine what went wrong. These teams represent the U.S. Mine Safety and Health Administration (MSHA), the State of West Virginia, and Massey Energy. As of mid-August, that investigation was on-going and no conclusions as to the cause of the accident had been reached.

Notwithstanding the as-yet unresolved investigation, Congress and the federal government have responded to the accident in a number of different ways directed at coal mine operators and MSHA itself. On May 6, former Senator Robert C. Byrd and Senator Jay Rock-

efeller proposed legislation requiring publicly-traded mining companies such as Massey Energy Co. to report "serious" notices of mine safety violations issued by state and federal inspectors in their public filings with the Securities and Exchange Commission (SEC) in order for it to be tracked by both shareholders and industry analysts. The bill also imposes penalties if this information is not fully disclosed. The legislation was amended into H.R. 4173, the Wall Street Reform and Consumer Protection Act, which was signed into law by President Obama on July 21.

In addition to the foregoing, on May 13, the U.S. Senate added \$22 million in funding for MSHA to H.R. 4899, the supplemental budget bill. This funding is designed to assist the agency in clearing a backlog of over 16,000 company appeals of notices of violations issued by the agency's inspectors. Included in the funding package is \$18.2 million for the solicitor's office at MSHA to prosecute those appeals and \$3.8 million for the Review Commission to hear them. That supplemental budget proposal was signed by President Obama on July 29. On May 14, the U.S. Department of Justice (DOJ) acting through the U.S.Attorney's Office for the Southern District of West Virginia sent a letter to the U.S. Secretary of Labor confirming the fact that the DOI is currently conducting an investigation into possible criminal violations of federal law associated with the UBB explosion. The letter asked that MSHA request that any Administrative Law Judge (ALJ) designated to hear future claims relating to administrative actions arising out of the UBB explosion stay such proceedings until any criminal matters are resolved. The DOJ is concerned the civil cases may interfere with the criminal investigation. On May 20, MSHA motioned the ALJ assigned to this case to stay the civil proceedings while the federal criminal investigation is being conducted. On June 2, the ALJ issued an Order granting in part and denying in part the agency's motion to stay. On June 30, the Federal Mine Safety And Health Review Commission

(FMSHRC) issued an Order staying all civil proceedings.

On June 24, the U.S. Labor Department Office of Inspector General issued a report critical of MSHA's practices in connection with the inspection and oversight of coal mines. The Inspector General asserted that MSHA failed to subject coal mines that had been cited for repeated mine safety violations to stricter oversight based upon a presumed disregard for the well-being of its miners associated with those violations. Specifically, the Inspector General found that in 2009, MSHA removed ten mines from a list of "chronic" violators for inappropriate reasons, such as its own lack of resources. In response, Labor Secretary Hilda Solis said that the current violator system needs to be scrapped, and a new one be put in place that is focused "on protecting miners". The report and Secretary Solis' comments signal an intention on the part of both the Department of Labor and MSHA to more aggressively enforce existing statutes and regulations as well as seek enhanced powers, the logical consequence of which will be an increase in the number of notices of violations issued by MSHA as well as increased penalties and efforts to enjoin continued operations at locations where it is determined that such action is warranted.

In addition to the foregoing, three additional major pieces of federal legislation were introduced in July for the purpose of ostensibly strengthening mine safety laws in response to the UBB explosion:

H.R. 5663 the Robert C. Byrd
 Miner Safety And Health Act Of
 2010 was introduced by Representative George Miller from California
 on July I and was passed out of
 the House Judiciary Committee on
 July 29 and placed on the Union
 Calendar for consideration by
 the full House of Representatives.
 Among other things, this legislation,
 if enacted, provides for independent
 investigations of mine accidents

involving three or more deaths by a panel appointed by the Secretary of Health and Human Services. It also amends existing mine safety laws by broadening its provisions dealing with a pattern of noncompliance with the statute, to include any violation of the Act, not just violations involving "mandatory health or safety standards." With this change, MSHA would have more expansive authority to order withdrawals from mines where a pattern of violations or accidents is deemed present. Moreover, enhanced civil penalties can be imposed against operators for any violations of the Act where a pattern of such violations is deemed present, even if those violations do not involve mandatory health or safety standards. It also provides for civil penalties of not less than \$10,000 or more than \$100,000 for retaliation against workers reporting such violations. Those penalties double in the event of repeated retaliatory actions. In addition, criminal convictions for willful violations of the provisions of the Act are increased to \$1 million and up to five years in prison for a first offense as well as a criminal penalty for knowingly retaliating against an employee who reports safety violations to MSHA of up to 10 years in prison. This bill also provides for civil and criminal penalties for officers, directors, and agents who knowingly authorize, order, or contribute to the occurrence of a violation of the Act. Finally, this Act, if adopted in its current form, would abrogate the "at-will employment" doctrine at coal mines for hourly employees and prohibit the discharge of such employees without reasonable jobrelated grounds based on a failure to satisfactorily perform job duties. H.R. 5788 the Mine Safety Accountability and Improved Protection Act was introduced by Congresswoman Shelley Moore Capito from West

Virginia on July 20. The legislation

honors the Nation's fallen miners

by requiring improved mine safety practices and compliance in order to prevent future mine accidents. The bill was referred to the House Committee on Education and Labor where it is presently pending.

S. 3671 the Senate Mine Safety And Health Act Of 2010 was introduced by Senator Jay Rockefeller from West Virginia on July 29. This legislation is virtually identical to Representative Miller's bill that was introduced on July 1. It is intended to improve compliance with mine and occupational safety and health law, empower workers to raise safety concerns, prevent future mine and other workplace tragedies, establish rights of families of victims of workplace accidents, and address other mine safety issues. The legislation was referred to the Senate Committee on Health, Education, Labor and Pensions where it is presently pending.

These bills will not be considered until after Labor Day at the earliest because Congress is in recess until that time. It is unclear which of these three bills (if any) will ultimately become law and what form the final version will take. Of the three bills, Congresswoman Capito's legislation is the least onerous while creating requirements that will result in maximum safety for West Virginia's coal miners. That said, the likelihood of a Democrat controlled Congress passing this bill in lieu of bills sponsored by their members is questionable. As a consequence, the National Mining Association (NMA) has signaled it supports some of the proposed reforms suggested by Congressman Miller and Senator

Rockefeller with certain caveats and modifications. However, there are other important issues the NMA feels should be addressed where the legislation is silent. Finally, there are several provisions outlined in these two bills, the NMA believes could be problematic for the West Virginia coal mining industry without making coal mining tangibly safer. The primary areas of concern are:

- Mine safety progress could be threatened by overly punitive provisions:
- Mine safety would not be advanced by additional MSHA workforce authority;
- Mine safety and health will not be improved by penalty provisions that are not commensurate with the severity of the violation;
- Misallocation of safety resources will weaken safety efforts and results; and
- Transparency can be undermined by rule-making.

Many of the NMA's concerns regarding the legislation are shared by the West Virginia Coal Association (WVCA). In addition to the NMA concerns, the WVCA believes the current legislation is problematic for the following reasons:

- Many provisions are very onerous and punitive across industry;
- The legislation is too expansive, containing unnecessary and questionable provisions;
- The legislation empowers MSHA to impose greater enforcement action;
- Many of the provisions have little to do with the UBB accident; and
- Language of the bill doesn't match the stated intention.

Most recently, on August 16, MSHA issued a press release discussing new guidelines for industry compliance with ventilation regulations. MSHA released four new program information bulletins (PIBs) pertaining to ventilation issues in underground coal mines. According to the press release, the purpose of these PIBs is to remind mine operators, miners' representatives, MSHA enforcement personnel and other interested parties about mandatory coal mine safety standards relative to inadequate ventilation, intentional changes in the mine's ventilation system, maintaining face ventilation control devices, and maintaining methane monitors in permissible and proper operating condition for mining equipment. The press release also indicated, the release of these PIBs was prompted by testimony at a recent field hearing regarding the UBB explosion.

Overall, the final form of the federal mine safety legislation will largely determine the level of impact the federal government's actions will have on West Virginia's coal mining industry. The most prudent course of action would, of course, be for Congress to await the findings of the various groups investigating the cause of the UBB explosion and address those specific causes, if appropriate, through targeted legislation. Absent those findings, actions currently being taken on the legislative and regulatory front on both the state and federal levels run the risk of addressing perceived rather than real issues threatening miner safety. If that occurs, the industry will be negatively impacted without any real or tangible improvement in the safety of working conditions of miners. .

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# REMEMBERING THE Upper Big Branch Miners

In the following pages you will find a dedication to each of the 29 miners who lost their lives on April 5th 2010 at the Upper Big Branch Mine. For more information including more photos of each miner, loved ones whom they left behind, and what each of our heroes enjoyed doing when they were not mining for coal please view our special edition memorial at www.coalenergyonline.com or request a copy via email to maria@martonickpublications.com.

Carl Acord, 52

Jason Atkins, 25

Christopher Bell, Sr., 33

Gregory Brock, 47

Kenneth Chapman, 53

Robert Clark, 41

Charles Davis, Sr., 51

Cory Davis, 20

Michael Elswick, 56

William Griffith, 54

Steven Harrah, 40

Dean Jones, 47

Richard Lane, 45

William Lynch, 59

Joe Marcum, 57

Ronald Maynor, 33

Nicholas McCroskey, 26

James Mooney, 51

Adam Morgan, 21

Rex Mullins, 50

Josh Napper, 25

Howard Payne, 52

Dillard Persinger, 32

Joel Price, 55

Gary Quarles, 33

Deward Scott, 58

Grover Skeens, 57

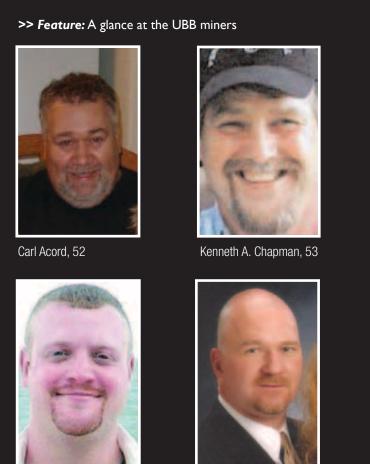
Benny Willingham, 61

Ricky Workman, 50

Average age of our heroes: 44 years

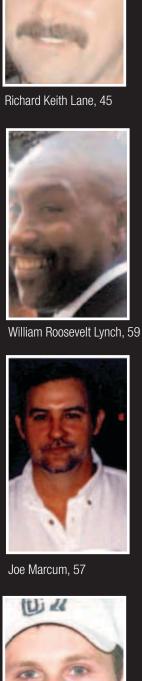
Oldest hero: 61

Youngest hero: 20





Michael Lee "Cuz" Elswick, 56





Jason Atkins, 25



Robert Eugene Clark, 41









Gregory Steven Brock, 47

Charles Timothy Davis, Sr. 51 Edward

Ronald Lee Maynor, 31

### >> Feature: A glance at the UBB miners



Nick McCroskey, 26



Joshua Scott Napper, 25



Gary Wayne Quarles, 33



Ricky Workman, 50



James "Eddie" Mooney, 51



Howard "Boone" Payne Jr, 53



Deward Allan Scott, 58



Adam Keith Morgan, 21



Dillard Persinger, 32



Grover Dale Skeens, 57



Rex Lane Mullins, 50



Joel R. "Jody" Price, 55



Benny Ray Willingham, 61



# Company **Profile:**



## What do you attribute the success of the company to?

Scantech provides a complete solution totally integrated with each client's operations and we form long term relationships to ensure that customers receive the maximum return on their process control investment. The breadth of our COALSCAN range of belt analysers ensures that the right solution is recommended for each application. The low maintenance requirements for these systems ensure that operating costs are minimised. Customised product support agreements and locally based service engineers ensure the customer receives the level of support they require. We have been providing specialised equipment and support for nearly 30 years. Our focus is meeting our promises.

### What are the companies goals in regards to the coal industry?

To be the number one supplier of real time analysers for conveyed materials in the global Coal and Power industry.

### 3. How has the company evolved over time to where it is today?

Scantech was originally called Mineral Control Instrumentation and our role was to commercialise a new online technology called DUET for real time analysis of ash content in coal. Since the early 1980s we have evolved into a company offering 11 analyser models using 6 different technologies. We also supply software, spare parts and product support services. We now provide process control solutions, rather than just instruments. We now have more than 850 analysers installed in 51 countries.

#### 4. What are your visions for the coal industry?

We see the coal industry as a long term investment. There will be a demand for metallurgical and thermal coal for steel and power for many years yet. Many mines and plants are able to optimize processes without major plant upgrades so the analysers will remain an attractive option for immediate productivity gains. Investment in technologies that improve process control and provide immediate benefits in increasingly competitive markets are in high demand.

## 5. How many employees are in the company and when was the company established?

Scantech was founded in 1981 and was listed on the Australian Stock Exchange in 1987. Since that time, our business has focussed on high technology on-line analysis systems for the resource sector. Scantech now directly employs 31 employees globally and works with at least 30 sales and service agents.

## 5. What products are offered and what type of work is done within the company?

Scantech offers process control solutions to Coal, Cement and minerals industry. The COALSCAN analyzer range is well known in the coal fired power market and has become the industry standard worldwide. We offer analyzers to meet specific applications. Our products include:

COALSCAN 2100 ash analyser,
COALSCAN 2800 ash and mositure analyser,
COALSCAN 1500 Natural Gamma ash analyser,
COALSCAN 9500X Elemental analyser for sulphur,
CIFA 350 for unburnt carbon in fly ash,
TBM 200 series for moisture monitoring, and
CM100 for conductive material moisture monitoring.

All analyzers measure material quality continuously and without conveyor or load contact. The CIFA 350 collects fly ash and is the only system we offer not suitable for conveyed loads. Analyzers enable the site to determine and control quality variation in order to minimize the impact on product quality. The main applications are in quality monitoring, bulk sorting, blending and load-out operations, primarily for process control and product specification compliance. All units can be integrated with plant control systems for real time process control. Scantech also focuses on customized product support to ensure ongoing performance of the analysers.

## 6. Can you tell me a little bit about the mission statement?

Scantech's core business is the development, supply and support of on-line analysers for the resources sector. Scantech first supplied this technology to the coal sector and has now developed the technology to supply the cement, minerals, power and steel sectors. Scantech mission statement is to be the world leader in providing process control solutions for bulk materials.

## 7. How has the economy affected your company?

As with many companies involved in equipment sales and service to the resource sector, Scantech has been affected by the reduction in available capital for equipment purchases and plant upgrades and expansions. As sales are spread over a number of industries the impact of reduced sales in some sectors on overall performance has been moderated. Due to the strong focus on product support and long term relationships with our customers, Service revenue has in fact grown throughout this period. §

## A measured Approach to Improvements in Rail Grinding By Mike Gilliam and Russell Rohlfs



The Union Pacific Railway has 30,000 mainline miles of track over 23, primarily, western states. It has more than 6,500 miles of curves, which require significant maintenance efforts, such as rail grinding and lubrication. It's a challenge to manage the rail assets, as rail weights have varying replacement criteria, and various metallurgies require different grinding frequencies. This challenge led to reorganization a couple years ago, and creation of the Director of Rail Management position.

The Director of Rail Management is charged with eliminating service failures and maximizing the rail asset. Previously, many of the functions in the Maintenance group were not centralized, but controlled by each operating region or service unit. This resulted in a multitude of different standards, practices and operating procedures. UP has since centralized control in an effort to maximize the benefit for the money spent on grinding, lubrication and other programs. While rail grinding or lubrication may have a very attractive ROI on their own, they are battling for funding with tie, rail, turnout, yard rehab and surfacing projects, to name a few. Each expenditure must be able to demonstrate an extension in asset life, or increase in the level of service.

Based on the preventive grinding cycle frequencies currently recommended by AREMA, UP would need to grind approximately 19,000 pass miles per year. This assumes that there is new rail in all of the locations to be addressed by a preventive grinding cycle. This is not

the case on UP. Many curves require multiple cycles with multiple passes in order to get the rail into the desired profile condition. In order to do this, UP estimates the annual requirement is closer to 23,000 pass miles. Based on the number of available grinding hours per day (3.04 hours per day in 2009), UP would need to work 4.25 grinders the entire year; it's currently working only four. How can UP bridge this gap?

With costs increasing faster than budgets, there are three likely op-

- Increase grinding time, which requires an internal balancing act based on the need to move freight to pay for the grinders and maintain the fixed assets.
- Become more efficient with the available grinding time.
- Increase the grinding budget (which should be pursued only after the first two options have been exercised).

Scheduling grinding work represents an ongoing challenge at UP. Maintaining tonnage-based cycles is not always possible. Because of fire danger in the western U.S., some territories that should be ground three or four times per year can be ground only once per year. This requires multiple passes on curves, which requires excessive metal removal and results in low productivity rates — neither of which is cost effective.

Another consideration is that some territories have a mix of Head-Hardened (HH) and Standard Strength (SS) rail. Because of the





logistics, UP has to choose to grind at either the HH frequency or the SS frequency. This leads to either over grinding or making more passes than otherwise necessary — both of which reduce the productivity and cost effectiveness of the grinding machine. Some of this can be remediated with good record keeping of the rail type, which enables the grinder to increase the grinding speed and reduce the metal-removal rates on the HH rail, and to reduce the grinding speed and increase the metal remove rates on the SS rail. This procedure requires thorough pre-inspections and good communication with the machine operators.

## Improving Efficiency

The need to increase grinding time results in an internal negotiation between those who need the track time and those who grant the track authority. This is an on-going battle that every M/W discipline faces. UP has worked to increase awareness of the importance of grinding to operations and the dispatching center management. We have set goals for grinding permit time, and discuss them daily on system conference calls in much the same way that we manage track curfews for large renewal gangs. This creates accountability for maximizing on-track windows. We have also educated dispatchers on how the grinder works, what it does, where it can clear and the costs associated with not working the equipment. Helping them understand the value from a defect-prevention standpoint helps them understand how grinding can reduce the need for slow orders or track time to repair a defect or service failure later.

Once a track window has been granted, the UP grinding team and

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the service provider have to perform as much work as possible within the available track time. We do this in a few different ways. One way is to increase the grinding speed, though this is not as easy as it may sound. The speed and pattern determine the metal removal rate. Faster is not always better. As speed increases, less metal is removed. This can undermine the goal of reshaping the head and removing the micro cracks. So, before increasing the grinding speed, a measure is put in place to ensure the quality of what is being left behind (see Figure 2). If grinding speeds are too slow, or if the wrong pattern is called, too much metal can be removed, resulting in poor productivity and a reduction in rail life. Use of the wrong patterns also requires more passes than may be necessary to achieve the desired result, which also reduces overall production.

Another way to improve efficiency is to identify the appropriate grinding cycles. The use of premium head-hardened rail, which is 30% to 40% more resistant to rolling contact fatigue (RCF) than head-hardened rail made only 10 years ago, has enabled UP to extend grinding cycles and the efficiency of the grinding program, overall.

UP and its service providers are reviewing the horsepower requirements for the various grinding patterns that have been used on the system. Improvements in stone technology may provide opportunities to increase horsepower and grinding speed with some patterns. UP is also reviewing the process of how it determines which patterns and grinding speeds to use. Under the current process, the grinding supervisor pre-inspects the grind locations and calls the first pattern and speed. On multi-pass curves the pattern is called on the grinder. This practice has worked, but there is a tendency to call the same handful of patterns because that's what has always been done, rather than utilizing some of the other patterns that are available.

## Improving Grind Quality

UP is also working with its service providers to move toward computer-generated pattern selection. Most grinders have the ability to use rail profile data to select the best templates to re-shape the rail profile. This could increase grinding speeds and reduce the number of passes required. The cost associated with auto generation of the patterns must be weighed against the productivity gains to determine the potential for productivity increases.

Also tied to grinding speed is the quality of the grind. UP has been working over the past few years to obtain a quality index behind the

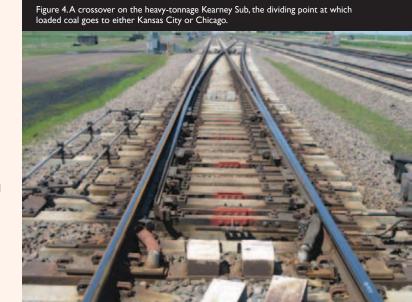




Figure 5. Conditions that could have been prevented with a switch grinding program

grinder. This index will allow UP personnel to understand the impact of increasing speeds with certain patterns, for example, and provide a quality audit tool to ensure that the railroad is getting what it pays for. A quality index will also provide a better understanding of the effect of grinding over the life of the rail.

With a quality index, UP will be able to monitor rail on a subdivision or specific segment of track to see if the average profile is getting better or worse. It will then be able to cross reference defects or service failures with rail profile quality. If the data shows that the rail defect rate is higher in areas with poor profile conditions, it can be used to justify increasing the grinding budget, or moving funds earmarked for rail replacement to the grinding program.

UP has established test locations to monitor various levels of grinding. UP is skipping selected curves and tangent sections during their regular grinding cycle to see how fast RCF develops, and to dial in the optimum cycles. Figure 3a shows the amount of spalling that develops at approximately 60-mgt grinding cycles. UP has since cleaned up this curve and kept if free of spalls with 35- to 40-mgt grinding cycles (Figure 3b).

UP is collaborating with the Transportation Technology Center Inc. (TTCI) at a western mega site to compare the effects of preventive grinding to the use of top-of-rail (TOR) friction management on the development of RCF on low-degree curves in heavy-tonnage territory. UP expects to be able to compare the cost of grinding versus

friction management and their effects on rail life.

## **Switch Grinding**

After years without a switch grinding program, UP began working a switch grinder again, this year. The major obstacle in the past was obtaining track time. Switch grinding is an inefficient process; much of the track time is consumed traveling between switches, or waiting to grind the turnout side of a switch. Granting permission to grind the turnout side is what gives the dispatch center the most trouble. On double track, which is where switch grinders are typically operated, dispatchers do a

good job of providing time on one track. But access to both tracks is needed to fully grind the switch. Granting time on both tracks is hard for dispatchers to do, so the switch grinding program suffers. Figure 4 shows a crossover on the heavy-tonnage Kearney Sub, the dividing point at which loaded coal goes to either Kansas City or Chicago. Because of the volume and tonnage, these turnouts require a lot of maintenance, from hand grinding to surfacing. If UP can quantify the savings that switch grinding can provide (in all of the maintenance categories), it will be able to obtain additional maintenance funding. Figure 5 shows some of the conditions that could have been prevented with a switch grinding program. Instead, this defect will require replacement of a movable point frog. This comes with very high material and labor costs, not to mention the network impact of having the crossover down while the changeout is done.

Among the areas that UP is exploring is non-destructive measurement of the depth of cracks on the rail surface. An accurate measurement of crack depth would help grinding supervisors to minimize metal removal and maximize grinding speed. UP is also looking for a way to quantify rail life extension due to grinding. UP currently correlates the number of pass miles ground to the number of detail fractures per mile. As Figure 6 indicates, when the number of pass miles (shown in green) increases, the number of defects (shown in orange) decreases.

Through close monitoring, UP hopes to further extend the life of the rail on the system. Analysis may show that a significant increase in grinding could reduce the need to replace rail in curves, which could enable UP to increase rail programs. For every mile of curve rail that is saved, 1.25 miles of new rail can be added. The ability to lay rail out-of-face, rather than skipping around to lay various curves, can significantly improve the efficiency of maintenance.

Mike Gilliam is Director of Track Maintenance; Russell Rohlfs is Director of Rail Maintenance, Union Pacific.



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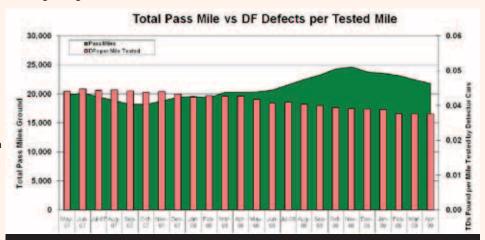


Figure 6.Two years of data shows that when the number of pass miles (shown in green) increases, the number of defects (shown in orange) decreases



## IN THE PRESS

New pre-cleaner delivers 2-3x blade life On vulcanized conveyor belts

[Neponset, IL] -- A new, highquality cleaning blade for use on vulcanized conveyor belts features a special polyurethane blend and tungsten carbide tip to deliver service life 2-3 times longer than conventional urethane blades. Designed to provide excellent cleaning performance immediately, avoiding any break-in period, the QCTM #1 MT Pre-Cleaner from Martin Engineering maintains consistent tension without frequent adjustment, requiring re-tensioning just twice a year in most applications.

The new pre-cleaner was developed specifically for vulcanized belts with no mechanical splices, and can be used at belt speeds up to 900 feet per minute (4.6 meters per second). The heavy-duty blade is well suited for wet, sticky material applications, and there is no limitation to the type of material on which it can be used.

Customers will find a familiar mounting design on the new product, with the same mounting dimensions and tensioning pressures as the company's popular QCTM #1 Heavy-Duty Pre-Cleaner. Utilizing both spring and twist tensioners, the QCTM #1 MT fits both 1- and 3-piece mainframes.



The MARTIN® QC<sup>TM</sup> #1 family of belt cleaners combines effective carry-back removal with "quick-change" one-pin replacement of the long-lasting, one-piece blade. To introduce product back into the product flow, the QCTM #1 MT is installed on the face of the head pulley. On a dual cleaner system, the new pre-cleaner is installed immediately in front of the secondary cleaner. For applications involving enclosed pulley chutework, the company recommends that one of its steel inspection doors be installed.

Martin Engineering is an industry leader in the development and manufacture of high-performance urethanes for specialized belt cleaning applications. These color-coded urethanes can be supplied in blades for any of the company's precleaners, as well as pre-cleaner designs from other manufacturers.

The company's belt cleaners are employed in a wide variety of bulk material handling applications, including coal, wood chips, pellets, grain, rock/aggregate, cement/clinker, mining and others. Founded in 1944, Martin Engineering is the world leader in making bulk materials handling cleaner, safer and more productive. The firm is headquartered in Neponset, IL, with global reach from operations in Brazil, China, France, Germany, Indonesia, Mexico, South Africa, Turkey and the UK.

## Hoosier Energy Agreement Marks 20th Settlement Under EPA's Power Plant Enforcement Initiative

WASHINGTON - The U.S. Environmental Protection Agency (EPA), the Justice Department, and the state of Indiana announced that Hoosier Energy Rural Electric Cooperative, Inc. has agreed to pay a civil penalty of \$950,000 and install and upgrade pollution control technology at its two coal-fired power plants in Indiana to resolve violations of the Clean Air Act. The settlement, filed in federal court today, will reduce harmful air pollution by more than 24,500 tons per year and requires Hoosier to spend \$5 million on environmental projects.

"This settlement continues our important enforcement initiative to reduce harmful air pollution from coal-fired power plants and provide the public with cleaner, healthier air to breathe," said Cynthia Giles, assistant administrator for EPA's Office of Enforcement and Compliance Assurance. "Pollution from these sources can cause severe respiratory and cardiovascular impacts, and are significant contributors to acid rain, smog, and haze. Coal-fired power plants are large sources of air emissions, and EPA is committed to making sure that they comply with the law."

"The large reductions in harmful air pollutants including sulfuric acid mist emissions secured by this settlement will have a significant beneficial impact on air quality in Indiana and downwind states," said Ignacia S. Moreno, Assistant Attorney General for the Justice Department's Environment and Natural Resources Division. "The Justice Department is committed to vigorously enforcing our nation's environmental laws, and we are pleased that Hoosier has agreed to install state-of-the art controls that will significantly reduce harmful emissions."

EPA issued a notice of violation to Hoosier, an Indiana electric generation and transmission cooperative, alleging that in 2008 it made modifications at its Merom coal-fired power plant without first complying with New Source Review requirements, including obtaining pre-construction permits and limiting emissions based upon best available control technology.

The settlement requires Hoosier to reduce air pollution from the cooperative's Merom and Ratts Stations, located in southwest Indiana. Emissions of sulfur dioxide (SO2) will be reduced by approximately 20,000 tons and nitrogen oxides (NOx) by more than 1,800 tons. The settlement will also reduce harmful sulfuric acid mist and particulate matter (PM) emissions. To achieve these reductions, Hoosier will upgrade existing, and install new, pollution controls at the Merom plant, install new pollution controls at the Ratts plant, and comply with annual tonnage limitations across its system. Hoosier estimates that it will spend between \$250 and \$300 million upgrading and installing pollution

controls at its coal-fired units through the end of 2015.

Hoosier will spend \$5 million on environmental mitigation projects in its service territory to address the impacts of past emissions. Hoosier must direct \$200,000 for projects to mitigate the harm caused by Hoosier's excess emissions at lands owned by the U.S. Forest Service. The remaining \$4.8 million will be spent on one or more of the following projects:

- Coal Bed Methane: Hoosier will capture and combust methane from coal beds to generate at least 10 megawatts of electricity. Carbon dioxide emissions resulting from the combustion of methane will be supplied to a greenhouse for use as a fertilizer.
- Wood Appliance Change-out and Retrofits: Hoosier will sponsor a wood-burning appliance change-out and retrofit project. Hoosier will provide incentives through rebates, discounts, and in some instances, replacement of old, inefficient, high polluting wood-burning technology.
- Clean Diesel Retrofits: Hoosier will retrofit in-service, public diesel engines with emission control equipment designed to reduce air pollutants.
- Solar Technologies: Hoosier will install solar power systems on public schools or on buildings housing

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non-profit groups in the company's service territory.

The settlement marks EPA's 20th settlement under its national enforcement initiative to reduce emissions from coal-fired power plants under the Clean Air Act's New Source Review requirements. Sulfur dioxide and nitrogen oxides, two key pollutants emitted from

power plants, have numerous adverse effects on human health and the environment. These pollutants can cause severe respiratory and cardiovascular impacts, and premature death. Sulfur dioxide and nitrogen oxides are also significant contributors to acid rain, smog, and haze. In addition, air pollution from power plants can drift significant distances downwind, thereby effecting not only local commu-

nities, but also communities in a much

The proposed settlement was lodged in the U.S. District Court for the Southern District of Indiana and is subject to a 30-day public comment period and final court approval .

## NMA Board of Directors Elects New Officers for 2010-2012 Term

Washington, D.C. -The National Mining Association (NMA) board of directors elected a new slate of officers for the two-year term 2010-2012. The action came at the association's Board of Directors and Annual Meeting of Members held in Washington, D.C. on Sept. 24.

New officers are:

#### Chairman

Greg Boyce, chairman and CEO, Peabody Energy Vice Chairman

Frank McAllister, chairman and CEO, Stillwater Mining

#### President

Hal Quinn, president and CEO, NMA

#### **Treasurer**

Roger Roberts, senior vice president, NMA

Secretary

Bruce Watzman, senior vice president, NMA Asst. Secretary

Katie Sweeney, general counsel, NMA

"NMA is fortunate to have executives of this caliber devoting their time and energies to the association," said NMA President and CEO Hal Quinn. "They make an extraordinary contribution to NMA and to U.S. mining. Gary Goldberg, NMA's outgoing chairman and president and chief executive officer of Rio Tinto Minerals, exemplifies the long tradition of service NMA has enjoyed from its volunteer leadership. The board and staff of NMA deeply appreciate Gary's many contributions over the last two years.

"NMA remains a robust organization because of the active participation of our membership and the service of our officers and board members. At a time when Americans are so concerned about their economic future, mining continues to provide jobs for more than 560,000 Americans and to meet the nation's needs for affordable and reliable energy and the materials that are essential to our economic and national security."

## New Oscillation Advancement Delivers 2.8 Acres Of Dust Suppression

[Peoria, IL] -- A global leader in large-scale dust suppression technology has announced another breakthrough in coverage area, now able to blanket more than 125,000 square feet with a powerful dust-trapping mist from a single machine -- more than 2-1/2 football fields. By designing a 359° oscillation option for all three of its popular ducted fan models, Dust Control Technology can deliver what is believed to be the widest coverage of any

comparably-sized dust suppression equipment.

Already known for long throw and outstanding effectiveness, the Dust-Boss® product line now offers an option for even greater cost efficiency and faster payback. "With nearly double the coverage, users can manage dust on a given job with a reduced number of machines," observed DCT president Edwin Peterson. "Crews can maintain better focus on core activities, without having to relocate the units as often to manage adjacent areas."

The expanded oscillation option will be available on all three of the DustBoss fan-driven designs: the DB-60, DB-45 and DB-30. Specifiers will be able to order the machines with four pre-set oscillation arcs of their choosing, allowing users to select the most appropriate coverage for each job site and weather conditions.

To incorporate the expanded oscillation option, engineers capitalized on the same advancements that produced 180° coverage a year ago. They shifted the water inlet to a center feed to accommodate the increased range of motion, and incorporated a larger oscillation motor

to handle the additional work.

The DB-60 employs a series of 30 specially-designed brass nozzles to atomize water into droplets 50-200 microns in size, the optimum for effective dust particle attraction. Launched by a powerful 25 HP (18.6 Kw) motor that generates 30,000 CFM (nearly 850 cubic meters per minute), the atomized spray has a throw of more than 200 feet (approx. 60 meters) to produce the massive coverage area of more than 2.8 acres.

The oscillating DB-45 can deliver a virtual dust barrier that covers more than 70,000 square feet (approx. 6,503 square meters), with a throw of nearly half a football field. With its 15 HP (11.2 Kw) fan, the DB-45 generates 18,000 CFM (510 CMM) of air flow to maximize coverage and particle capture. Like the more powerful DB-60, the design also features adjustable elevation from 0-50°. An optional 10 HP (7.5 KW) booster pump elevates water pressure in the DB-

45 as high as 200 psi for outstanding particle suppression.

The DB-30 has long been known for performance that belies its smaller size, capturing dust particles more effectively than many larger machines. Mounted on a movable carriage, the versatile unit has a 7.5 HP (5.6 Kw) motor that generates 9,200 CFM (260 CMM). When equipped with the new 359° oscillation option, the DB-30 can cover more than 30,000 square feet of area (2,787 square meters), nearly ¾ of an acre.

All of the fan-driven DustBoss models are available with the company's Variable Particle SizingTM technology, providing customers with a wide selection of different nozzles for suppressing a broad range of particle sizes. VPS can be used to control dust outside the typical 50 - 200 micron range, such as odor-causing vapors or very fine solids. Any of the DustBoss

designs can be ordered with a dosing pump to add surfactants for superior particle attraction or additives for odor control, and can be equipped with a supplemental filter system permitting the use of non-potable water sources. Dust Control Technology is a global leader in dust and odor control solutions for demolition, recycling, scrap processing, mining and rock industries. The company's DustBoss® product line helps reduce labor costs vs. manual sprays, freeing up manpower for more important tasks. Built for safety and rugged durability, the units also use less water than hoses and sprinklers. Some customers have realized payback in less than six months, netting an annual cost savings of more than \$50,000.

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## Industry Events

#### **RMEL**

2010 Fall Convention, September 12-14 2010, Tucson AZ
Safety Roundtable, February 25th 2011, Longmont CO
Distribution Operations and Maintenance Conference, March 10-11 2011, Littleton CO

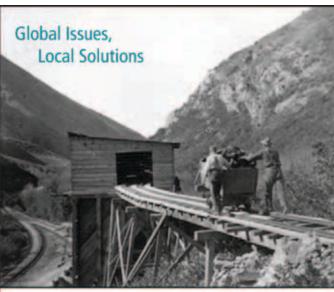
NCTA (National Coal Transportation Association)
Fall Meeting & Conference, September 13-15 2010, Denver CO
Spring General Conference, April 24-27 2011, Colorado Springs CO

ACC (American Coal Council)
2010 Coal Market Strategies, October 5-7 2010, Tucson AZ
2010 Coal Trading Conference, December 6-7 2010, New York NY
2011 Spring Coal Forum, March 8-10 2011, Clearwater FL

ACAA (American Coal Ash Association)
ACAA Fall Meeting, September 21-22 2010, Denver CO
The World of Coal Ash 2011, May 9-12 2011, Denver CO

To include your events in Coal Energy's listings, please email info@martonickpublications.com





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## u Know ior Mining Accidents in **U.S.** History

The recent tragedy earlier this year at the Upper Big Branch Mine Explosion in Montcoal, West Virginia once again brings the issue of mining safety to the forefront. The explosion, which claimed 29 lives, and accidents like this demonstrate both the danger of mining - and the courage of miners. Disasters such as the following chronicled accidents leave behind a means to learn and improve safety measures to further eliminate risk:

#### By Wadzi Muzwidzwa

In 1900, the Scofield Mine disaster in Utah became America's worst at the time. A massive explosion caused by an accumulation of dust claimed the lives of at least 200 miners. The explosion was reportedly so massive it threw a miner standing near the opening of the mine 820 feet.

Less than a decade later, the U.S. realized its worst mining disaster to date. The Monongah explosion of West Virginia resulted in the deaths of 362 miners. Miner Peter Urban emerged as the sole survivor but also suffered personal loss at the death of his twin brother in the explosion. A cave-in 19 years later claimed his life. The disaster is said to have been caused by the ignition of methane, which led to the ignition of coal dust. It's unknown how the methane was ignited, but it has been theorized that a dynamite blast or open lamp may have been to blame.

Within two weeks of the Monongah explosion, another mining tragedy at the Darr Mine - which had a death toll of 239 - occurred. An investigation determined that the explosion occurred when miners carrying flaming lamps entered a closed off area. Though a final consensus was never determined, the inquiry acquitted the Pittsburgh Coal Company of all blame.

The 1909 mining disaster in Cherry IIlinois was particularly resonant because it involved the death of children. Having occurred in the early 20th century, child labor laws had not yet been enacted, so it was common for children to work in the mines. Thus, out of the 259 miners killed in the explosion, several were children - the youngest of whom was only eleven. The inferno started during an electrical outage, when a cart filled with hay came to a stop on its tracks beneath an open torch, catching fire and spreading as workers attempted to move it out of danger.

In 1913, an overcharged explosion and dry conditions resulted in the New Mexico Stag Canon No. 2 disaster. 263 miners lost their lives on that October day. Only 14 miners were unaffected in the explosion. An apparatus crew rescued nine more, though two helmet men later died as they were overcome by afterdamp.

The second worst mining disaster in

West Virginia's history occurred at the Eccles Mine. At least 180 miners were killed when a buildup of flammable gases caused an explosion. After the explosion, entering and exiting was made difficult by the blockage of the lift shaft by carts that were supposed to be sent to the surface.

1917 saw yet another mining disaster that testified to the lack of safety regulations in the early 20th century. 167 fatalities resulted from Montana's Granite Mountain Mine disaster, which was caused by a rapidly spreading fire. The fire, which occurred when a cable was ignited by an assistant foreman's lamp, spread easily because of the mine's ventilation. The victims, many of whom died from asphyxia, did not die immediately. JD Moore, who died after the explosion, left heart-wrenching notes to his wife on his time book. There were few survivors.

Today, Castle Gates, Utah is a ghost town infamous for a series of explosions that claimed 172 men. The three explosions all occurred in 1924. The first one was set off after a fire boss attempted to relight his lamp, igniting gas and dry coal dust.



The second occurred when the survivors attempted to relight their lamps, and the third caused a cave-in.

Despite being hailed for being ahead of its time, the Mather Coal Mine was scene of the 1928 Benwood explosion. 195 West Virginians perished in the Mather Coal Mine explosion that came as a result of faulty wiring.

On January 10, 1940, 91 miners lost their lives in the Pond Creek No. I explosion in Bartley, West Virginia. The source of ignition was reportedly an electric arc propagated by coal dust. Many miners were able to escape, however. Of the 138 men in the mine, 47 survived.

With the early 50s came an explosion in West Frankfort, Illinois. The Orient No. 2 mine tragedy on December 21, 1951 came at the very last shift before the mine closed for the Christmas holidays. 119 miners were killed with their bodies being carried up from the mine and into the local junior high school gym for identification. This explosion was historical in that it spurred passage of the Federal Coal Mine

Safety Act of 1952.

Just a few days shy of Christmas in 1984, Emery County, Utah was hit with tragedy when a fire at the Wilberg Mine claimed 27 miner's lives: 18 workers and 9 company officials. The victims were unable to escape when their escape route became engulfed by fire. The disaster was reported as the worst coalmine fire in Utah history.

The dawning of a new century realized vast improvements in mining regulations and safety, however, several tragedies still occurred.

In 2001, two gas explosions claimed the lives of 13 miners inside the Brookwood mine in Alabama. The first explosion ignited when a rock fell onto a battery charger. The second, following not long after, resulted because of the build-up of methane gas due to the first explosion.

On January 2, 2006, 13 miners became trapped inside the Sago mine following an explosion. By the time rescuers were able

to reach them 36 hours later, 12 had died due to carbon monoxide poisoning. Just a few months later, another five miners were killed in an explosion at the Darby mine in Kentucky on May 22, 2006.

Six miners and three rescue workers were killed at the Crandell Canyon mine in Utah in 2007. Initial reports stated that the collapse was caused by an earthquake, but afterwards it was discovered the seismic waves were to blame. The mining company retained \$1.85 million for violations of health and safety.

Throughout history, the lives lost in mining accidents have undoubtedly spoken of the apparent dangers of the craft. But above that, they have spoken of a need and responsibility for safety and health regulation in the U.S. These tragedies shed more light than mere statistics and points in history: they remain as an indelible reminder to both the lives affected and to the coal mining industry as a whole.



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"In a landmark buyout, Asian coal mining powerhouse Banpu Public Company Limited takes over Australia's Centennial Coal Company"

BY WADZI MUZWIDZWA

On Wednesday, Aug. 11, 2010, Banpu Public Company Limited announced a venture that would further propel the Thailand-based coal mining company to an intercontinental arena.

Its shareholders green-lit Banpu PCL's investment undertaking of Australian miner Centennial Coal Company. The U.S. \$2.1 billion dollar venture fulfills the company's long hailed intention of offshore expansion and regional growth and comes as a response to expectations of rising demand and prices.

Presently, Banpu PCL is the biggest coal mining company in Asia. Established in Thailand in 1983, the company has emerged as an energy-producing powerhouse and is "rapidly becoming a leading regional coal player through its operations in Indonesia and its investments in China," according to its website.

Banpu PCL was listed on the Stock Exchange of Thailand in 1989 and continued to expand well into the 1990s. In 2001, Banpu turned its sights toward leading the Asia-Pacific region in coal and energy, looking to profit off its core skills, competitive advantages and the maximum opportunity for growth. That directive spearheaded such investments as the undertaking of Australia's Centennial Coal Company, which was established in 1989 and listed on the Australian Securities Exchange in 1994.

Currently, Banpu PCL controls approximately 19.9% of the Australian coal company but decided in July to place an offer for the remaining 80.1% stake that it does not currently have in Centennial. The U.S. \$5.2 dollar per share price tag stands at a 40% premium to Centennial's closing share price of \$3.9 U.S. dollars, as of early July.

Earlier, Banpu PCL had reported that bonds issue at about \$604 million U.S. dollars would finance the investment undertaking. The remaining funds have been acquired through loans from foreign banks, at the approval of Banpu's shareholders. In a prepared statement, Banpu's chief executive Chanin Vongkusolkit expressed hope that the tender offer would be completed by September or end of October at the latest, with



a realization of revenue from Centennial as early as the fourth quarter.

That target date seems likely as the buyout is in its final stages. Its only hurdle now is to receive confirmation from the Foreign Investment Review Board, which according to its website, "examines proposals by foreign people and companies to invest in Australia and advises the Treasurer on those subject to the Foreign Acquisitions and Takeovers Act 1975 and Australia's foreign investment policy."

For the Banpu deal, the FIRB is likely seeking reassurances concerning the security of thermal-coal supplies for the Australian power generators that currently buy the majority of Centennial's output.

The offer was purposely placed as the Australian government's mining tax plan was reworked and will be the first corporate deal following it. Analysts from Citi Bank report that the changes work to highly benefit Centennial. The reworked Minerals Resource Rent Tax will reportedly spare the company a net present value of 13% that the original version would have cut.

Analysts also predict that the deal will bring considerable gain to Banpu as the takeover would put Centennial's nearly 400

million tons of coal reserves under the Thai company. This would cause a subsequent increase in earnings and even potential upgrade. The purchase seems a worthy one, as Centennial Coal Company presently is the largest independent coal company in Australia. Though down 28 points from the previous year, Centennial's full year profit, posted mid-August, showed a profit of U.S. \$51.5 million with an expected net profit of U.S. \$134 million dollars this year.

The Australian investment is intended to act as a prelude to further acquisitions in Australia, which has emerged as a target growth market for Banpu, along with Indonesia and South Africa, among others. The expansion also comes in an effort to reduce its reliance on Indonesia, which currently is the source of more than 90% of Banpu's entire revenue from last year. Indonesia's numerous legal disputes also often complicates business dealings.

In a prepared statement, Chanin Vongkusolkit expressed his belief that the merger was mutually beneficial for both companies. He said, "We believe that the cash nature of the offer will enable Centennial shareholders to realize certain and immediate value for their shares in a volatile and uncertain market." Centennial Chief Executive Bob Cameron, in a prepared statement, applauded Banpu's bid for "recogniz[ing] both the current profitability of Centennial and its upside." -



# PROFILE Cecil Edward Roberts, Jr.

Sixth-generation coal miner and one of the labor movement's most stirring and sought-after orators, became President of the United Mine Workers of America (UMWA) on October 22, 1995, having served as Vice President of the union since December 1982. Roberts succeeded Richard L. Trumka, who was elected Secretary-Treasurer of the AFL-CIO.

Growing up in a UMWA household on Cabin Creek in Kanawha County, WV, Roberts heard the stories of his family, including a great-uncle, Bill Blizzard, who was a legendary organizer during the West Virginia mine wars of the 1920's and a UMWA District President under John L. Lewis. Both of his grandfathers were killed in the mines.

After military service in Vietnam and college,

Roberts worked for six years at Carbon Fuels' No. 31 mine in Winifred, West Virginia, where he served as a local union officer. In 1977 he was elected Vice President of UMWA District 17 by a 2-to-1 margin. In May 1981, he was reelected without opposition.

On November 9, 1982, Roberts was elected Vice President of the UMWA International Union, again by a 2-to-1 margin, running on a slate headed by Trumka and including John J. Banovic, who was elected Secretary-Treasurer. The Trumka - Roberts - Banovic team was reelected without opposition five years later.

In 1989, Roberts was the on-the-scene leader, often referred to as field general, and day-to-day negotiator in the UMWA's militant 10-month strike against the Pittston Co., which had cut off health benefits to its retirees and was trying to walk away from its obligations to the UMWA Health and

Retirement Funds. For his role in that successful strike, Roberts received the Rainbow Coalition's Martin Luther King award as well as awards from Citizen Action and the Midwest Academy.

On November 10, 1992, Roberts was reelected by an 80-percent margin to his third term as Vice President.

In December, 1995, Roberts assumed the UMWA Presidency upon the resignation of Richard Trumka.

In 1996, he reopened the UMWA's National Agreement for the first time in the union's history and made significant improvements in the wage agreement.

In August 1997, Roberts was elected by acclamation to the Presidency of the UMWA.

In 1998, he negotiated a new National Agreement that was ratified by the highest percentage in the Union's history. The agreement included a historic 20-year and out pension provision which has benefitted approximately 5,000 UMWA members to date.

In July of 2001 he became a member of the AFL-CIO's Executive Council. He serves on the Civil and Human Rights Committee; Labor and the Environment Committee; Manufacturing and Industrial Committee; Safety and Occupational Health Committee; Senior Action Committee Strategic Approaches Committee; Political Education Committee; and Article XX Appeals Committee. In October of 2005, he was appointed to the Executive Committee of the AFL-CIO's Executive Council.

In 2000 he was again elected by acclamation as President of the United Mine Workers of America, and in 2001 he negotiated a new National Agreement that provided a first ever 30-year and out pension provision regardless of age which has benefitted approximately 3,000 UMWA members to date.

In 2004 he became the first President in the history of the United Mine Workers of America to be elected by acclamation by the membership for three consecutive terms.

At the end of 2008, he became the 2nd longest standing President of the UMWA, second only to John L. Lewis.

In August 2009, Roberts was once again reelected by acclamation to his fourth full term as International President. He is on the board of the American Income Life Insurance Company.

Roberts graduated from West Virginia Technical College in 1987, and received an honorary Doctorate in Humanities from West Virginia University of Technology in 1997.

Roberts is married to the former Carolyn Stewart. They have a son, Kyle, a daughter, Melissa, two grandsons, Aaron and Brandon and two granddaughters, Savannah and Kathryn.

## COAL FATALITIES BY STATE

STATE	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997		TOTAL
ALABAMA	2	3	2	3	2	4	2	1	1	14		2	1	1	2	40
ALASKA					_											0
ARIZONA					1									1	1	3
ARKANSAS										1						1
CALIFORNIA																0
COLORADO				1							1	1	2		1	6
CONNECTICUT																0
DELAWARE																0
FLORIDA																0
GEORGIA																0
HAWAII																0
IDAHO																0
ILLINOIS	2	2	1					3		1	2	1		1	2	15
INDIANA	1		1	3			1	1	1	2	1	1		1		13
IOWA																0
KANSAS																0
KENTUCKY	5	6	8	2	16	8	6	10	10	5	13	9	12	5	12	127
LOUISIANA		1														1
MAINE																0
MARYLAND				2	1							1				4
MASSACHUSETTS																0
MICHIGAN																0
MINNESOTA																0
MISSISSIPPI																0
MISSOURI																0
MONTANA	1				1											2
NEBRASKA																0
NEVADA																0
NEW HAMPSHIRE																0
NEW JERSEY																0
NEW MEXICO				1					1							2
NEW YORK																0
NORTH CAROLINA																0
NORTH DAKOTA														1		1
OHIO						1				2		2	1			6
OKLAHOMA				1		1										2
OREGON																0
PENN (ANTH)			1		1	1	1		3	1	2	2			1	13
PENN (BITUM)		1	4	1		3		1					1	4	2	17
PUERTO RICO																0
RHODE ISLAND																0
SOUTH CAROLINA																0
SOUTH DAKOTA																0
TENNESSEE		1					1							1		3
TEXAS			1	1						1						3
UTAH				10	1		2		1		4	1		3	2	24
VERMONT																0
VIRGINIA		1	2		1		3	3	4	2	4	5	5	5	3	38
WASHINGTON																0
WEST VIRGINIA	32	3	9	9	23	4	12	9	6	13	9	9	6	7	12	163
WISCONSIN																0
WYOMING			1			1		2	1		2	1	1		1	10
TOTAL	44	18	30	34	47	23	28	30	28	42	38	35	29	30	39	494

## Upcoming issue

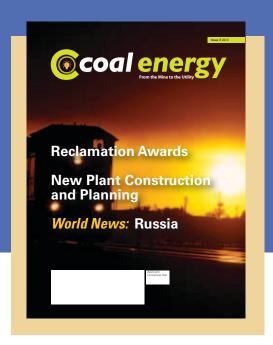
Look for these stories coming up in Issue 1,2011:

**Reclamation Awards** 

**New Plant Construction and Planning** 

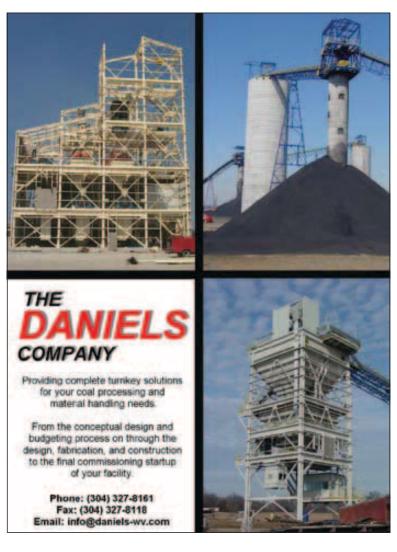
World News: Russia

If you have any story ideas you would like to see in the next issue, please send an e-mail to maria@martonickpublications.com.



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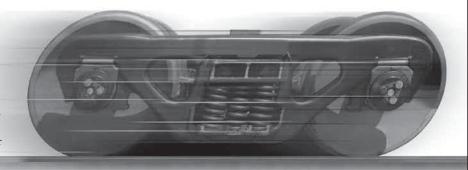


## Below the deck...we're a cut above.

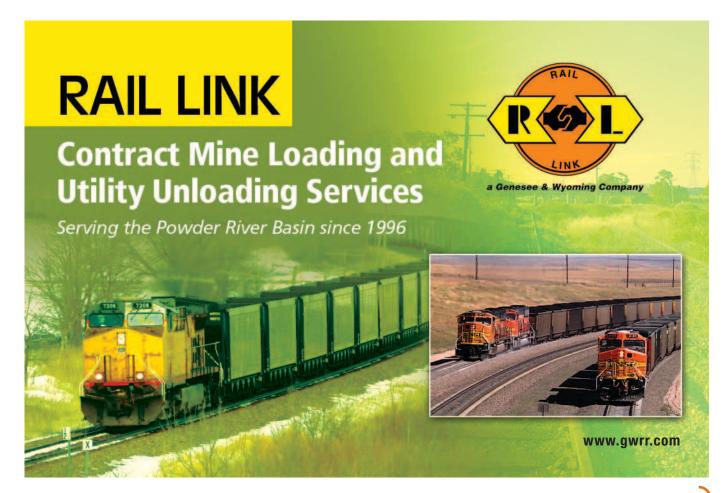
- Truck systems
- Side frames
- Bolsters
- Constant contact side bearings
- Couplers
- Draft sills
- Coil springs
- Center plates
- Draft gears
- Bearing adapters
- Cushioning units
  - → End-of-car
  - → Center-of-car

■ Wheels, curved-plate, heat-treated

■ Roller bearings







## ATTENTION: EnviroGreen Dust Control Bulletin





EnviroGreen Technology offers stay where you spray technology!

 Because EnviroGreen DC-2008 resists being "wicked" into the internal surfaces of the coal, it offers fantastic point of application dust control.

## "Foam without the Fuss!"

Apply EnviroGreen ONCE and it keeps on working throughout ALL the transporting and handling process.

## ACTUAL RESULTS:

EnviroGreen even performs on super dry coke! It is being used at two huge mid-America coke producing facilities to minimize dust when the coke is offloaded at the blast furnaces. When not treated, the dust cloud at the blast furnace dump completely engulfs the entire railcar and surrounding area. The cars literally disappear into the black cloud! When the coke is treated as the cars are loaded, there is no cloud at offloading dump area; when the hopper doors open and the coke tumbles out, there is a wisp, a hint, of light dust and then nothing ...

Just coke pouring though the grating. NO DUST!

Contact AKJ Industries TODAY and start using our technologies to save you money while benefitting from being GREEN!



phone: 239-939-1696

email: info@akjindustries.com

web: http://www.akjindustries.com