

# News & Views

## SE District's Premier Safety and Health Newsletter

October 2008

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### Recent Promotions/Hires in Southeastern District:

*Jose Figueroa, Supervisor  
Special Investigations*



Jose began his career with MSHA in August 1992 as a Mine Safety and Health Inspector for the San Juan, Puerto Rico Field Office. In 1997, he transferred to the Bartow, Florida Field Office as an inspector. In Bartow, Jose also worked collateral duty as Accident Investigator and Special Investigator. Jose has a Bachelors degree in Business Management and is a Certified Mine Safety Professional.

*Keiko Brown, Supervisory  
Management Program Analyst*



Keiko has a total of 26 years of Federal Service and most recently served as Field Office Supervisor in Sanford, NC. Keiko graduated from the Alabama Christian College and received an associate degree in Business Administration. She served in the U.S. Army from 1978 to 1981. She began her career with MSHA in the San Antonio Field office in 1999, becoming a journeyman inspector in 2006.

## October is the Fire Safety Month

Have you tested the smoke detectors in your home? Do your children know escape routes? Is the fire extinguisher in the kitchen or garage charged and ready to use? See page 10 for tips.

## Safety Success!



Over three years without a Lost-Time Accident. Keep up the good work Cemex!



National Cement employees attend a company sponsored picnic to celebrate one full year with no Lost-Time Accidents.

Recent Promotions/Hires  
in Southeastern District  
Continued:

**WELCOME TO THE  
SOUTHEAST TEAM!**

**Administrative Assistants**

Columbia: Hazel Tarver

Franklin: Teresa Howell

Knoxville: Patricia Lay

Lexington: Mary Wagner

Macon: Temekia Simmons

San Juan: Juan Mejias

Sanford: Jamey McGurl

Bartow: Danny Andrews

## From The District Manager's Desk

"Looking back over FY 2008, I want to thank the Southeastern District's Metal Nonmetal mine operations for an exceptional job in accident and injury reduction. While we suffered two fatalities in 2008, our operations had the lowest total incident rate of any in the country at 2.43! I recognize the commitment of each and every dedicated MSHA employee for the tremendous accomplishment in our 100% mandated completion rate!!

The 2009 economy will challenge the mining community and MSHA. The commitment for safety and health cannot change and expectations are that industry will double its efforts to affect safe work practices throughout its operations. To that end, I would ask each and every inspector to take the time to be fair, firm and consistent in their application of the Mine Act's requirements. Take the necessary time to accurately assess the working place and when writing violations, be insistent to involve the operator in determinations of gravity, negligence and abatement times. Be equally quick to recognize our operations where the programs, practices and individuals express safety as a priority.

Last but not least, consider that your credibility and the agency's are directly linked to your actions- do the right thing.""



# Southeast Mine Safety & Health Conference: Birmingham – 2008

The 3rd Annual Southeastern US Mine Safety and Health Conference is coming to Birmingham Alabama. Mark your calendars: November 5th through November 7th, 2008 at the Wynfrey Hotel. One of Birmingham's finest! Check the website for registration details and up to date information. [www.southeastmineconf.org](http://www.southeastmineconf.org)

This year promises to be the best conference yet. We have incorporated ideas and suggestions taken from the previous conference attendees. There will truly be something for everyone. We hope to see you there. Topics include

- Rigging
- Healthy living
- Contractor specific
- Top Violations
- Training
- Workplace Exams
- Crane Safety
- Explosives/Blasting

As in the previous years we scheduled time for industry-specific discussion groups. These groups will be jointly facilitated by industry leaders & MSHA management to address issues specific to those industries. The groups will be:

- Behavior Based Safety
- Responsibilities while on site
- Health Assessments
- On line reporting
- First Aid/ CPR
- Dust & Noise & DPM Sampling

Technical Sessions will have experts in Mine Electricity and Grounding, Rigging, Noise Control, High wall Stability, and Accident Investigation.

Keynote speaker: Dee Dee Lewis, former NFL star with the Dallas Cowboys



# SOUTHEAST SAFETY CORNER

## Crane Safety



Crane accidents have been reported in the news lately and there have been several crane accidents in the District's mines in the past year. Nationally there have been 285 crane accidents in 2008 with 134 deaths reported. 12 accidents were reported thus far in September with 3 deaths.

The numbers above indicate there is a great need for more training and safety awareness while operating cranes. The majority of accidents were caused by "Human Error" which means... **Knowledgeable people doing dumb things!**



Statistics show that at least 50% of crane incidents occur because the crane set-up is not correct. Specific hazards that can cause or contribute to failure or collapse include:

- failure to extend the outriggers fully;
- not extending all outriggers;
- failure to get completely "off-rubber"
- not accounting for poor ground conditions;
- Failure to level the crane.

**Use the Correct Load Chart:** The purpose of outriggers is to improve the stability of the crane. Accurate use of the "*on-outriggers fully extended*" load chart, requires that outriggers be fully extended and they must bring the rig completely off-rubber. If the tires are touching the ground, then the "*on-rubber*" load chart is the only one that can be used. Manufacturers do not recommend extending only one or two of the outriggers. If outriggers are to be used, fully extend all of them and get the tires off the ground.

**Outrigger Pads and Floats:** The pads found on all crane outriggers are designed for good ground conditions. Poor conditions reduce the amount of load a crane can safely place on the outrigger pad. Because of this, many crane operations require additional support or "floats." Supplemental floats are made of substantial material and must *always* be larger than the outrigger pad. These floats disperse the weight of

the crane and its load over more ground area than does the pad. Any cribbing used under the pads must be solid and in good condition.

**Leveling:** Also be aware that all floats and cribbing must be level. If the outrigger pad is set down on an unlevel float, the outrigger pad may slide off when under load, causing the crane to tip. Many manufacturers stipulate that the crane must be within 1% of level before their load chart applies. In a 20-foot span this is only 2 inches off-level! Past this point, the crane can lose 15% - 20% or more of its rated capacity. So, keep the crane on solid level footing.

Operators and workers must never take a mobile crane for granted. Plan the work--setting up the crane safely *every time*, for *every lift*!

### **Inspection of Mobile Cranes**

**In your initial survey of a crane operation, look for crane stability, physical obstructions to movement or operation, and proximity of electrical power lines, as well as the following:**

- **Leveling** Has the crane operator set the crane up level and in a position for safe rotation and operation?
- **Outriggers** Are the outriggers, fully extended, with the rubber tires off the ground, and being used in accordance with manufacturer's recommendations?
- **Stability** The relationship of the load weight, angle of boom, and its radius (the distance from the cranes center of rotation to the center of load) to the center of gravity of the load. Also, the condition of crane loading where the load moment acting to overturn the crane is less than the moment of the crane available to resist overturning.
- **Structural Integrity** The crane's main frame, crawler, track and outrigger supports, boom sections, and attachments are all considered part of structural components of lifting and must be in good condition. In addition, all wire ropes, including stationary supports, help determine lifting capacity and are part of the structural elements of crane operations and must be maintained in good condition.
- **Electrical Hazards** Working around or near electrical power lines is one of the most dangerous practices for crane operations. Power lines should be deenergized.

- **Load Charts** Are the principle set of instructions and requirements which establish crane capacity for safe operation. The crane operator must have the appropriate load chart related to the crane being used and for the loads lifted. The crane operator must show adequate understanding and proficient use of the load charts as related to the equipment in use and the load being lifted.
- **Guarding of Moving Parts** All exposed moving parts such as gears, chains, reciprocating or rotating parts are to be guarded.
- **Safe Operation Planning** When cranes are used properly they can provide safe reliable service to lift and move loads. Because cranes have the ability to lift heavy loads, they have an increased potential for catastrophic accidents if safe operating practices are not followed. Accidents can be avoided by careful job planning. A safety plan must be developed for the job and must be explained to all personnel involved in the lift.
- **Walkaround Inspection** Before operations begin, a walkaround inspection needs to be conducted to ensure that the machine is in proper working condition. Regular inspections are important; they provide a means of detecting potential hazards or conditions that could contribute to a sequence of events leading to an accident. Safe and reliable operation of lifting equipment cannot be ensured without regular safety inspections and through preventative maintenance programs. A through inspection program can forecast maintenance needs or potential equipment failures or malfunctions. The lack of such a program could result in serious deterioration of the equipment and an increased potential for accidents.

## Highwall Hazards

- **56/57.3401 Examination of ground conditions.** Appropriate supervisors or other designated persons shall examine and, where applicable, test ground conditions in areas where work is to be performed prior to work commencing, after blasting, and as ground conditions warrant during the work shift. Highwalls and banks adjoining travelways shall be examined weekly or more often if changing ground conditions warrant.
- **56.3130 Wall, bank, and slope stability.** Mining methods shall be used that will maintain wall, bank, and slope stability in places where persons work or travel in performing their assigned tasks. When benching is necessary, the width and height shall be based on the type of equipment used for cleaning of benches or for scaling of walls, banks, and slopes.
- **56/57.3200 Correction of hazardous conditions.** Scaling and support. Ground conditions that create a hazard to persons shall be taken down or supported before other work or travel is permitted in the affected area. Until corrective work is completed, the area shall be posted with a warning against entry and, when left unattended, a barrier shall be installed to impede unauthorized entry.
- **56.3131 Pit or quarry wall perimeter.** In places where persons work or travel in performing their assigned tasks, loose or unconsolidated material shall be sloped to the angle of repose or stripped back for at least 10 feet from the top of the pit or quarry wall. Other conditions at or near the perimeter of the pit or quarry wall which create a fall-of-material hazard to persons shall be corrected



## Impoundment Failure in North Carolina

### Impoundment Design Hazards

#### *Lack of an "engineered design"*

- *Slopes at an angle of repose (way to steep for dams)*
- *No systematic compaction of embankment*
- *No internal drainage*
- *No or inadequate spillways*
- *No or improper installation of decant pipes*

#### *Lack of quality control during construction*

The cross valley impoundment was constructed in 1927 with an earthen dam that had little or no compaction. The height of the dam was approximately 31' feet with a pool surface area of 33 acres. The impoundment failed on July 9, 2008 when the area received over 10" inches of rain. The spillway and decants were overwhelmed before the water topped over the dam causing the dam to fail. The operator stated that he believes that the large trees on the structure were the main cause of the failure.



# Health Corner

**Exposure to excessive noise levels is an ongoing concern for mining. We face engineering control issues and personal protection concerns. If allowed to go uninterrupted estimates are that 40,000 miners face the risk of hearing loss.**

**MSHA continues to emphasize our concern for excessive noise exposure at our mine properties. Inspectors monitor the noise levels, but this is also the responsibility of the mine operator and contractor. (For assistance in How To monitor call your local Field Office or the SE District office @ 205-290-7294.)**

**Use all available resources to help you, and always make sure your miner is protected. Issuing hearing protection and offering audiograms involves training the miner, and all too often we see that hearing protection is simply worn improperly or worse yet, not worn at all.**

**The MSHA academy at Beckley has developed literature and CD's on this subject as well as NIOSH and many organizations and manufacturers.**

**You may call Beckley at (304-256-3257) and acquire noise information at nominal charges.**

**Hearing Conservation, MSHA's Part 62 (C/MNM) – also includes Spanish version: *Conservación de la Audición, Parte 62 de MSHA (C/MNM)*. . DVD 511-S**

<http://www.msha.gov/1999noise/Guides/SurftotalFinal.pdf>  
**(Noise Control Resource Guide – Surface Mining)**

<http://www.msha.gov/1999noise/Guides/ugtotalFinal.pdf>  
**(Noise Control Resource Guide – Underground Mining)**

<http://www.msha.gov/1999noise/Guides/MillPreptotalFinal.pdf>  
**(Noise Control Resource Guide – Mills and Preparation Plants)**

# FIRE SAFETY



**Fire Safety begins at home.** Every family should know the basics of how to prevent fires at home and what to do in case there is a fire. So, invest a few minutes and learn how to BE SAFE!

**Straight Talk** - an injury prevention and community outreach program, created to affect the attitudes, knowledge and behavior of families in our community and to reduce the incidence of preventable injuries.

There are many things that people can do to improve their safety at home, school, or work from a **FIRE!** Below you will find a list of information that will help you to become more fire safe wherever you are. Also a list of information of things to do if you do have a fire, to get out alive.

## Fire Safety Information



- **Planned Escape From Fire**
- **Fire Safety In The Home**
- **Smoke Detectors**
- **If You Have a Fire**

Have at least one operating **smoke detector**.

Have an **escape plan** that includes:

- Two different ways out.
- Someone assigned to help those that need help getting out.
- Someone assigned to call 911.
- A meeting place for everyone once they get out.

**Practice** fire drills regularly using your escape plan.

Keep matches and lighters out of the reach of children.

Have a working fire extinguisher.

Smokers always use a proper ash tray.

Be careful while **cooking** and remember:

- Never leave cooking unattended.
- Wear clothes with short, roll-up, or tight-fitting sleeves.
- For each pot or pan you use, have its lid out to cover it.
- Keep the cooking areas clear of combustibles.
- Turn pot and pan handles inward on the stove so they can't be bumped.
- Keep small children away from the cooking area while in use.

Keep portable heaters and space heaters at least three feet away from anything that can burn.

Use **electricity safely** and remember:

- Avoid using extension cords where possible.
- Never run extension cords under rugs or carpet.
- Replace any frayed or cracked extension cords.
- Don't tamper with your fuse box or use improper-size fuses.

If any electrical appliance smokes or has an unusual smell, unplug it immediately, and don't use it until checked or repaired.

Have your chimney cleaned regularly to prevent chimney fires.

If you have a fire in your fireplace, always close the screen or doors.

Always empty your fireplace ashes in a metal container, and set them away from the house or anything that will burn. \*\*\*\*\*

### **THINGS TO REMEMBER IF YOU HAVE A FIRE!**

GET OUT of the House or building and **STAY OUT!**

Crawl low under the smoke.

Feel doors with the back of your hand for heat, before opening.

Open doors slowly and be ready to close them if heat or fire is outside them.

Once out of the house or building, **DON'T GO BACK IN FOR ANY REASON!**

Once outside go to a phone and call 911 to report the fire.

If your clothes catch on fire: **STOP, DROP, and ROLL** until the fire goes out and cover your face with your hands.

Close any doors you safely can as you are leaving the house or building.

Provide any helpful information to the Fire Department you can:

- Where the fire is located in the house or building.
- If anyone is still in the house or building and where they might be located.
- Any hazards that might be in the house or building.

**FATAL ACCIDENT, OCTOBER 17, 2008  
O-N MINERALS, MARBLE HILL MINE  
ID# 09-01038  
ELLIJAY, GILMER COUNTY, GEORGIA**

Tony A. Cruse, a 45 year old miner with 8 years of underground experience, was killed when a rock measuring up to 15 feet by 30 feet and 6 feet in width fell from the roof striking the cab of the track mounted roof scaler he was operating. The accident occurred at approximately 10:00 am when another employee observed the excavator with a large rock on top of the machine. Cruse had been a scaler for 4 years and 8 months and was alone in the face area of the North 8 Heading on the 9<sup>th</sup> level at the time of the accident.

The Marble Hill Mine is a multi level underground crushed marble operation which employs 24 employees, 11 of which are employed underground. The mine has been in operation since 1990. Raw material is extracted using explosives, loaded into haul trucks with front end loaders, and transported to the surface for crushing and processing. After the material is loaded out, the scaling machine comes in and removes any loose rock which may be present on the mine roof or ribs. The height at this mine is typically 24 to 30 feet.

