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The Mine Safety and Health Administration and Joseph A. Holmes Safety Association Bulletin contains safety articles on a variety of subjects: fatal accident abstracts, studies, posters, and other health and safety-related topics. This information is provided free of charge and is designed to assist in presentations to groups of mine and plant workers during on-the-job safety meetings. For more information, visit the MSHA home page at www.msha.gov

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One of the largest coal companies operating in Richmond Basin (Virginia) in the late 1830s was the famous Midlothian Mining Company, chartered in 1836. The Midlothian Mining Company employed some 150 black workers. The company hired excess slaves from nearby farmers. Following the Civil War, the company employed as many newly freed blacks as possible rather than replacing them with whites.

During the Civil War, the 22 leading coal companies of eastern Virginia either hired or owned 1,847 hands, mostly slaves. Slaves worked Alabama mines as early as 1840. To encourage coal production, the Confederate government enacted legislation in 1861 exempting from field service any operator who contracted to mine coal with at least 20 slaves.

Emancipation terminated slave labor in the coal industry as it did throughout the South, but some of the economic benefits derived from forced labor were preserved, at least for a few mine operators, in the new bondage of convict leasing. Although leasing convicts to private contractors was common in the South, it became prevalent in the coalfields only of Georgia, Tennessee, and Alabama. Other southern states with significant coal reserves did not use prison labor in mining.

The prevailing patterns of race relations in the American coalfields resulted in the exclusion of blacks in the North and nearly complete dependence upon them in the South. Correspondingly, the struggle for control of the labor process set the course of race, class, and community conflict along diametrically opposite paths in the North and South. In vast portions of industrializing central Appalachia, particularly in southern West Virginia, blacks came closer to finding economic equality than in any other coalfield, and perhaps anywhere else, in America.
A large percentage of the migrants into the central Appalachian coalfields were blacks, and by far the majority of them came to live in southern West Virginia. Blacks came to West Virginia in larger numbers in part because the scope of industrialization was greatest there, and labor in greater demand. By 1920, therefore, 88,706 blacks lived in central Appalachia, but 69 percent of them resided in southern West Virginia.

The population of central Appalachia grew dramatically between 1880 and 1920 in the wake of industrialization, though growth did not proceed uniformly, nor was it evenly distributed. The West Virginia plateau grew rapidly throughout the area with the population of the southern counties nearly quintupling from 93,174 to 446,051.

To attract southern black labor to the new fields, companies dispatched labor agents to the southern states with “pockets full of money” and offers of free transportation, steady work at high wages, and company houses to lure those who had little money with which to purchase their own.

From the spring of 1916 through 1917, the U.S. Department of Labor’s Division of Negro Economics estimated 75,000 blacks or about 8.3 percent of Alabama’s black population migrated to points north.

Better wages were not the only reason blacks left the South for Appalachian coal mines. The prominent black UMWA organizer George Edmunds summarized the deeper foundations of the exodus when he observed that black migrants were seeking a “man’s chance in the world; a chance to educate their children, to live in decent homes under decent conditions, to exercise the right of the ballot, and in short, they were looking for true American citizenship.”

Even though racial lines were not so strongly enforced in West Virginia as they were in the deep South, or even in neighboring central Appalachia, social life in the Mountain State was segregated by custom and management design. Nevertheless, race relations were unique. Perhaps the key to understanding the distinctive qualities of race relations in southern West Virginia was the freedom of expression enjoyed by blacks. Only in education and intermarriage was integration specifically barred by statute. Unlike its Appalachian neighbors, West Virginia did not disfranchise blacks, and they continued to enjoy full political equality. In fact, one of the major reasons blacks moved into the state’s mining towns in such large numbers was the near absence of Jim Crow laws. They preferred West Virginia to Kentucky, Virginia, and Tennessee because they wanted to vote, to educate their children,
and to live in a black community which was not suppressed by racist politics or hedged in at every turn by the constraints of caste etiquette. That only 14 percent of the blacks who resided in West Virginia during the 1920s were born in the state testifies to the powerful allure of the relative equality they found there.

Southern blacks chose the unknown dangers of life and labor in central Appalachian coal mines for sound economic reasons. The southern caste system dictated that blacks receive the worst jobs and lower pay than whites for the same work, whereas in the northern fields blacks all too frequently found themselves excluded entirely. Although racist attitudes were prevalent among white employers and white workers in central Appalachia, the severe labor shortage in an expanding industrial labor market eliminated the most blatant forms of racial discrimination.

Two important analyses, one complete in 1933 and one complete in 1983 provide an exhaustive array of data on the occupational and wage equality of blacks in southern West Virginia. Both studies demonstrate that racial discrimination was operative in a few job categories. As might be expected, management was all but closed to blacks. One study found only 9 blacks in the sample of 248 supervisors employed between 1906 and 1925. In 1922 the West Virginia Bureau of Negro Welfare and Statistics similarly reported only 7 bosses among 6,483 black miners and only 1 fire boss among over 7,000 Afro-Americans surveyed in 1927.

Some segregation also existed in transportation. Throughout this period motormen were almost exclusively white; mule drivers were black. Both performed similar functions in

Afro-Americans took full advantage of this political freedom. Their enthusiasm for politics led the prominent black politician and Charleston attorney T.G. Nutter to conclude in 1924 that “The Negro is the balance of power in the state and this fact is recognized by the two great parties.” Consequently, Nutter wrote, “In no other section of the country does the Negro wield the power and enjoy the political prestige he had in West Virginia.” Although Nutter exaggerated, it is true that blacks were a political force to be reckoned with in the southern part of the state. Since they were staunchly Republican until the New Deal era, blacks exerted considerable influence in the party’s local machinery.
the industrial process, but mule driving was harder work. Electric motors were used to haul coal cars in newer, larger, and more mechanized mines, whereas the mules were most often found in smaller operations.

When blacks did find employment as motormen, they usually operated the smaller gathering motors which brought loaded cars to the entry, where the main haulage motor towed them outside.

Between 1907 and 1932, years for which data are available, the percentage of native whites found in the harder, dirtier, and more dangerous inside jobs ranged between 53 and 80 percent total. A greater percentage of the black work force held inside jobs between 77 and 92 percent, and southern European immigrants holding these jobs between 88 and 92 percent or higher. Wages, rather than employer discrimination, explain the higher proportion of blacks and foreign laborers working inside. These occupations paid on a tonnage basis at the same rates regardless of race or nationality, and an expert loader could earn as much or more money as any of the skilled men, with the possible exception of the machine runner.

Interviews conducted for one survey indicated Afro-Americans whose families still lived in the South preferred coal loading because they came from farms where work and leisure routines were established by nature and necessity, and the miner’s traditional independence on the job resembled this familiar work pattern. Like farming, traditional methods of coal mining called for alternate periods of intensive labor and rest and permitted miners to simply walk out when they had loaded enough. Coal loading also offered less direct white supervision, and miners might not see a foreman more than once during an entire shift. This was an important consideration for southern blacks who came to the mines to escape the constant scrutiny of whites in the Jim Crow South.

On the job, operators integrated the races more or less indiscriminately, through equal opportunity and pay, attempting to mute irrational racial animosities which might hinder production and profits. But controlling the miners’ work life was only part of the operators’ management problems. In these remote mountains, coal companies also had to plan and construct entire towns, and towns involved social life.
The social sphere of coal town life was not so directly connected with production, and most operators followed the customary social norms by segregating the racial and ethnic elements of the mining population. Even though segregation prevailed, however, in southern West Virginia the separate-but-equal doctrine usually applied, and most miners were offered the same type of housing, rental rates, and conditions of tenancy. Blacks not only were welcomed in the mountain coalfields, they were given equal wages for equal work, as good an opportunity in the occupation hierarchy as they were likely to find anywhere in industrial America.

Equally funded education in the coalfields was significant not merely as a magnet for attracting black workers or as a mechanism for upward social mobility but also as preparation for equal citizenship.

The role of the American miner has changed during this century from slave and convict laborer in southern mines to highly skilled and educated miners, mine superintendents, safety managers, Federal and state mine inspectors, and mining engineers.
The No. 1 Mine Explosion
Dawson, New Mexico
February 8, 1923

About 2:20 p.m. February 8, 1923, an explosion occurred in the No. 1 Mine of the Phelps Dodge Corporation in Dawson, New Mexico, resulting in the death of 120 of the 122 men underground at that time. The explosion coming out of the mine practically destroyed the concrete portal at the Main 11 Entry and blew out the explosion doors at the fan, and otherwise damaged the fan approach at the surface but did not injure the fan itself. Temporary repairs were made renewing air circulation near the mine portal in less than an hour after the explosion. The quick resumption of ventilation allowed for prompt entrance into the mine carrying fresh air, and this, together with the fact that there were so many extended falls of roof in the interior of the mine, made it unwise and unnecessary to try to use oxygen apparatus, hence no apparatus work was done.

This mine was slightly affected by the shot firing explosion starting in the adjacent connected No. 6 Mine on April 14, 1920, resulting in the death of five men, two being killed in No. 1 Mine. There was also an explosion in No. 6 Mine, October 14, 1919, resulting in no loss of life. On October 23, 1913, there was a disastrous explosion in No. 2 Mine (with a portal of about 1200 feet from No. 1 and No. 6), resulting in the death of 263 persons and in much damage to property.
The explosion occurred between 2:20 and 2:30 p.m., February 8, 1923, there being 122 men in the mine at the time. Underground Superintendent Dupont was at the mine portal but just out of the direct line of the main entry, and while thrown a short distance was not hurt. The reinforced concrete portal of the No. 1 Main Entry was shattered and it partly collapsed, necessitating some immediate work to get past it safely. The fan explosion doors were blown out and fan approach somewhat shattered. The fan itself was unharmed and continued to run. Upon completion of temporary repairs to the fan approach and making No. 1 Main Entry portal safe, General Manager Brennan and a number of helpers went into the mine, restoring ventilation as they went by placing temporary brattices in the crosscuts between the main entry or intake air course and the return air course on the right, with the stoppings on the left between No. 1 and No. 6 Mines remaining in place.

Except for the violence seen at the fan and No. 1 Main Entry portal, together with the blowing toward the return air course and the manway of stoppings and occasionally timbers blown toward the mouth of the mine, comparatively little sign of force was encountered until a point about 1900 feet from the portal was reached. On an abandoned parting starting about 1500 feet from the mouth of the mine and ending about 1800 feet in, there was a loaded trip of over 20 cars with electric locomotive on outby and with controller on locomotive said to be in the “Off” position. There was evidence that the two cars adjacent to the locomotive had been off the track for over 100 feet but had been partly placed on the track by a re-railer located near the outby end of the parting. The motorman, badly burned but not broken by violence, was found dead at the mouth of a crosscut a short distance back of the locomotive. The nipper, also burned but not mangled, was found a few feet inby the inside car of the trip. At least two cars (probably three) were off the track about midway in the trip, and these cars had torn out three sets of timber. This abandoned parting was fairly closely timbered with legs and crossbars, also in places with cribs, and practically all timber was standing, everything indicating presence of very little force at any time on this parting.

The exploring party encountered comparatively little trouble with falls until it had gone into the 4th North and inby the 4th North in the Main entry. However, both in the 4th North and in the Main entry and other entries inby the 4th North, falls were numerous, in places almost continuous, and practically all stoppings blown out by a force going inby. The 4th North overcasts were temporarily restored and part of the air taken into the 4th North and that region explored and simultaneously part of the air taken in on the Main entry. On account of numerous falls encountered inby the 4th North and because it was found feasible to carry circulating air along by temporary bratticing, oxygen breathing apparatus were not used though both apparatus and apparatus wearers were quickly available. Apparatus explorations inby the 4th North would have been impracticable except for very short distances, as the falls were of such nature that apparatus wearers would have been seriously handicapped.

The morning of February 9, about 8:00 a.m. at a time when there were no persons in the mine on rescue or recovery work, two men who had been working in an unventilated portion of the mine extracting some pillars West of the 4th North and opposite region between 4th and 5th East off 4th North, walked out of the mine unharmed and unaiderd after having been in the mine at the time of the explosion and remaining there for about 18 hours afterwards.

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Notwithstanding the numerous falls encountered, there was not much extreme violence and the recovery of bodies was comparatively rapid, being facilitated by the fact that only about 11 or 12 bodies were under falls. By the night of February 10, or 48 hours after the explosion, 53 bodies were out of the mine, and by February 13, 108 bodies were recovered, the inquest being held on February 14. It is understood that the entire 120 bodies were recovered later on and that all were identified.

**Cause of the Explosion**

During the first few days after the explosion there were the usual numerous rumors as to the cause, among them the lighting of a match for smoking purposes with ignition of methane. This was disproved in a number of ways, among them the fact that no matches were found on any bodies and no positive evidence was produced showing that methane entered at all actively into the explosion. Another rumor was that methane had been ignited by one of the five old type 250 Volt DC non-permissible electric cutting machines in use; this was disproved also, as it was found that all of the five machines had power disconnected (controller in “off” position), and there was no evidence that force or violence came from the region where these machines were located. One cutting machine out of order was in a parting off the 3rd North opposite the 4th East. One machine was at the face of 6th North with power shut off though the machine was in position ready to sump, the machine men being burned and somewhat battered by violence. A third machine was found on a parting in the 3rd East off the 7th North. One machine was found at the face of Room 10 off the 2nd East off the 12th South, but the men were placing bits hence power was off. These men too were burned and battered by force coming from outside. The fifth machine was in the neck of Room 4 off 2nd East off 10th South, the machine man having gone out because of lack of places to cut. It was also thought at first that the trolley locomotive operating in the interior of the mine near possibly gaseous faces might have ignited some methane. However, the locomotives were found with power off and, as with the electric cutting machines, there was absolutely no
evidence that the explosion originated at or near these interior locomotives.

The actual point of ignition was undoubtedly the place where timbers were torn out by derailed cars on the abandoned parting on the main entry about 1600 feet from the mouth of the mine. The cause of the explosion was undoubtedly ignition of coal dust by electric arcs from short-circuit of trolley wire and trolley feed cable when they were thrown upon the steel cars by dislodged timbers from the derailed cars. The coal dust for the ignition was probably supplied partly by the settled dust which had been on the dislodged timbers, together with dust thrown into the air from a car of machine cuttings off the track at the head end of trip and “bumping” over ties for over 100 feet before it came to a re-railing device near the outer end of the old parting. Fuel for propagation of the explosion was supplied by dry, very fine settled dust on timbers, ribs and roof ledges combined with dry dust from the floor. Although, the roadways had apparently been comparatively free of the usually found accumulations of large sized coal, rock, etc.

The trolley locomotive at the head or outer end of trip had proceeded a few feet out of the old parting and was on the track, and while somewhat dust-covered, was in good condition mechanically and electrically. There was evidence that at least one, probably two, loaded cars (one with machine cuttings) adjacent to the locomotive had been off the track for at least 100 feet within the old parting and were placed, at least partly, on the track by a re-railer in the track a short distance back of the place where the locomotive was found.

The motorman, burned to some extent, was found dead at the mouth of a South crosscut near the locomotive. The old parting had cross bars from rib to rib practically throughout, there being center posts a few feet from the north rail; however, the east end of the parting for a distance of about 100 feet was filled on the north side with timber cribs, leaving but 7 or 8 feet to the south rib. Practically none of this timber on the abandoned parting was disturbed by the explosion, though a few sets had been pulled out by some derailed cars about 125 feet back of the locomotive, these timbers letting the trolley wire and 400,000 circular mill bare stranded trolley feed cable down on the end of the steel cars.

Undoubtedly, there were two decided arcs as the trolley wire showed a decided burn, and opposite it the stranded feed cable had two or three wires severed by burns. There was much very fine dry settled dust on the timber caps in this region, as well as in the adjacent cribs and on the floor, and the dislodged timbers undoubtedly released a considerable amount of this dry fine dust, and this dust, together with that brought back from bumping over ties of the derailed car of machine cuttings, gave the fuel for ignition in contact with the intense heat from the two arcs.

This explosion, as well as others which have taken place at Dawson, make it certain that the dust is very explosive and that as yet the correct method of handling it has not been placed into operation. It would appear advisable to make a thorough detailed study of the mines at Dawson and vicinity to try to determine the best methods of handling these mines to prevent explosions.
Women in Mining
By Cheryl McGill

Some people seem to have known what they wanted to be when they grew up since the age of five. As for myself, nothing could be further from the truth. Coming from a traditional family setting (mother, father, and one brother) and living in a small town, a career as a teacher, nurse, or housewife would have been the expected plan. Becoming a coal miner was beyond my wildest dreams.

For some, the pursuit of a non-traditional occupation stems from a desire to “change the world” to be a pioneer, or just to be different. For me, the sole motivating factor was money.

Since the dominant industry in the area where I lived was the coal industry, and the best paying jobs were coal mining jobs, the choice was obvious for me. In the early 1970s, new stories of women going to work in the mines were beginning to flash on the 6 o’clock news. With the knowledge of the lifestyle a job in mining could provide for me and my son, and too much pride to ask for help from my family, I set out on becoming a coal miner.

After applying for employment with a number of coal companies, I finally got a call for an interview. This interview turned out to be the single most important event in what has become a very rewarding career.

I was asked questions like “Kid, have you ever been in a mine? Do you want to stand bent over and shovel coal till your back breaks for the rest of your life?” At my honest reply of, “No Sir,” his gruff tone began to change.

From the start, hostility and resentment toward my new job became all too apparent. Although many miners were less than accepting, similar attitudes from friends and family took me by surprise. As a counter to all of this hostility, I had the largest paycheck I’d ever seen, and the determination to make this work. Thus began my uncharted path of education, work, and trial and error. Through the suggestion and examples of a select few individuals, for and whom I worked, I began to realize the difference between a “job” and a “career.” Today I hope to pass on the same type of encouragement to others who come after me.
What is it like to be an Inspector?

A typical day for me as a mine inspector would begin early, usually 6:00 a.m. at the field office, gathering inspection equipment then traveling to a mine. One difference for me as a woman is that it is helpful to know what kind of facilities, if any, are available at a mine I am going to inspect. Male mine inspectors can don their uniform and safety equipment in an all male miners’ bath house or even the parking lot. Pre-planning could save me a lot of embarrassment or discomfort while at the mine.

In my experience as an MSHA inspector, I have always been relatively well received initially by both mine management and miners. That is, until the novelty wears off or some enforcement action becomes necessary. At that time their perspective changes to “this woman doesn’t know what she is talking about.” Fortunately, the negative reactions don’t last long, especially when you do your job consistently.

Another of the more easily resolved problems of a female mine inspector is the different capabilities of men and women. Physical strength, or the lack of it, seems to be the first in a long list of “can’t do” items that a woman is presented with in a nontraditional occupation. Compensation for physical weakness can easily be accomplished with the creative use of tools, levers, and equipment.

A more subtle but just as common obstacle comes in the form of attitudes and opinions of more traditional and less flexible coworkers. There is no simple, quick fix way to tear down those barriers. They must be dealt with on an individual case-by-case basis. Unfortunately, this often takes more than just being good at what you do.

For many women, experience can be another barrier. Just the lack of years of experience moves you to the back of the line. This necessitates finding ways of catching up and becoming an equally productive member of the work force. Most women who have chosen a

In my case, becoming a mine inspector seemed a natural progression from the experience gained through working in the mine. My job abilities and titles in the mine had ranged from general inside laborer to safety manager, with my main interest in the area of health and safety. Mine Safety and Health Administration (MSHA) inspectors are deeply committed to improving the health and safety conditions under which miners make their living. In most cases this commitment is born from the inspectors’ first-hand personal knowledge of the hazards of the occupation, enhanced by the training that all new Federal inspectors receive.

I applied for an inspector’s position in 1987 after some encouragement from a friend who was an inspector. The Federal hiring register was open for the first time in several years. What did I have to lose? Never expecting to hear anything in response to my application, I found it was serious decision time when I did receive an offer.

With any job change there are uncertainties and anxieties—coming to work for MSHA was no different. By this time my mining background and education level were comparable to my male counterparts, which allowed for my progression through the ranks from trainee to journeyman inspector within the same timeframe as the male inspectors. I was later promoted to the job of health and safety specialist at MSHA headquarters.

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nontraditional career deeply desire to rise or fall on their own strengths and abilities. The stigma that results from the perception that women receive special treatment in the workplace of today hinders women to reach their full potential. It takes incredible personal strength to move forward in the face of such antagonism. Sometimes you feel so worn down that you reach the point where you say “why bother?” and quietly fall back into the socially accepted ranks.

It’s time for a new chapter in the book. The rules are in place establishing a woman’s right to equal treatment in the workplace. It’s time to start filling in the blank spaces. Laws and regulations alone can’t do the job. Networking, support systems, and good solid work are among the best tools that we as women can use to benefit ourselves, each other, and make valuable contributions in the workplace today.

A Woman’s Place Is in the Mines

Women mining professionals were rare when an act of Congress created the Mine Safety and Health Administration in the U.S. Department of Labor in 1978. Today, a woman with the MSHA logo on her hard hat no longer causes astonishment when she arrives at a mine.

All of the women who have broken ground in the mining career field have interesting anecdotes to share. The following individuals represent MSHA women who have held a variety of jobs both in industry and in the Federal government. Here are their stories.

“When I started in the mines in 1965, you could hardly see your hand in front of your face underground because the coal dust inside the mine was so thick. Today, you can watch the bits on the continuous miner turning from 50 to 60 feet away.”

Carl Boone, District Manager, Coal Mine Safety and Health Division

When I started in the mines in 1965, you could hardly see your hand in front of your face underground because the coal dust inside the mine was so thick. Today, you can watch the bits on the continuous miner turning from 50 to 60 feet away.”

Carl Boone, District Manager, Coal Mine Safety and Health Division
Diane Watson was drawn to non-traditional jobs like a magnet. From installing solar systems atop houses in Nevada, to shipping weapons and ammunition to law enforcement agencies throughout California, Watson seemed destined to land in an industry that boasts few women into its ranks. For five years, Watson held a variety of jobs at an open pit gold mine, from haul truck driver to bulldozer, loader and grader operator. “Basically, I worked my way through all the equipment,” she says. Her work ethic and company smarts were noticed by an MSHA mine inspector, and she was encouraged to apply for a job at MSHA. “That was when I realized how serious MSHA people are about what they do. I wanted to be a part of that,” says Watson.

Since 1988, Watson has regularly inspected the nearly 50 metal and nonmetal surface mines in her northern California territory. Watson takes seriously the responsibilities of her job, and the gratification she seeks is simple and heartfelt. “I know that I have the capacity to save lives,” she says. “There are days when I talk to the miners and I know they are really listening, and maybe I’ve convinced them to change the behavior that could get them injured or killed. Those are the days when being a federal mine inspector is really worthwhile.”

Linda Zeiler wondered how far a double major in environmental science and religious studies would take her. For the first two years of her working life, it landed the Pittsburgh native a job at a lab at her alma matter, the University of Virginia. Then an opening at MSHA’s Toxic Materials Division drew her back to her hometown for an interview. Although she didn’t get the job, she did go back to school for yet another degree, this time in chemistry. It paid off. In 1982, Zeiler was hired by MSHA’s Physical and Toxic Agents Division, where she spent 12 years. As a chemist, Zeiler analyzed gas samples at mine operations throughout the country where underground mine fires were actively burning. She juggled her job with courses at the University of Pittsburgh, where she would eventually earn a Master’s degree in Industrial Hygiene.

In 1995, Zeiler took a technical support job at MSHA headquarters in Arlington, where she headed an advisory committee studying the health effects of dust exposure on miners. That was followed by an assignment drafting (continued on next page)
By 2000, she had achieved a new feather in her hard hat – deputy director of Technical Support. “The experience gave me much more exposure to the safety side of MSHA, whereas my background is primarily in health,” says Zeiler. “It was also worthwhile because I helped put together a list of recommendations for the improvement of MSHA’s overall impoundment inspection and plan review process.”

Certainly there are challenges in upper management, notes Zeiler. “It’s all about the big picture – meeting the goals of the Assistant Secretary and assisting the other program areas as best as you can.” The picture has gotten a bit bigger of late. In August 2002, Zeiler was one of the 27 people selected for the Labor Department’s Senior Executive Service Candidate Development Program.” “Achieving SES status requires a well-rounded understanding of all the components of an agency. Again, its all about the big picture,” says Zeiler.

Dani White was a third generation worker in the oil fields of Oklahoma, and had the industry boom continued, her career path might have been quite different. During a two-year stint in the Army, White was the first woman in her unit to work on heavy artillery. When her tour of duty ended, White returned home and spent the next seven years running cranes and building rigs in the oil fields of Oklahoma and West Texas.

By 1980, a shift in the economy led to cutbacks in the oil industry, and White found herself out of a job. Because of her experience running front-end loaders and haulage trucks, she didn’t stay unemployed for long. For the next nine years, White worked at a limestone quarry on the Arkansas River operating crushing, loading, drilling, and blasting equipment. Eventually, White moved up to superintendent and encountered the usual challenges that face those who manage. “It doesn’t matter whether you are male or female; you have to win the confidence of the workers,” she says. White’s crew earned a number of safety bonuses and developed solid safety programs and initiatives during her tenure. “I was very proud of our safety record, which was a big factor on why I decided to take a job at MSHA,” she says. In 1999, White entered MSHA’s inspector training program
and parlayed the skills she had garnered as a mine superintendent into her new position. Today, in her inspection territory she covers 44 metal and nonmetal mines throughout Oklahoma. “I let them know how I am. And I ask them to be straightforward with me,” she says. “I try not to preach to them about safety, but I relate a lot of my own experience and near misses and what I could have done to prevent them.” She continues, “They ask a lot of questions, so that tells me they’re really listening.”

In the 1970s, making inroads in a man’s world was no easy task, but Margaret Lally took it all in stride. The mine safety and health specialist in MSHA’s Office of Assessments is a veteran of the coal mining industry of Kentucky, her home state.

In 1972, Lally answered an ad for a keypunch operator at a coal company operating 13 mines in western Kentucky. Lally tackled her new job with energy and enthusiasm, and in no time was reassigned to the lab that analyzed coal prior to shipment to utility companies. For 10 years, Lally was in charge of sampling at the company’s preparation plants, the processing centers where coal is cleaned and readied for distribution. “This was no office job. I was out at one of the plants every single day,” she says. Eventually shifting gears, she applied to MSHA in 1992 and began her Federal service as a mine inspector. This was something new, but not unwelcome. “I understood what happened after coal came out of the ground and is shipped off to the utility companies,” says Lally. “Now I would find out what happens while it’s being mined underground.”

By 1997, Lally thought an assignment at MSHA headquarters in Arlington would provide her with better opportunities for advancement, so she applied for a job in the Office of Assessments. Here she would review citations for safety and health violations and determine what dollar amount to attach to each one. Lally’s field experience has served her well in this position. “Whenever I pick up a fatality report, I can visualize exactly what they are talking about. It certainly helps me in assessing violations,” she says. □

“MSHA tremendously impacted the everyday life of coal mining families. The agency has successfully cut accident and injury rates through enforcement, education and training. I have always been proud of the men and women who have made MSHA a great success.”

Hugh V. Smith, Treasurer, National Council of Field Labor Locals, AFGE, AFL-CIO
An electrical accident occurred on October 10, 2010, that caused the death of one contract electrician and seriously injured two coworkers. They were installing ground fault indicator lights in a circuit breaker enclosure when an arc flash occurred. They were not aware the circuit breaker enclosure contained a bottom feed circuit breaker and had locked out the wrong disconnect switch.

Best Practices

► After opening the correct load break switch, always ensure the correct visual disconnect is opened, locked, and suitably tagged prior to working on any portion of the electrical circuit.

► Always ensure there is no voltage inside an electrical enclosure prior to working on it.

► Properly label visual disconnecting devices to identify the circuit they protect.

► Place warning labels on the terminal covers of bottom feed circuit breakers stating that the “Bottom terminal lugs remain energized when the circuit breaker is open.”

► Wear appropriate personal protective equipment (PPE) as defined in NFPA 70E (Standard for Electrical Safety in the workplace) when doing any electrical work.
(Definition of Rock dust) Pulverized limestone, dolomite, gypsum, anhydrite, shale, adobe, or other inert material, preferably light colored, 100 percent of which will pass through a sieve having 20 meshes per linear inch and 70 percent or more of which will pass through a sieve having 200 meshes per linear inch; the particles of which when wetted and dried will not cohere to form a cake which will not be dispersed into separate particles by a light blast of air; and which does not contain more than 5 percent combustible matter or more than a total of 4 percent free and combined silica (SiO2), or, where the Secretary finds that such silica concentrations are not available, which does not contain more than 5 percent of free and combined silica.

Generous applications of rock dust can prevent the propagation of coal dust explosions. The law requires that all areas of a coal mine that can be safely traveled must be kept adequately rock dusted to within 40 feet of all working faces. These are minimum requirements.

REMEMBER - The chance of propagation and risk of widespread explosion disasters in bituminous coal mines can be nearly eliminated when rock dust is applied liberally and maintained properly. However, unless rock dusting is appropriately and properly maintained, it will almost surely fail in an emergency.

Rock dusting is of extreme importance in the prevention or lessening the effect of fires and explosions in underground coal mines.
Council Updates

The Sunflower Safety Council’s November JAHSA meeting was called to order by Brad Gover. There were 22 members present. Wally Pitney gave a presentation on Hearing Conservation Programs. Sentinel of Safety awards went out to Nichols Sand and Gravel in Nebraska and Bromley Quarry and Asphalt in Kansas. Certificates and recognition were awarded for citation free inspections. The spring thaw seminar was held on March 8, 2011, in Hutchinson, Kansas.

Update submitted by Dawn
The 2011 National Meeting and Training Seminar of the Joseph A. Holmes Safety Association will be held in San Antonio, Texas, on June 21–23, 2011. This meeting will provide a variety of safety and health workshops presented by experts from around the U.S. and representing all sectors of mining. The meeting will be held at the Hyatt Regency Hotel. To make reservations call 1-210-222-1234. The discounted hotel rate per night for guest rooms is the government per diem of $106. Please mention Holmes Safety Association to receive the discounted rate. The hotel will honor reservations received by May 20, 2011.

The hotel address is:

**Hyatt Regency**  
123 Losoya Street  
San Antonio, Texas 78205

For more information contact:

**Al Simonson**  
Cell: 507-351-2381  
sineun@hickorytech.net

**Sylvia Ortiz**  
Telephone: 512-232-2232  
s.ortiz@austin.utexas.edu

**Amanda Sanchez**  
Telephone: 512-232-6215  
amandasanchez@austin.utexas.edu

**Business Meetings**

**Tuesday, June 21, 2011**  
9:00 a.m.  
NASMITA Meeting

**Tuesday, June 21, 2011**  
10:00 - 11:30 a.m.  
JAHSA Executive Committee Annual Meeting

**Thursday, June 23, 2011**  
2:15 p.m.  
JAHSA General Meeting

**Planned Workshops June 21 – 23**  
Sessions begin June 21 at 1:00 p.m.

- **Identity Theft**
- **Aging Workforce**
- **Blasting Safety**
- **Parts 46 & 48**
- **Rules to Live By I & II**
- **Accident Prevention**
- **Pre-Shift Inspections**
- **Slips, Trips and Falls**
- **Accident Investigation**
- **Ergonomics in Mining**
- **Back Injury Prevention**
- **Hearing Conservation**
- **Working Around Water**
- **Powered Haulage Safety**
- **Miners’ Rights & Responsibilities**
- **New First Aid Guidelines**
- **Innovative Training Methods**
- **Preparing for an Emergency**
- **Substance Abuse in Mining**
- **Independent Contractor Safety**
- **MSHA Updates**

Topics are subject to change.
Event Schedule

May

May 2-4 – New Mexico Mine Health and Safety Conference – Focus 24/7 at the Macey Conference Center in Socorro, NM. For more information, call: 575-835-5460

June

June 21-23 – National Holmes Meeting and Training Seminar will be held at the Hyatt Regency Hotel in San Antonio, Texas. For more information, call Al Simonson at 507-351-2381 or Sylvia Ortiz at 512-232-2232.

August

August 17-18 – Northern West Virginia Mine Rescue Contest (UG Coal) in Morgantown, WV.

October

October 3-6 – National Mine Rescue, First Aid, Bench and Pre-shift Competition at the Greater Columbus Convention Center, in Columbus, OH. For more information, call 276-679-0230 or visit http://www.msha.gov/MineRescue/CONTEST.htm.

October 11-13 – TRAM Conference / National Mine Instructors Seminar at the National Mine Health and Safety Academy in Beaver, WV. For more information, call 304-256-3326.

TRAM

Call For Entries

16th Annual Mine Health and Safety Training Materials Competition

Your entries will be evaluated and displayed, and winning entries will be awarded, during the Training Resources Applied to Mining (TRAM) Conference October 11-13, 2011, at the National Mine Health and Safety Academy in Beaver, West Virginia. The deadline for entries is Monday, September 19, 2011. There are some significant and exciting changes in the competition format this year, so be sure to watch for more details in future issues.
What you can do when you are exposed to hazardous noise

CAP the NOISE
To Save Your Hearing!

Today, more than 150,000 miners have some hearing loss.
By age 60, more than 75% of coal miners have a hearing impairment from exposure to noise.

Once you have lost hearing due to noise, it’s permanent and cannot be reversed.
Because there’s no pain or visible damage, you may not notice hearing loss right away.
Every time you are exposed to noise, your risk of hearing loss increases.

If you have hearing loss, you may experience:
> Difficulty hearing warning signals and equipment sounds
> Trouble understanding what someone is saying
> Accidents and lost productivity
> Ringing or buzzing in the ears
> Sounds seeming dull or flat after leaving a noisy area
> Headaches, tiredness, stress, and a feeling of isolation

You don’t have to lose your hearing.

CAP the NOISE
1. CONTROL the noise at its source (Engineering Controls)
2. AVOID the noise source (Administrative Controls)
3. PROTECT your ears (Hearing Protection Devices)
How Can You CAP the NOISE?

How you can CONTROL the noise at its source
> Use feasible noise controls such as enclosures, coated chains, and isolators
> Maintain and lubricate equipment
> Tell management about worn/broken noise controls and noisy machinery
> Use barriers or enclosures for work areas
> Clean and maintain fan silencers
> Replace or repair defective mufflers

How you can AVOID the noise
> Use remote controls for machine operation
> Limit time in noisy areas by rotating with other workers
> Turn off equipment when it’s not in use
> Avoid sitting idle in equipment in noisy areas
> Perform cleanup and maintenance during machine down times

How you can PROTECT your ears
> Wear hearing protection (muffs and/or plugs) when you must be exposed to noise

Keeping your hearing is easy.

To receive documents or other information about occupational safety and health topics, contact NIOSH at: 1–800–CDC–INFO (1–800–232–4636) · 1–888–232–6348 (TTY) · e-mail: cdcinfo@cdc.gov or visit the NIOSH Web site at www.cdc.gov/niosh.

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