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Ergonomic hearings expected to be full of debate, disagreement

Fight over proposed rule continues

The formal hearings into the federal government's proposed ergonomic rule have begun, and all signs indicate that they will provide a vivid illustration of just why this rule is considered one of the most hotly debated in the entire history of the federal Occupational Safety and Health Administration.

A great many organizations are providing formal comments and testimony regarding the proposed rule, and it seems that nearly everyone has found something they don't like.

The American Association of Occupational Health Nurses in Atlanta (AAOHN) recently criticized the rule, saying it does not go far enough in trying to prevent ergonomic-related injuries and it does not adequately recognize the role of occupational health nurses. Now the group representing occupational health physicians is making similar complaints. **(For more about the AAOHN position, see *Occupational Health Management*, April 2000, pp. 37-41.)**

> *"I've never seen an issue that's this political. The hearings make me feel sorry for OSHA. It must feel like chum in the water when sharks are around. The feeding frenzy will start."*

Even groups that support the overall concept

COMING IN FUTURE ISSUES

- Large employer reduces carpal tunnel cases to near zero
- What it takes to receive a STAR award from OSHA
- Debate continues over federal ergonomic rule
- Marketing ideas that aren't worth the money
- Repeat violations a quick way to a big OSHA fine

outlined in the ergonomic proposal still want OSHA to fine-tune it in some important ways. The American Industrial Hygiene Association (AIHA) in Washington, DC, wants an ergonomic rule but one that is more proactive, says **Sheree Gibson**, PE, CPE, president of Ergonomics Applications in Greenville, SC, and former chair of the AIHA's ergonomics committee. She will testify on behalf of the AIHA in May.

About 1,000 people are scheduled to testify during a three-month period in Washington, DC; Chicago; or Portland, OR. OSHA received nearly 7,000 comments on the proposal during the 100-day public comment period that closed March 2.

Gibson says the hearings are shaping up as a rough experience for OSHA officials. They have been under fire for years because of the effort to enact an ergonomic rule, and some opponents will see these hearings as the opportunity to vocalize all their frustration and dissatisfaction, she says.

"This is such a political issue, a hot topic, and that shows no signs of abating. In all my years in occupational health, I've never seen an issue that's this political. The hearings make me feel sorry for OSHA. It must feel like chum in the water when sharks are around. The feeding frenzy will start," Gibson adds.

Final rule expected by end of the year

Gibson says she and her AIHA colleagues are relieved to see the ergonomic proposal moving forward, even if the road continues to be more than a bit rocky. OSHA has been trying to enact an ergonomic rule for more than 10 years, progressively weakening the proposals in response to employer protests and strong resistance from Congress.

The administration first wanted to cover all U.S. employers in a 1994 proposal, which then was about 6.1 million employers with 96 million employees. A 1995 proposal reduced the scope to only employers with evidence that hazards exist, about 2.6 million employers with 21 million employees.

The current proposed OSHA ergonomics program standard relies on what OSHA calls "a practical, flexible approach that reflects industry best practices and focuses on jobs where problems are severe and solutions well understood." It would require general industry employers to address ergonomics for manual handling or manufacturing production jobs. Employers also would need

Groups promote views on ergonomics rule

AAOHN and ACOEM comment on rule

The nursing and physician groups representing occupational health professionals both are complaining that the Occupational Safety and Health Administration's proposed ergonomics rule does not give them enough recognition.

The American Association of Occupational Health Nurses (AAOHN) in Atlanta said in its comments on the proposed rule that it is "extremely disappointed that OSHA has entertained the question as to whether it is appropriate for OSHA to recognize or promote the role of the nonphysician provider with respect to the ergonomics standard." AAOHN called for OSHA to require or promote the use of occupational health nurses when complying with the ergonomics rule.

Physicians vs. nurses?

On the other hand, the American College of Occupational and Environmental Medicine (ACOEM), representing occupational medicine physicians, said it is irked that the proposed rule leaves too much room for employers to use nurses or other nonphysicians. "ACOEM continues to question OSHA's use of 'licensed health care provider' language when OSHA's colleague federal agencies have publicly disagreed with its use," the organization stated in its written comments.

Those comments indicate the physician group wants much more of the ergonomic rule's required tasks to be performed only by a physician. However, AAOHN's comments indicate that the nurses' group wants the rule to indicate even more clearly than it already does that nurses may perform many of the tasks.

Diplomatically, both groups tell *Occupational Health Management* that their apparently contrasting opinions do not represent any conflict between the groups. ■

to fix other jobs where employees experience work-related musculoskeletal disorders (MSD).

About one-third of general industry work sites — 1.9 million sites — would be affected, and more than 27 million workers would be protected by the standard. Fewer than 30% of general industry employers have effective ergonomics programs in place today, according to OSHA.

Under the OSHA proposal, about 1.6 million employers would need to implement a basic ergonomics program. The program would involve assigning someone to be responsible for ergonomics; providing information to employees on the risk of injuries, signs and symptoms to look for, and the importance of reporting problems early; and setting up a system for employees to report signs and symptoms. Full programs would be required only if one or more work-related MSDs actually occurred.

Taking the 'quick-fix' route

The proposal's "quick-fix" alternative to setting up a full ergonomics program works the following way:

- ❒ **Correct a hazard within 90 days.**
- ❒ **Check to see that the fix works.**

No further action is necessary. In addition, a "grandfather" clause gives credit to firms that already have effective ergonomics programs in place and are working to correct hazards.

After the hearings end in May, OSHA intends to finalize the rule by the end of 2000.

Gibson says the AIHA views the proposal as flawed but workable. The biggest problem is that the proposed standard is almost entirely reactive, rather than proactive. Much of the proposed rule depends on an "injury trigger," in which an employer is obligated to correct ergonomic hazards only after an injury is reported, she says.

"Most people in the safety and health profession try to be proactive, but using an injury trigger is obviously a reaction," she says. "It doesn't seem to have anything using a risk-based approach, looking for problems before they cause an injury."

Gibson says she suspects OSHA used the injury trigger in an effort to minimize the burden on employers, and she acknowledges that the problem with the trigger may be more philosophical than practical.

"You really need to look at the jobs with high-risk factors and deal with those problems at least.

But to be honest, when you see something that has high-level risk factors, you're probably going to catch it with an injury. So in reality, part of the debate is philosophical. If you have high-risk factors, you're likely to see an injury within a short period of time," she points out.

Past injuries not considered for trigger

Gibson says there is another part of the proposal that runs counter to the way most occupational health professionals operate. If the rule is enacted as it is written now, any workplace injuries occurring before the rule's effective date are not considered a trigger for implementing the rule's requirements. The employer is free to use that injury as a reason to implement changes, just as they are free to do so now, but the rule would not require any action based on previous history of injuries.

Many employers are afraid of the proposal because it does not clearly define how OSHA will enforce it, Gibson says. OSHA may have tried to keep the proposal relatively simple and without any heavy-handed threats of enforcement, but that effort may have backfired, she says. Employers would be more comfortable knowing what to expect.

"Some people would rather have the devil you know rather than the devil you don't know," she says. "I tell people that I think OSHA's going to go after the bad guys first, but the industries have no guarantee of that."

Accurate diagnosis prime concern of ACOEM

The 34-page comment on the rule by the American College of Occupational and Environmental Medicine (ACOEM) in Arlington Heights, IL, emphasizes that the accurate diagnosis of a MSD is paramount to making any workplace ergonomic program effective.

As written, the rule does not ensure an accurate diagnosis, says **Robert McCunney**, MD, MPH, director of environmental medicine at the Massachusetts Institute of Technology in Boston and president of ACOEM. **(See story on ACOEM's and AAOHN's comments on the rule, p. 51.)**

"There is nothing specific about musculoskeletal disorders that would pinpoint the cause," he says. "If someone has pain in the shoulder, elbow, or knee, that looks the same to a physician and is treated the same whether it occurred at work or not. It's important to ensure an accurate diagnosis and determination of the cause, because tremendous ramifications ensue for the employer once that diagnosis is made."

Without an accurate diagnosis, employers can be subjected to the requirements of the rule for injuries that actually are not work-related, he says. The rule should specify that a physician, preferably one who specializes in occupational health, be responsible for making the diagnosis. It is not enough to require only a "licensed health care provider" to make the diagnosis, McCunney says.

"I've been in this field for 20 years, and I never cease to be amazed at how many physicians have virtually no concept of what goes on at work. To make a proper assessment, one needs to understand what goes on at work," he adds.

In its formal comments to OSHA, ACOEM stated that "a 'qualified' occupational health care provider should be an individual empowered to independently make the decision of whether a diagnosis is needed and if so, to make such a diagnosis." State scope of practice laws are not sufficient for determining which health care providers can make such an assessment, the comments say.

> *"The requirements of the rule are subjective and ambiguous, assuring that an employer could never achieve compliance because, in all of its more than 1,000 pages, not a single proven solution is provided."*

ACOEM also expressed concern about the "quick-fix option" in the proposed rule. Although the quick fix may allow employers to find a fast and inexpensive solution, the comments note that "it may be contrary to the best interests of an employee." Part of the problem, ACOEM said, is that the rule allows the employer to determine whether the quick fix has been successful.

"Clearly, a disincentive exists for the employer to determine that a quick fix has not been successful," ACOEM stated. "In addition, employees may feel pressure — warranted or not — to agree that the quick fix has solved the hazard."

McCunney also expresses concern about the worker compensation provisions in the proposed rule. OSHA proposes that employees suffering ergonomic injuries would be compensated 90% of

(Continued on page 54)

Reactions to proposal: Change it, scrap it

The comments on the Occupational Safety and Health Administration's ergonomic rule proposal vary from one organization to another, with some offering helpful advice on a rule they largely support and others calling for the rule to be scrapped altogether. Here is a summary of the some of the position statements and commentaries:

- ✔ **American Association of Occupational Health Nurses (AAOHN), Atlanta**
  AAOHN is concerned that the injury trigger is not proactive. The group also is critical of the rule's complexity and what it calls an unreasonable burden for employers. AAOHN "strongly feels that there are inherent challenges for employers who do not have the benefit of the services of an on-site health care professional to apply the screening criteria." The group also is "extremely disappointed that OSHA has entertained the question as to whether it is appropriate for OSHA to recognize or promote the role of the nonphysician provider with respect to the ergonomics standard." AAOHN says, at the very least, OSHA should require that the health care professional be knowledgeable about ergonomics issues.

- ✔ **American College of Occupational and Environmental Medicine (ACOEM), Arlington Heights, IL**
  ACOEM supports the enactment of an ergonomics standard but wants it to more clearly define some requirements, especially those relating to the diagnosis of a musculoskeletal disorder. The diagnosis should be made by an occupational medicine physician, ACOEM says. The group also is concerned that the proposed rule usurps existing workers' compensation laws for no good reason, and that the "quick-fix" option leaves too much control with the employer.

- ✔ **American Industrial Hygiene Association (AIHA), Washington, DC**
  AIHA "strongly supports the proposal," but is concerned about the use of an injury trigger instead of using a proactive approach. The group says the standard should include a trigger requiring examination of jobs with high exposure to the known and documented risk factors described in the standard.

- ✔ **American Hospital Association (AHA), Washington, DC**
  The AHA is a member of the National Coalition on Ergonomics in Washington, DC, a group of about 300 employers and other organizations opposed to the proposed ergonomic rule.

'Cookie-cutter' approach?

The coalition calls the proposal "subjective, ambiguous, and unmanageable," calling on OSHA to completely withdraw its rule. **Carla Luggiero**, JD, RN, senior associate director of federal regulations at the AHA in Washington, DC, says the AHA has no position on whether there should be any ergonomic rule at all, but they definitely don't want this one. For hospital employers, the proposed rule is a "cookie-cutter, one-size-fits-all" approach that will prove impractical to health care institutions open 24 hours a day and working with a wide range of people. "The cost also is a concern," she says. "They estimated about $900 per establishment, at $150 per workstation and six stations per employer. But for a hospital, that's a gross underestimate. I don't know any hospital that has six employees."

- ✔ **National Small Business United, Washington, DC**
  The nation's oldest small-business advocacy group is "extremely concerned" that the proposed rule will have an adverse impact on employers already making an effort to protect employees. "The agency has significantly underestimated the hardship, both financial and operative, for small business. If a small business followed the path prescribed by the proposed regulation, it is uncertain whether there would be any decrease in these injuries, let alone enough decrease to warrant the rule," the group said in its comments. ■

their after-tax earnings, but most state workers' compensation systems provide only 66%. The higher compensation is intended as an incentive to report ergonomic injuries, but McCunney says that is an unlikely result.

ACOEM recommends that the compensation rate for workers should be based on existing workers' compensation statutes, but that the waiting time for benefits and the types of injuries covered should be governed by the ergonomics standard.

Employers not at all keen on the idea

The proposed rule is not popular with many employers, McCunney says. That should not be interpreted necessarily as a resistance to dealing effectively with ergonomic hazards, he says. Rather, the opposition from employers is likely a response to the uncertainty of how a rule would affect them in tangible ways.

"I really expected more employer support for the rule because of the effect that these injuries have on productivity," he says. "Employers have a natural hesitation and resistance to more federal regulations. It's almost like asking the National Rifle Association if they want another gun-control bill."

One of the most vocal critics of the proposed rule is the National Coalition on Ergonomics (NCE) in Washington, DC, a group of about 300 employers and other organizations opposed to the rule. **Ed Gilroy**, co-chair of NCE, says employers see the proposed rule as unrealistic.

"Looking at the data and the record as a whole, there is no way any reasonable person could agree with OSHA's contention that there is scientific, legal, or public policy justification for the agency's proposed ergonomics rule," he says. "The requirements of the rule are subjective and ambiguous, assuring that an employer could never achieve compliance because, in all of its more than 1,000 pages, not a single proven solution is provided. Even the best-intentioned employer will be unable to understand what this proposal requires, no matter how many lawyers or experts he or she hires."

Looking for assurances

The NCE has long supported safety and health programs, but in OSHA's proposed ergonomics regulation, the coalition only sees a costly experiment that fails to assure the prevention of injuries, Gilroy says.

"Nothing in the proposed regulation assures the prevention of even one injury," he says. "The only assurance is that this is the most expensive regulation ever proposed by OSHA. Even the agency admits its estimates are the highest costs ever proposed, and we think those estimates are unrealistically low." ■

Employees concerned about workplace violence

Risk management survey shows audit needed

Safety experts are urging company managers and safety professionals to conduct a risk assessment and vulnerability audit of their workplace and act immediately following the analysis of a recently completed countrywide survey on workplace violence.

The survey, from the Risk Management / Insurance (RM / I) Division of the American Society of Safety Engineers (ASSE) and the Risk and Insurance Management Society in New York City, found that although the number of violent incidents in the respondents' workplaces have stayed the same, employees remain concerned.

The survey results suggest that there needs to be more focus on preparing the workplace for violent actions as part of an overall effort to provide a safe workplace, says **Kathy Seabrook**, vice president of practices and standards for ASSE, and president of Global Solutions, based in Mendham, NJ.

"We also found that it is increasingly vital, especially from a legal standpoint, that employers take precautions to create and maintain a safe working environment," she says. It is particularly urgent to provide employers with the knowledge and resources needed to prevent violent workplace occurrences following a major increase in the number of deadly incidents in the workplace over the past few years, Seabrook says.

The U.S. Department of Justice found that 21,300 recent assaults and violent acts in the workplace resulted in fatalities, injuries, grief-stricken family and friends, and missed days off from work due to the emotional impact. In addition, it estimated that the cost to employers in days missed and legal fees annually was $4.2 billion in 1992, she says.

Seabrook adds it also is important to note that, legally, employers may be liable for failing to provide adequate on-site safety and security measures after they have been notified of a potential danger. The U.S. Supreme Court recently considered an opinion stating that an employer is subject to vicarious liability for a victimized employee for an actionable hostile environment created by a supervisor with immediate authority over the employee.

These are some results of the survey:

• **Workplace violence incidents.**

Forty-one percent of the responses indicated that the number of workplace violence incidents has stayed about the same while 31% of the responses indicated that no incidents have occurred. However, 58% indicated that employees have expressed fear that violence may occur at work.

• **Training.**

More than half (58%) of those organizations surveyed have provided training to help identify warning signs leading to potentially violent behavior. Training was provided by the human resources department (24%), safety department (14%), risk management department (13%), security department (13%), and legal department (3%).

• **Recognition and coping methods.**

To help prevent violence in the workplace, more than half (58%) of the respondents refer potentially violent employees to their employee assistance programs. Forty percent offer training to managers to identify warning signs of violent behavior, and 35% provide employee training on conflict resolution. Only 24% offer training to employees to identify warning signs of violent behavior.

• **Formal risk assessments.**

Although almost three-fourths of the respondents (70%) have not undergone a formal risk assessment of the potential for violence in the workplace, 62% of the respondents indicated their organizations have a written policy in place addressing violent acts in the workplace.

• **Written programs.**

A high percentage (82%) indicated their organizations have a written policy addressing weapons on the work premises.

• **Post-incident actions.**

After a violent incident has occurred in the workplace, only 5% of the employers surveyed allow employees to take liberal leave following an incident; however, 55% offer counseling for employees not directly involved in the incident. Other follow-up steps include aiding employees in job relocation (31%), aiding employees in job relocation within the organization (25%), and offering counseling for victims (22%).

• **Background investigations.**

Nearly half (49%) of the respondents indicated a thorough background investigation of prospective employees was done. But only 4% of the respondents indicated a psychological test was given as a standard part of the hiring process for all potential employees.

[For more information or a complete survey report, contact: Risk and Insurance Management Society Inc., 655 Third Avenue, New York, NY 10017-5367. Telephone: (212) 286-9292.] ■

Wal-Mart settles claims with two deaf applicants

The U.S. Equal Employment Opportunity Commission (EEOC) and the Arizona Center for Disability Law have announced a settlement of a disability discrimination lawsuit against Wal-Mart related to hiring discrimination claims brought by two deaf applicants.

Under the terms of a consent decree approved by Judge William Browning, Wal-Mart agrees to pay $132,500 to Jeremy Fass and William Darnell, two applicants who are deaf. Fass and Darnell, who applied for positions at a Tucson Wal-Mart store, also will be offered jobs under the terms of the consent decree. Wal-Mart also agrees to make corporatewide changes in the hiring and training of new employees who are deaf or hearing impaired.

Wal-Mart agrees to several provisions

The lawsuit was brought in 1997 under the Americans with Disabilities Act by the EEOC and the Arizona Center for Disability Law. These are some of the major provisions of the consent decree that apply directly to Fass and Darnell:

• Each will be paid $ 66,250 plus his share of profit sharing and reimbursement for out-of-pocket medical expenses that would have been covered by health insurance benefits had he been hired by Wal-Mart in 1995.

• Wal-Mart will offer both men jobs as a stocker or unloader.

• Wal-Mart will provide a sign language interpreter for them during their training and orientation, at any meetings to discuss evaluations of their performance, and at scheduled meetings.

• Wal-Mart will also provide other reasonable accommodations based on their deafness:

— giving them vibrating pagers for communication at the store;

— installing a telecommunication device for the deaf (known as a TTY or TDD);

— revamping safety and evacuation procedures to ensure that deaf employees are safely evacuated during an emergency;

— installing visual fire alarms.

Wal-Mart will pay the Arizona Center for Disability Law $57,500 in attorney's fees and litigation expenses incurred in representing Fass and Darnell.

A major portion of the training Wal-Mart offers to its new employees is an orientation and training program that is developed at the corporate office and administered nationwide through computer-based learning and videotapes. Under the terms of the consent decree, Wal-Mart will do the following:

• encode with closed or open captioning all training videotapes used by Wal-Mart to train employees in any entry-level position;

• develop an alternative format for a sign language version of the information in the computer-based learning modules;

• provide a corporatewide electronic or written notice to all of its stores to announce the availability of the alternative format videotapes and computer-based learning modules for use by the deaf and hearing impaired;

• modify its existing corporate policy on reasonable accommodations to include a procedure for an applicant or employee to follow if she or he wishes to request an accommodation and the procedure for approval of the accommodation request.

Selected Wal-Mart stores in Tucson, Phoenix, and Green Valley also will take some additional steps under this consent decree. Those stores will conduct meetings with representatives from agencies that assist with job placement of people who are deaf and hearing impaired to explain the hiring procedures and discuss job openings. They will make arrangements with sign language interpreter referral services to ensure sign language interpreters are available when needed, and they will conduct training on the nondiscrimination provisions of the Americans with Disabilities Act and communication techniques for employees who are deaf. ■

EEOC issues proposal on ADA and federal work force

The U.S. Equal Employment Opportunity Commission (EEOC) has issued a Notice of Proposed Rulemaking (NPRM) to clarify the application of the employment provisions of the Americans with Disabilities Act of 1990 (ADA) to federal government workers.

When the ADA's employment provisions were enacted in Title I of the law, some of the legal requirements of the ADA differed from the Rehabilitation Act, even though the two laws shared the same purpose — ending employment discrimination based on disability. In 1992, Congress made the laws the same by amending the Rehabilitation Act to apply the ADA standards to federal employment.

New rule addresses reassignment

The NPRM updates the EEOC's Rehabilitation Act regulation to incorporate this change. It is responsive to feedback from federal stakeholders seeking clarification, especially on the topic of reassignment. The proposed regulation would highlight changes in the law. These are some examples:

• The ADA provides that reassignment is a reasonable accommodation subject only to the limit of undue hardship. The regulatory limits on reassignment of federal employees with disabilities, formerly included in 29 C.F.R. § 1614.203(g), have been deleted.

• The ADA defines the term "direct threat," providing that an employer may disqualify an individual from employment based on health or safety concerns only if the employer can demonstrate that the person poses "a significant risk of substantial harm" to self or others, even with reasonable accommodation. Under the old Section 501 regulation, the individual was required to prove that he or she could safely perform the job, as part of establishing that he or she was a "qualified individual with a disability."

• The application of the ADA's nondiscrimination standards has no impact on federal affirmative

action obligations or programs.

Title I of the ADA prohibits private employers, state, and local governments; employment agencies; and labor unions from discriminating against qualified individuals with disabilities in job application procedures, hiring, firing, advancement, compensation, job training, and other terms and conditions of employment. Section 501 of the Rehabilitation Act prohibits employment discrimination against employees and applicants with disabilities in the federal sector. ■

JOURNAL REVIEWS

Lowery JT, Glazner J, Borgerding JA, et al. **Analysis of construction injury burden by type of work.** *Amer J Ind Med* 2000; 37:390-399.

These researchers at the University of Colorado School of Medicine in Denver studied injury patterns at construction sites by examining workers' compensation claims for 32,081 workers building Denver International Airport.

They found that injury experience varied widely among different types of construction work. Workers building elevators and conduits, and those installing glass, metal, or steel, were at particularly high risk of both lost-work-time and nonlost-work-time injuries. General concrete construction and roofing also have high risks for injury. The median days lost by injured workers were the highest for truck drivers. The median days lost for most types of work were much greater than previously reported for construction: 40 days or more for 18 of the 25 types of work analyzed.

The researchers note the injury rates for some types of work were much higher than would be expected, a result that could indicate either the unreliability of the earlier data or an increased overall risk on this particular job site. ▼

Currens JAB, Coats TJ. **The timing of disability measurements following injury.** *Int J Care Injured* 2000; 31:93-98.

To address the continuing need for a standardized measurement of disability after injury, this study was designed to define the best time at which to measure disability following trauma. Studying 201 trauma patients, the researchers used the functional independence measure (FIM) and Glasgow outcome scale (GOS) to assess the patients at three, six, 12, and more than 24 months after injury.

They determined that the best time to measure disability was the point at which a steady state was reached, the point at which functional improvement ceased. The patients' motor FIM showed significant change between three- and six-month assessments, and between six and 12 months. There was no statistically significant change beyond 12 months.

For cognitive FIM, there was significant change between three and six months, but not beyond the six-month period. For GOS, there was significant change between three and six months and between six and 12 months, but no change beyond the 12-month mark.

"Disability measurements should be performed 12 months after injury, when patients have reached a steady state," they write. "This time of measurement should be adopted as the standard for trauma databases and outcome studies." ▼

Hakkanen H, Summala H. **Sleepiness at work among commercial truck drivers.** *Sleep* 2000; 23:49-57.

This Finnish study addresses sleepiness among commercial truck drivers, both long-haul and short-haul drivers. The researchers surveyed 184 long-haul drivers and 133 short-haul drivers to examine the frequency of driver sleepiness-related problems at work during the previous three months and to assess the incidence of sleep apnea. The study also tried to identify factors likely to predict problems with staying alert at work, dozing off at the wheel, and near misses.

The results suggest that 13% of the long-haul drivers exceed European regulations limiting the mean driving time per shift. About 40% of the long-haul drivers and 21% of the short-haul drivers reported having problems in staying alert on at least 20% of their drives. More than 20% of the long-haul drivers reported having dozed off at least twice while driving. Seventeen percent of those drivers had experienced near misses while dozing off.

Factors indicating sleep apnea syndrome occurred in only about 4% of the long-haul

drivers and in only two of the short-haul drivers. The researchers say "this suggests that driver sleepiness-related problems tend to be shared by many of the professional drivers, rather than being a 'specific' and permanent problem for a smaller portion of drivers. However, difficulties in sleep patterns, such as having difficulty falling asleep, were infrequent." ■

OSHA Actions

Chemical company fined for safety violations

The Occupational Safety and Health Administration has simultaneously issued citations and signed a settlement agreement with Celanese Chemicals in Bucks, AL, with the employer agreeing to accept five unclassified violations of OSHA standards with assessed fines totaling $250,000.

The settlement follows an OSHA inspection of an accident that caused one fatality and one serious injury. The accident occurred at the Bucks facility after a power failure on Sept. 4, 1999.

According to **Lana Graves**, OSHA's Mobile (AL) area director, the power outage set off a dangerous chemical reaction. Sodium hydrosulfite in one of the dryers in the hydro unit of the plant began to rapidly decompose, releasing dangerous sulfur dioxide and hydrogen sulfide gases. Several employees working in the area donned self-contained breathing apparatuses and tried unsuccessfully to stop the decomposition by flooding the dryer with water.

Two employees exposed to toxic gases

Graves explained that two of the employees, exhausted by their emergency response efforts, entered the control room, a place they considered to be safe, and removed their self-contained breathing apparatuses. That proved to be a mistake.

"Upon restoration of power to the plant, toxic gases were drawn into the control room through a hole in the ventilation system, exposing both employees to high levels of toxic gases," she explains.

One of the employees died instantly, and the other is currently hospitalized in a long-term care facility.

OSHA's investigation of the accident found five violations of safety standards, two of which fell under the Occupational Safety and Health Act's General Duty Clause. Those included failure to provide a source of backup electrical power so that dryers could be positioned, exhaust fans could operate, and the control room's ventilation system could be adequately maintained to ensure the integrity of its atmosphere in the event of a total power failure or process abnormality.

The company also was cited for lack of an adequately designed water deluge system that would safely control and dispose of the dryer contents in the event of an unplanned decomposition, and failure to calibrate the dryer thermometers in accordance with the employer's written procedures.

The remaining three citations were issued for:

- failure to provide fall protection in the form of scaffolds for employees working three stories above ground level;
- failure to provide adequate refresher training for emergency responders and incident commanders as required by the emergency response standard;
- failure to provide adequate training to employees, contractors, and outside emergency responders regarding the physical, chemical, and health hazards of the hazardous materials being used in the work area and their decomposition products such as hydrogen sulfide.

All of the cited violations were corrected by the employer prior to issuance of the citations and signing of the settlement agreement. As part of the settlement, Celanese Chemicals agreed to these steps:

- hire an outside consultant to conduct an independent investigation of the accident, results of which will be shared with OSHA;
- contribute $25,000 to local emergency medical services to be used as needed for equipment and other improvements;
- report to OSHA's Mobile Area Office, for the period of one year, all events involving decomposition of sodium hydrosulfite resulting in an incident investigation;
- conduct annual mock emergency response drills, including evaluation by emergency response experts and written reports of effectiveness;
- ensure availability of telephone service

within the plant at all times;

• produce, and present at an appropriate industry meeting, a position paper titled "Lessons Learned" regarding the incident that occurred on Sept. 4, 1999;

• pay the assessed fine of $250,000 within 30 days of the signing of the agreement.

"We worked with Celanese Chemicals to reach an agreement that provides safety enhancements for company employees, the chemical industry, and the general community," Graves says. "Hopefully, these commitments by the employer will provide information that can be used to identify probable causes and determine appropriate methods to prevent and control similar incidents in the future.

"We think this agreement provides a more significant impact than just issuance of conventional citations," she says. "It also demonstrates OSHA's efforts to see new ways for advancing the cause of safety without the potential cost and burden of lengthy litigation." ■

OSHA cites companies after excavation fatality

The Occupational Safety and Health Administration has cited TGR Constructors of Bedford, TX, for an alleged willful violation of a fatal excavation accident in Lewisville and has proposed penalties totaling $35,000.

Dean Wingo, OSHA Fort Worth area director, says the fatality is a good example of why trench safety is so important. "Collapse protection is essential since the sides of a trench can collapse with great force and without warning, stunning and burying workers beneath tons of soil before they have a chance to react or escape," he says.

An employee of TGR Constructors was trapped on Dec. 30, 1999, by a trench wall cave-in and died during the rescue attempt by the local fire departments. "An OSHA compliance officer returned to the same job site of the fatality and observed employees working in an unprotected trench exposing them to potential cave-in or collapse," Wingo says.

OSHA's excavation safety standard requires that excavations 5 feet or deeper must have a protective system in place to prevent cave-ins. Such protection can be supplied by shoring the trench's sidewalls or by sloping those sidewalls at a shallow angle. Wingo says neither safeguard was properly in place or in use in the excavation at the time of the two inspections. ■

Fireworks manufacturer fined after worker dies

An explosion at a fireworks manufacturing plant has led the Occupational Safety and Health Administration to cite Luna Tech of Owens Cross Roads, AL, and proposed penalties totaling $64,750.

John Hall, OSHA's Birmingham area director, says the agency initiated an investigation in September 1999 after an explosion hospitalized three employees, one of whom later died. Following the inspection, OSHA cited Luna Tech for 21 serious safety and health violations.

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Editorial Questions

For questions or comments, call **Coles McKagen** at (404) 262-5420.

The majority of the alleged violations pertained to OSHA's process safety management standard, which addresses exposures to highly hazardous chemicals. These included failure to properly train employees in operating processes and procedures, perform hazard analyses, develop written operating procedures, and establish and implement an emergency action plan.

Other violations alleged in the citation included a lack of approved wiring, unguarded belts and pulleys, and lack of a respiratory protection program.

"Improper handling of hazardous chemicals can have dire consequences," Hall says. "Following OSHA standards, providing adequate training, and having a workable emergency action plan in case of an accident, raises the safety quotient considerably."

OSHA defines a serious violation as one in which there is substantial probability that death or serious physical harm could result and that the employer knew or should have known of the hazard. ■

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Workers overcome by chemical vapors

Even though the workers were not seriously injured or killed, an accident at a manufacturing facility in Dalton, GA, has led the Occupational Safety and Health Administration to cite Textile Rubber and Chemical Company with penalties totaling $201,600.

The company was cited and fined for safety violations found during an investigation prompted by an accident that injured three workers. **Tom Brown**, OSHA's Atlanta-West area director, says the accident that spurred the agency's inspection occurred in September 1999 when three employees were overcome by chemical vapors while working inside a waste treatment tank. The three workers were treated at local hospitals and released.

OSHA's investigation resulted in proposed penalties totaling $189,000 for three willful violations of confined space safety standards. Those included failure to provide auxiliary self-contained respirators in case an employee's line respirator malfunctioned; implement a respirator program to ensure that workers had adequate respiratory protection from inhalation hazards in confined spaces; implement safe entry, working and rescue procedures for confined spaces; and provide the necessary equipment for employees to enter and work in confined spaces safely.

One of two additional serious citations noted that the employer failed to monitor confined spaces to assure that the air inside was safe for entry, did not prepare entry permits outlining measures for protecting employees from confined space hazards, and did not regulate employee entry into the space. The other serious violation involved the employer's failure to train employees about new confined space hazards that resulted from changes in operations. The two serious violations drew penalties totaling $12,600.

"We issue willful citations when there is an intentional disregard for safety requirements," Brown says. "This company knew the serious hazards associated with working in confined spaces but failed to take adequate protective measures. In fact, key management officials at the facility had received extensive and continuing confined space entry safety training since 1992."

Brown says the company also ignored requests from employees for equipment they needed to safely enter and work in confined spaces. Textile Rubber & Chemical employs 190 of its 350 employees at its Dalton corporate headquarters and plant. Latex carpet and rug backings, urethane backings, coatings, and other textile specialties are manufactured at the plant. ■