

# MINER DETAILS

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## BRIDGING THE COMMUNICATION GAP

### From The Director's Office

The coal mining industry continues to experience fatalities resulting from coal stockpile accidents. Since 1980, there have been thirteen stockpile accidents in the nation in which seventeen miners have lost their lives. Ten of the seventeen fatalities were bulldozer operators. One accident claimed the lives of five miners who were walking on the stockpile.

Stockpile operations can be hazardous if proper safety precautions are not followed. Every coal mine operator should formulate a stockpile plan that incorporates the following safety practices.

- Provide training to every person who works on or near stockpiles to alert them of the inherent dangers and of the stipulations in the stockpile safety program.
- Indicate the location of underlying feeder points with overhead markers and provide perimeter-warning markers.
- Use equipment with fully enclosed cabs equipped with high-strength windows.
- Window glass with structural support to prevent it from being pushed into the cab by outside pressure should be considered.
- Establish a communication system so that the equipment operators working on stockpiles are aware of plans to start or stop feeders.
- Every feeder should be installed with the ability to fully close and to fully open the feeder gates where gates are used.

- Never push material toward an active feeder until a depression has begun to form on the surface of the surge pile, and always push perpendicular to the depression.
- Ensure that mine management is notified immediately if a depression does not form above an activated feeder. This could indicate that a cavity may have developed above the feeder and corrective actions must be taken to eliminate the void.

MHS&T personnel will be sharing this and other accident prevention information with miners, mine operators, and independent contractors.

Gary Ball  
Deputy Director

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### Agency Accomplishments

#### Stay Out Stay Alive Child Safety Program

Every year several children and adults are killed or seriously injured in accidents around abandoned or inactive mine sites. Recognizing these dangers, MSHA and MHS&T are cooperating in a child safety awareness program. The *Stay Out Stay Alive* program

developed by MHS&T includes presentations to schools and student groups. Special stickers and web site pages dedicated to child safety have been developed. If MHS&T staff members are going to be meeting with children, please feel free to contact Ty Coleman for *Stay Out Stay Alive* materials. Check out the web pages of the program from our site at: [www.state.wv.us/mhst](http://www.state.wv.us/mhst).

### Special Thanks

We would like to express our sincere thanks to John Scott and Leon Bailey from the Welch Office. Their dedicated work in helping to set up the new computer network saved the agency many dollars! Besides installing network cards and programming them, John and Leon have worked many hours getting our PC's ready for service. All of this hard work is greatly appreciated!

### For Your Information

#### Y2K Problem for Mining

As you probably know, many computers and computer chips use two digits to keep track of the year. This may be a problem for the mining industry. Called Y2K, the year 2000 problem could cause computers (and therefore mining equipment) to stop running or to start generating erroneous data on January 1, 2000. There is a need to consider what impact this problem may have on the miners' health and safety. Some equipment and services that may be affected include mine monitoring systems, preparation plant control systems, automated longwall support systems, remote-controlled underground mining equipment, surface earth-moving equipment and haulage trucks,

and gas, water, and electrical utilities. We should carefully think about this problem and discuss it with mining industry personnel. Mine operators may receive free technical help from equipment manufacturers to be certain the Y2K problem is identified and solved for their computerized equipment.

### **Hazard Alert!**

A certain danger exists with front-end loaders. This danger is hard to recognize, but deadly. Recently, in two separate mining accidents, experienced mechanics died while working between the bucket lift arms and the loader frames. One mechanic had 12 years of experience and the other had 31 years of experience. In both cases, the mechanics needed to work on the main hydraulic valve chest located on the front of the loader frame. The bucket lift arms were raised to make room and the bucket was tilted to the full dump position with the cutting edge placed on the ground. The lift arms were not cribbed or supported. The bucket in this position may have seemed to support the lift arms, but it did not. Trapped hydraulic pressure caused the bucket to return to the level "work" position when mechanics disconnected hydraulic hoses from the main valve chest. The bucket then slid forward and the lift arms fell. Front-end loader lift arms, bucket pivot arms, and equipment wheels must be cribbed or blocked so they can not move whenever mechanics work on them.

## **For Your Health**

### **Children's Health**

Refer the parent or legal guardian of an uninsured child to the Children's Health Matters program, which helps uninsured kids get medical care through Medicaid. For details visit [www.childrenshealthmatters.org](http://www.childrenshealthmatters.org).

### **Did You Know?**

**TQM Update** - The Design Team is looking for ideas. The past

success of the TQM concept is evident throughout our agency. MHS&T is a better, more efficient agency because of everyone's work and contributions. With renewed efforts, our agency can continue to improve. Process Improvement Forms are available at all regional offices. Any problem areas, ideas, or suggestions that you may have can be addressed on these forms. No idea is too small and no signature is required on the forms. All submissions will be reviewed by the Design Team and will be acted upon by consensus. Please help to improve our agency and continue the TQM concept.

### **ARMPS Program**

There is now available an easy to use computer program from NIOSH that estimates the load carrying capacity of coal pillars. Analysis of Retreat Mining Pillar Stability (ARMPS) is user friendly even for the newest computer users. The program requests information that is easy to obtain and expresses a safety factor represented by a number like 1.3 or 1.5. Many options for mine layouts and the step-by-step data input will provide accurate results within seconds. One thing the user must always keep in mind is that ARMPS is a tool that will assist in mine planning, but like most tools, improper use can be a costly experience. Using a large pillar for a mine that doesn't plan second mining is a waste of reserves. On the other hand, using a pillar too small to adequately support the mine roof also ends with wasted reserves, and possibly, loss of equipment and lives. However, ARMPS does not account for the effects of multiple-seam mining, therefore site specific evaluations are an important part of the formula to success. When plans do not include second mining, a safety factor of 1.5 for a developing load has provided a stable environment in most mines. When plans do include second mining, a safety factor of 2.0 for a developing load will provide a large, or strong

enough pillar to accept the loads placed on the pillars (excluding multiple seam mining). Also, accuracy of ARMS is reduced when depth of cover exceeds 1,000 feet.

## **Home Cookin'**

### **Sweet and Sour Pork**

**Ingredients:** 1 1/2 lbs. pork, cut in strips; 2 Tablespoons shortening; 1 chicken bouillon cube; 1 medium can pineapple chunks; 2 Tablespoons Cornstarch; 1/4 cup vinegar; 1/4 cup onion, cut into rings; 1 Tbs. of soy sauce; 1/4 cup brown sugar; 1 medium green pepper, cut in strips. **Instructions:** Brown pork in shortening. Add 1 cup water, bouillon cube, and 1/4 tsp. salt. Cover & simmer 1 hour. Drain pineapple, reserve syrup. Combine brown sugar and cornstarch, add pineapple juice, vinegar, and soy sauce. Cook and stir over medium heat until thick and bubbly. Add to pork, stir to coat. Add pineapple chunks, green pepper strips, and onion. Simmer until tender.

## **Up Close and Personal**

### **Summer Help**

This year MHS&T has three summer interns working on our records management efforts. In the Charleston Office, Chris Whitmore is assigned to work with the records in the "White House". In Oak Hill, Nicholas White and Richard Arrington are handling the records stored in the "attic." Reportedly all three are doing a great job. If you see them this summer, be sure to introduce yourself and say hello.



### **Happy Birthday West Virginia!**

*This newsletter is published bimonthly by the WV Office of MHS&T*  
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