



# Mining Accident News No.1213

31 May to 18 June 2012

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Monday 4 June 2012

## Fines For Fatal Mining Accident Less Than Predicted

*Extract from news.opb.org*

The federal government is fining a north Idaho mining company \$360,000 for unsafe practices that killed a miner last year. That's about a third of the penalties that were expected.

Last year federal inspectors said the Hecla Mining Company engaged in "aggravated conduct" when it allowed miners to extract silver ore from a mass of unstable rock. It happened about a mile underground at the Lucky Friday Mine near Mullan, Idaho.

The practices led to a tunnel collapse that killed 53-year-old Larry Marek, according to a investigation.

**NOTE:** Views expressed in this newsletter are those of the individual sender, and are not necessarily the views of the NSW Department of Trade and Investment, Regional Infrastructure and Services  
Issue 13 of 2012

Federal mine regulators have now assessed the penalties on four citations associated with Marek's death. They include the accident itself, as well as similar mining practices elsewhere in the mine that inspectors say could have lead to other fatalities.

The \$360,000 in fines is far less than what Hecla's president had predicted.



A spokesman for Hecla Mining said the company has no comment, as it's an ongoing legal matter. Another miner died and several others were wounded in separate accidents at the Lucky Friday last year.

On the Web:

MSHA investigation report on Marek's death:

<http://www.msha.gov/FATALS/2011/ftl11m04.pdf>

## Coal, gas outburst in southwestern China kills 5 miners

*Extract from channel6news.com*

QUJING CITY, CHINA (BNO NEWS) -- Five workers were killed on Sunday evening in a coal and gas outburst at a coal mine in southwestern China, local authorities confirmed on Monday afternoon. More than 40 other workers were able to escape safely.

The accident occurred at around 6:30 p.m. local time on Sunday when a group of 47 miners were

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working at a shaft at the Lianhuachongchagou Coal Mine in the Qilin District of Qujing City, which is located in southwestern Yunnan province which borders Burma (Myanmar), Laos, and Vietnam.

District government officials told the state-run Xinhua news agency on Monday that 42 miners managed to escape on their own, but five others were trapped following the outburst. Rescue workers later pulled four of the workers from the debris, but they all died after being taken to a nearby hospital.

Xinhua said rescue workers recovered the body of the fifth miner at approximately 4 a.m. local time on Monday.

The cause of the accident was not immediately known, but authorities said the coal mine was properly licensed.

Safety conditions at mines in China have significantly improved in recent years but they remain among the world's most dangerous with at least 289 fatalities in the first quarter of this year. There were a total of 1,973 fatalities in 2011, 2,433 fatalities in 2010 and 2,631 in 2009, according to official figures.

One of the worst mining accidents in China in recent years happened in November 2009 when 104 workers were killed after several explosions at a coal mine in Heilongjiang province.

Wednesday 6 June 2012

## **USA: Hecla fined \$318K over death of miner in Idaho**

*Extract from Bloomberg Businessweek*

Hecla Mining Co. has been fined \$318,200 by federal regulators for the death of a worker last year in Idaho's Lucky Friday Mine.

Larry Marek died April 15, 2011, during a cave-in at the underground silver mine near Mullan, Idaho.

In a report released last year, Mine Safety and Health Administration officials called Lucky

Friday managers negligent for failing to install adequate ground support and not testing the stability of the rock where the cave-in occurred. Hecla has disputed those findings.

Hecla must either pay the fines by June 19 or contest them. The company declined to say Wednesday what it planned to do.

"It's still a legal issue, and the company doesn't comment on pending legal matters," spokesman Stan Devereau said.

Hecla is based in nearby Coeur d'Alene, Idaho, and is the nation's largest primary silver producer.

Marek was crushed when his work area collapsed in what was Hecla's first fatal accident at the mine in 25 years.

It was the first of three accidents that prompted the Mine Safety and Health Administration to order the mine closed in January for some safety improvements, throwing more than 100 miners out of work. Contract miner Brandon Lloyd Gray was buried in rubble while trying to dislodge jammed rock Nov. 17, and died two days later.

In mid-December, a rock burst injured seven miners. The mine has not operated since.

Federal safety inspectors ordered the Lucky Friday Mine closed after they determined sand and concrete material that had leaked from a pipe into a mine shaft over the years needed to be removed.

The material is in the mile-deep Silver Shaft, the mine's main access shaft, and workers are essentially power washing the material from its walls.

Last month, Hecla Mining Co. Chief Executive Officer Phil Baker said the work was progressing and that Hecla would start rehiring workers in July.

The underground Lucky Friday Mine is one of the nation's deepest, and produces silver, gold, zinc and other metals.

Thursday 7 June 2012

## Four Killed in SW China Mine Collapse

*Extract from Xinhua*

Four miners were killed after the roof of a mine in southwest China's Guizhou province collapsed on Wednesday, local authorities said Thursday.

There were 35 miners on duty at the Yebiao Coal Mine, located in the town of Pingzheng in Zunyi county, when the accident happened.

Thirty-one miners managed to escape, while the remaining four became trapped underground, according to the provincial work safety bureau.

One miner died at the scene, while the other three died at a local hospital after being pulled from the mine, the bureau said.

The cause of the accident is under investigation.

### Quote of the week



"Because things are the way they are, things will not stay the way they are."

Bertolt Brecht, German playwright (1898-1956)

Friday 8 June 2012

## Philippines: Coal mine worker falls in pit, dies

*Extract from Sun Star, Cebu, Philippines*

A REPAIRMAN of a coal mine in Barangay Balaas, Argao town died after he slipped from a coal transport equipment and fell into a 45-meter pit last Monday night.

In the accident in Alta Tierra Mining and Development Corp. in Argao, Leocadio Sandoval, 37, suffered fatal head injuries due to the impact. The hole is about 60 meters deep.

Alta Tierra Mining and Development Corp. is co-owned by Cebu Provincial Board Member Wilfredo Caminero.

The Department of Energy (DOE) has started investigating the accident, and has ordered the temporary closure of the site pending the result of the investigation.

SPO1 Arnold Abiner of Argao Police Station told Sun.Star Cebu that the accident happened past 7 p.m., when Sandoval went down into the pit with his two colleagues to repair the cart used in transporting coal.

His body was pulled out an hour later.

The elevator is open and riding it is risky, the police officer said.

The police ruled out foul play after interrogating Sandoval's co-workers Jimmy Dwerme, 30, and Cerilo Mariposque, 28.

Sandoval wasn't drunk because drinking is not allowed at the mine, the police officer said.

Police learned of Sandoval's death only last Wednesday night, after the media called the police station to confirm the accident.

Asked why they did not immediately report Sandoval's death to the police, Caminero said it was an accident and not a crime, so they informed the DOE instead.

"If there is an agency that deals with accidents in mines, it would be the DOE," Caminero said.

In a phone interview yesterday, Gerard Abesares, investigator of DOE's Energy Development and Utilization Division, said they considered the accident an error of judgment on the part of Sandoval, who was trying to test the coal transport equipment.

Abesares confirmed that the small-scale mining is operated by Caminero and has a permit under the name of Gemma Albarracin.

Abesares, who visited the mining site last Tuesday, told Sun.Star Cebu that Sandoval was a member of the repair and maintenance crew that was called to fix a wooden path where loads of coal pass through.

When the repair was completed, they decided to test it.

His fellow miners were already on board the equipment, which was running. When Sandoval tried to get on the equipment, he slid and fell directly to the pit, landing some 45 meters from where the equipment was hanging.

His fellow miners immediately carried him out but a medical rescue team declared that he died instantly because his head was badly fractured.

“Based on our interviews with his fellow miners, the victims appeared experienced in his job, but he was negligent and did not follow the standard of operations,” Abesares said.

There are two kinds of mining operations in Cebu—the coal operating contract (COC) and the small scale mining operations.

Albarracin’s mining firm, which is reportedly financed by Caminero, is classified as small-scale mining.

A DOE team inspected Albarracin’s mining site and learned that it complied with the mining standards of operations, Abesares said.

He added that the firm has a safety inspector and has safety reminders within the mining site, and the miners have safety boots and head gear.

But because of the accident, about 300 workers of Alta Tierra Mining and Development Corp. were told not to report for work.

Caminero, for his part, said there is no basis for the temporary closure of the mine, especially when all their 300 workers are equipped with safety gear.

“It was an error on the part of the worker. It’s really up to the workers, if they are not careful, then they would fall,” said Caminero.

He said the DOE has confirmed that Sandoval was negligent.

The board member said this was not the first time an accident happened at the mining site.

Years ago, a foreman and another worker died on separate incidents. Both were Caminero’s nephews.

Abesares said Caminero has assured the DOE that he would give weekly financial support to the Sandoval family and a scholarship for his son who is in second year high school.

Sandoval’s wife Clara, 33, said she now worries for the future of their seven children.

In an interview aired over ABS-CBN’s TV Patrol Central Visayas, she described her husband as a hard worker, who had worked in the coal mine for seven years. His wake is in their house in Barangay Santicon, Badian.

Caminero also assured the Sandoval family of burial aid, on top of the Social Security System (SSS) benefits that the family will receive.

“This is a big loss for us. He was a trusted employee. He worked very hard and would not take his work for granted, especially if there was a problem at the mine,” Caminero said.

## This week in mining accident history

**8 June 1917**

**Granite Mountain/Speculator Mine**

**Butte, Montana, USA**

**Underground copper mine**

**167 died by asphyxia from fire**

In the Granite Mountain/Speculator Mine disaster of June 8, 1917, a cable was being lowered into the Granite Mountain mine as part of a safety system. At this time, the Butte, Montana copper mines were at full wartime production. Ironically, an attempt to install a fire suppression system in the Granite Mountain and Speculator mines caused the fire itself. When the cable, intended to power a fire sprinkler

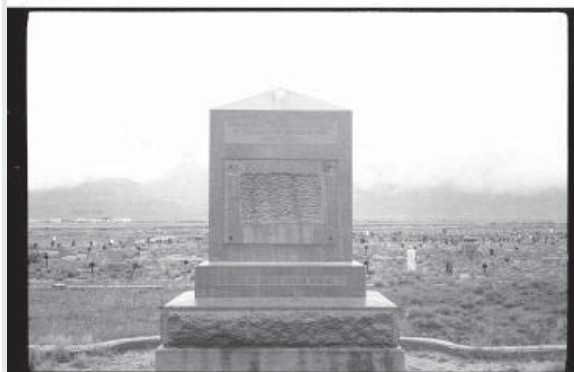
system, fell and was damaged, an assistant foreman (approximately 2,500 feet below the surface) with a carbide lamp went to inspect the damage, and the oil-soaked cloth insulation on the cable was ignited by the flame from his lamp. The fire quickly climbed the cable, and then turned the shaft into a chimney, igniting the timbers in the shaft. 167 miners died in the ensuing blaze, most from asphyxia. Some of the deceased did not die immediately; they survived for a day or two. Notes were written by them while they waited to be rescued. A few managed to barricade themselves within bulkheads in the mine and were found after as long as 55 hours. A strike ensued as a result of the disaster.

It remains the most deadly event ever in hard-rock mining in the USA.

The tragedy led to a climatic clash between capital and labor in which the unions were crushed.

The disaster was memorialized in the song "Rox in the Box" on the album *The King is Dead* (2011) by The Decemberists (band), an indie rock band.

There is a memorial to the miners killed in the fire, near the mine's location in Butte. Some of the notes written by the miners can be viewed at the site.



Monument for the victims of the Granite and Speculator mine disaster

Extract from *A Reexamination of the Granite Mountain-Speculator Fire*, by James D.Harrington

Sunday 10 June 2012

## NZ: Whittall worried at Kiwi safety

*Extract from [www.stuff.co.nz](http://www.stuff.co.nz)*

Peter Whittall spoke of his concerns about New Zealand workplace safety standards shortly before the Pike River mining disaster.

Whittall is defending 12 charges laid against him under the Health and Safety and Employment Act 1992, following the mining tragedy which claimed the lives of 29 miners and contractors.

Last weekend the Sunday Star-Times revealed that Whittall – chief executive of Pike River Coal at the time of the explosion – was a founding signatory to a major "zero-harm" workplace initiative.

The pledge that Whittall signed stated he would "take personal responsibility for making health and safety a vital part of my business".

Now it has emerged that Whittall aired his own issues with health and safety standards six months prior to the November 19 tragedy on the West Coast.

Whittall spoke out at a May 2010 meeting of the Department of Labour-convened Workplace Health and Safety Council.

Minutes of the meeting – obtained by the Star-Times – record Whittall telling the meeting health and safety in New Zealand was fragmented, with no standard "matrix or definitions". "Being from Australia, Peter made the comment that it all feels like late 1980s stuff and there is a long road ahead," the minutes read.

The meeting also featured 11 officials from the Labour Department, as well as representatives from the Accident Compensation Corporation, Business NZ, the New Zealand Council of Trade Unions and Maritime NZ.

Whittall attended the meeting as a representative of the Business Leaders' Forum on workplace health and safety.

He had signed the forum's pledge, in which he vowed to:

Take personal responsibility for making health and safety a vital part of my business; and

Create a workplace where everyone views health and safety to be as natural and important as quality, profit and customer service.

Whittall's pledge also stated that Pike River would: "Hold itself accountable before its peers by sharing its health and safety performance."

His signed pledge also stated his company would: "Champion health and safety – inspiring our people, suppliers and customers to create zero-harm workplaces."

But the ongoing royal commission of inquiry into the Pike River disaster has heard a catalogue of woe at the Pike River mine, including safety concerns, problems with the mine's design and heavy criticism of Whittall's management style, including the way he handled health and safety.

Confirmation of Whittall signing the "zero-harm" workplace accord was greeted with surprise by Pike River families spokesman Bernie Monk.

Monk – who lost his son 23-year-old son Michael in the tragedy – said Whittall had failed to honour the pledge he had signed.

"I am bloody disgusted [after reading] that article, how sadly we were let down by people like Peter Whittall," he said.

"I just can't think that [he] was serious in what they were saying and signing their lives away to, to let something like Pike River happen.

"Now everyone seems to be coming out of the woodwork to say there were major faults at Pike.

"Here we are losing people unnecessarily."

Meanwhile, Monk said the Pike River families had no plans to push for a memorial to be erected at the entrance of the mine.

Two prominent memorials have already been constructed on the West Coast for the Pike

River 29 – one in central Greymouth and another on land near the mine.

A third memorial for the Pike River 29 had been proposed at Greymouth's Lake Karoro.

Families of the dead miners and contractors have since decided that the memorial should be dedicated to all who had lost their lives in West Coast mining tragedies.

Wednesday 13 June 2012

## UK: More heartbreak for family of NZ mine disaster victim

*Extract from FIFE Today, UK*

The parents of mining disaster victim Malcolm Campbell have been left devastated by the news that it is unlikely their son's body will ever be recovered.



Malcolm Campbell from St Andrews who is trapped underground in a mine mining accident in New Zealand photo by Dave Scott

Jane and Malcolm senior were given the heartbreaking news during a teleconference with Solid Energy, the new owners of the Pike River mine in New Zealand where 29 miners were killed in a series of explosions in November 2010.

There were hopes the bodies could eventually be recovered but the families of the victims have now accepted that dangerous levels of methane

in the mine have made such an operation impossible.

Malcolm Campbell's parents are now preparing themselves to visit New Zealand again to say goodbye to their son.

"This news was like losing Malcolm all over again, the ache is just horrendous," Jane said this week.

"We got a call to attend an urgent teleconference and we were thinking they were going to tell us their plan to go in to recovery the bodies. The meeting was held by Solid Energy and mining experts and our lawyers.

"We were then told that recovery now would not be an option as it was too dangerous. We have accepted this as we do not wish for any more fatalities.

"At the meeting it was also mentioned that maybe in 10 years time, with new technology, there would be a possibility for recovery - yet another carrot.

"We have been angry as well as they have kept us hanging on and they probably knew this some time ago.

"We are now thinking of going over to New Zealand on the second anniversary to say our goodbyes to Malcolm - we just wish he was laid to rest here so we could visit him often."

Jane and her family have been overwhelmed by the support they have received from the local community who have rallied round them since news of the disaster first broke.

And she thanked everyone for their help as she and her husband prepare to say a final farewell to Malcolm before trying to move on without him.

"If it wasn't for our family, friends and the good people of St Andrews and further afield we could not have got through this nightmare," she explained.

"The fundraising that people took the time to organise and attend - we thank them all from the bottom of our hearts. The support we have had

has been amazing and, through the *Citizen*, we would like to say a huge, heartfelt thank you.

"They say life goes on, but it will never be the same again without our Malcolm."

Thursday 14 June 2012

## USA: MSHA says Coal Mine Safety Improving

*Extract from The Intelligence Wheeling News-Register, USA*

### Both companies and government making changes

PITTSBURGH - Changes made to laws and specifications in United States mines have improved safety significantly, a Mine Safety and Health Administration official said Wednesday.

During an MSHA seminar in Pittsburgh, Joseph Main, assistant secretary of labor for the administration, said in the two years since he took over the position prior to the Upper Big Branch Mine accident, a renewed focus on employee safety and response has been implemented. He said that accident forced the entire industry to pay closer attention to its weaknesses and find new ways to combat them.

"The impact that tragedy had on the families of the miners lost and the mining community is not measurable," he said. "There has been an intense examination of that tragedy, and MSHA and the mining industry have undergone significant change as we have sought to find and fix deficiencies in mine safety and health. MSHA's extensive investigation of that tragedy identified a workplace culture promoted by the operator that valued production over safety, including practices that intimidated and disrespected workers and fostered and encouraged non-compliance."

Main said while a majority of mines do adhere to safety regulations, there are many that do not. In an effort to change that trend, MSHA has implemented changes to its Pattern of Violation program. Since changing that approach, Main said the number of citations and orders issued

has dropped from 171,018 in 2012 to 157,678 in 2011.

Additionally, a final rule on examinations in underground mines goes into effect in August, mandating mines to correct violation of ventilation, methane, roof control, combustible materials, rock dust and other standards. Main said these issues have been identified as key causes of potential tragedies. He added 37 miners died in work-related accidents in 2011 and while that number is still high, it was an improvement over the 71 in 2010, which includes the 29 killed in the Upper Big Branch Mine accident.

"As low as the fatality numbers have come in recent years, we all know that one death is one too many and that mining deaths are preventable," he said, adding that in 1977, the total number of mining deaths was 273.

Main said MSHA also takes into account miner concerns and has focused on the well-being of workers. He said more than anything, many miners express their concerns that they do not have a voice in the workplace, which MSHA hopes is an opinion that will soon change.

"We want to give them a better opportunity to raise concerns about health and safety conditions and let us know if something needs fixed," he said.

Friday 15 June 2012

## **S.Africa: Village stops Tau Lekoa production after fatal accident**

*Extract from [miningweekly.com](http://miningweekly.com)*

JOHANNESBURG – Diversified miner Village Main Reef on Friday reported a fatal accident at its Tau Lekoa operation, in Orkney.

The company stated that a worker had died in a blasting-related accident on Wednesday.

It said in a statement that the Department of Mineral Resources (DMR) inspectorate in the

North West province had been alerted and an initial investigation had been conducted.

The inspectorate has issued a Section 54 instruction, stopping all production at Tau Lekoa.

"The management of Tau Lekoa is working closely with the DMR to reduce the duration of the stoppage on production at Tau Lekoa, while a full investigation continues," the company stated.

The news of the Village Main Reef accident comes only a day after fellow gold miner AngloGold Ashanti also reported a mine death at its Great Nologwa mine, near Klerksdorp.

The AngloGold worker died in a fall-of-ground incident.

## **USA: Greens Creek miners respond to Pogo fire**

*Extract from [KTOO News, USA](http://KTOO News, USA)*

Three workers from Juneau's Greens Creek Mine were among the emergency responders to the Pogo Mine in the Interior Tuesday, after an early morning underground fire forced the evacuation of 34 workers at the facility near Delta Junction.

The Greens Creek miners are part of "Central Mine Rescue" – a cooperative made up of workers from nine different mines in Alaska and the Pacific Northwest. They all train on the same equipment and are ready to assist other mines in the event of an emergency.

"Say like up at the Pogo Mine, we didn't have to pack up, bring anything with us," says Greens Creek Health and Safety Manager Teresa Cummins. "Our personnel are trained so that we can work with other underground mine rescue teams. We all are speaking the same language for an efficient and quick response when these nine members are in need."

Cummins says the Green's Creek miners were called in to assist Pogo's mine rescue team. She hasn't had any contact with them, but says it's likely they didn't see any action.



In the event of an underground emergency, the "Central Mine Rescue" agreement requires two teams of six respond – one in a primary role, the other as backup. The cooperative is run out of Couer d'Alene, Idaho, and puts out a call anytime there's an emergency at one of the member mines. In the case of the Pogo incident, Cummins says Greens Creek was the first to respond that it had a team available.

"This is what they train for and I'm very, very proud of them," Cummins says. "I had more volunteers than I had spots to send."

Cummins says about 20 workers make up the Greens Creek's Mine Rescue Team. Last month they competed in a "Central Mine Rescue" competition in Kellogg, Idaho, pitting workers from the nine member mines against each other in drills and training exercises.

Nobody was hurt in the underground fire at the Pogo Mine. The incident is under investigation by the federal Mine Safety and Health Administration.

Saturday 16 June 2012

## QLD: Struggling to deal with son's death

*Extract from Daily Mercury, Mackay, Qld*

IT'S been just over a week since Brett and Bonnie Scovell lost their son.

The heartbroken parents grieve heavily for their boy.

Sean Scovell had a great heart and would take the shirt off his back to help anyone.

The 21-year-old was killed on Tuesday, June 5, in a shocking conveyer-belt accident at the Moranbah South Quarry.

Mrs Scovell said she regretted the day Sean traded working with his family at their Biggenden Service Station for a job in the mines.

"I'm just hurt and lost and as a mother I feel empty," she said.



Brett and Bonnie Scovell are distraught after the death of their 21-year-old son Sean in a mining accident.  
Photo: Scottie Simmonds BUNSON

Sean was only an hour into his first shift after having time off when he became trapped in a conveyor belt at 7.10pm and as a result was killed. It's been hard for his family in the wake of his death.

"He just lost his life in a very short time," Mrs Scovell said

"I just love him and I miss him and I wish he was home. I wish he never went to the mines."

Tributes and support messages flow into a website page created in his memory.

One writer posted: "Sean without you I would never of made the friends I have... I'm so grateful I met you... I will truly miss that sweet smile... I was very lucky to have a friend like you."

While another tries to come to terms with the loss: "I think about the last time I saw you... Why didn't I take photos... I just wish I could turn back time and make things so different."

Sean was a happy-go-lucky boy who went out of his way help others, Mrs Scovell said.

He was the youngest son with two elder brothers and a sister and Mrs Scovell said he was a great workmate.

The incident is being investigated by the Mines Inspectorate.

A nature and cause report was being compiled for the Coroner, a Mines Inspectorate spokesman said.

Monday 18 June 2012

## USA: Prosecutors say Alpha mines safer

*Extract from Newsday, USA*

MORGANTOWN, W.Va. -- Alpha Natural Resources has significantly cut its accident and injury rates in the six months since a landmark \$210 million settlement that spared the company criminal charges over the 2010 mine explosion that killed 29 workers, federal prosecutors say.

Alpha cut its accident rate by a third and its injury rate by 25 percent at West Virginia's Upper Big Branch mine and other former Massey Energy Co. operations. It's also broken ground on an \$18 million training center that U.S. Attorney Booth Goodwin told The Associated Press will dramatically benefit the industry. When it opens in Julian next June, miners will be able to train for dangerous conditions in a 96,000-square-foot simulation laboratory.

Goodwin said the progress report he and lead prosecutor Steven Ruby have received shows Virginia-based Alpha making "pretty substantial progress" as it tries to overhaul the Massey Energy mines it acquired last summer and fix a corporate culture that devalued safety.

"This is like turning a freight liner," Goodwin said. "This is a company that now has 11,000 coal miners, and they can't just turn on a dime. But they got pretty close."

In April 2010, an explosion fueled by methane and coal dust killed 29 men in the southern West Virginia mine. It was the worst U.S. coal mining disaster in 40 years, and it led to the retirement of former chief executive Don Blankenship and criminal charges against a former superintendent and security chief.

Ruby said his criminal investigation remains active.

Four reports on the disaster agree on its mechanics: Massey allowed methane and coal dust to accumulate, and worn and broken cutting equipment created the spark that ignited the fuel. Broken and clogged water sprayers allowed a mere flare-up to turn into an inferno that ripped through miles of underground tunnels.

The federal Mine Safety and Health Administration said the root cause was Massey's "systematic, intentional and aggressive efforts" to conceal life-threatening problems, noting managers even maintained two sets of pre-shift inspection books -- an accurate one for itself, and a fake one for regulators.

They also habitually warned miners underground when an inspector arrived on site, trying to give crews time to make the mine appear safe.

Training to stop those practices is among the many components of the non-prosecution agreement Goodwin's office reached with Alpha in December. It wiped the slate clean of some 370 safety violations related to Upper Big Branch and required Alpha to pay \$35 million in fines for violations there and at other Massey mines.

Those fines have been paid, and in a five-page letter to prosecutors, Alpha says it's making progress on other required initiatives. Alpha asked prosecutors to refrain from making its full report public, citing concerns about competitive information.

Alpha says it has, among other things:

- done remedial maintenance at all Massey mines and added safety personnel at some;
- purchased digital sensors that can continuously monitor air flow and methane levels;
- created a foundation that will spend \$48 million on research and development in mine safety and health;

--and hired a new regulatory compliance director.

This month, it's buying its first cascading oxygen system -- similar to what firefighters use -- to give miners an uninterrupted supply of air while trying to escape. Alpha expects to eventually spend at least \$10 million on that technology.

It's also hired a company to develop wireless sensors that can check for methane anywhere in a mine, Goodwin said. They will be in place in every Alpha mine by next year.

The investments come even as Alpha loses money. Last month, it posted a first-quarter loss of \$29.1 million due to weak demand for coal and rising costs.

Alpha also says it has implemented plans to ensure coal dust accumulations are properly treated and has a system for monitoring results.

But problems remain.

Earlier this month, MSHA issued citations and enforcement orders at Alpha's Road Fork No. 1 in Wyoming County, where a conveyor belt had caught fire.

Inspectors found inoperable smoke detectors and fire suppression systems, and accumulations of coal dust as deep as 18 inches. MSHA said managers charged with safety inspections failed to report or record obvious safety hazards, or fix the ones they did list.

The conditions were similar to those in another Massey disaster. In January 2006, two West Virginia miners died in a fire at Aracoma Coal Co.'s Alma No. 1 mine.

Goodwin and Ruby said they're monitoring the Road Fork investigation.

"We don't mean to paint that everything's coming up roses," Goodwin said. "They still have room to improve."

But he said that after lengthy conversations with Alpha leadership, he's confident of its corporate resolve to change Massey's ways.

It's noteworthy, Ruby added, that after the settlement, "there was a wholesale house cleaning of the executive ranks of Massey.

"That factors into our thinking about the tone at the top," he said.

Ruby declined to detail how deep that process went, saying it's among the information Alpha considers commercially sensitive.

Goodwin said the settlement had three objectives -- addressing systemic problems at Massey, advancing state-of-the-art technology and making clear "that shortchanging mine safety is bad business."

Progress so far, he said, "shows the chance we took entering a resolution of this nature was a good chance to take."

## Mining dictionary

### A guide to coal mining terminology

#### B

**Bituminous coal** A middle rank coal (between subbituminous and anthracite) formed by additional pressure and heat on lignite. Usually has a high Btu value and may be referred to as "soft coal."

-Ed