

*Job Safety & Health Quarterly*

# JSHQ

The background of the cover is a photograph of a power line tower and several transmission towers in the distance, all silhouetted against a bright orange and red sunset sky. The power line tower in the foreground is on the right side, with various electrical components and insulators visible. The transmission towers in the background are spaced out across the horizon.

Volume 12 Numbers 1&2  
Fall/Winter 2000

Protecting  
Construction Workers  
from Power Lines

**U.S. Department of Labor**  
Alexis M. Herman, Secretary



Occupational Safety and Health Administration  
Charles N. Jeffress, Assistant Secretary

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## From the Editor...

When you think about the construction industry these days, it still remains high on the list for workplace injuries and fatalities. And there is always something in the paper to remind us of this fact. Just recently, there have been newspaper reports about one of the most common electrocution hazards—construction workers carrying or moving metal ladders and striking overhead powerlines. In Norwich, CT, on October 25, 2000, two workers died while installing gutters at a housing complex. The aluminum ladder that one man carried touched an overhead electric line; the second man died trying to help his coworker. This double tragedy could have been avoided. We have run a series on the top four hazards in the construction industry: falls, cave-ins, and caught-in between incidents. Our cover story focus on the fourth and final story in the series—electrocution hazards.

This issue of *Job Safety & Health Quarterly* also highlights stories on OSHA partnerships and customer service efforts. See our regular columns, *Q&A*, *What's Happening?*, *Calendar*, and the *Semiannual Agenda* for upcoming and ongoing OSHA activities, products, and programs. Our *FatalFacts* tearouts focus on electrical hazards in construction.

Please note that we have combined the fall and winter issues of *Job Safety & Health Quarterly*. All subscribers will receive their full subscription service.

We would like to hear from you for upcoming topics and areas of interest, so please take some time to complete our reader response card.

A handwritten signature in cursive script that reads "Anne Crown-Cyr".

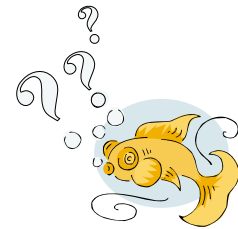
Anne Crown-Cyr  
Executive Editor

# JSHQ

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# Assistant Secretary's Message

People come first. It's that simple when it comes to customer service.

We want OSHA customers to know that we consider their satisfaction a measure of our success as workplace safety and health professionals. Our goal is to give workers and employers our best advice for reducing injuries, illnesses, and fatalities.

We were pleased to learn from a recent customer service survey that workers who've had an OSHA inspection at their workplaces give the agency a customer satisfaction rating of 70, a strong measure of support for our enforcement efforts. Safety and health professionals participating in the survey for a second time rated the agency's service significantly higher this year than last. So we know we're on the right track.

But we want to do even better. We intend to go above and beyond our customers' requests. We want to provide not just the information the customer thinks he or she wants, but respond to the real needs the customer has. Then we want to complete our response with additional useful information to make our contact as effective as possible in furthering our goal of safe and healthful workplaces.

OSHA's clients deserve outstanding service, so we're taking a common sense approach. OSHA employees continue to be:

- Respectful and cooperative and offer positive assistance.
- Professional by being knowledgeable, technically proficient, and accurate.
- Responsive with prompt and willing service.
- Able to take the initiative—see what needs to be done and do it.
- Honest and reliable.

- Committed to deliver quality products and meet or exceed the public's expectations.

OSHA's benchmark, as identified in Presidential Executive Order 12862, is "customer service equal to the best in business." Results, service quality, and customer satisfaction are the primary measures of government success under the Government Performance and Results Act. Our goal is to be successful in reducing workplace injuries, illnesses, and fatalities, and to be judged successful by our clients on the basis of the service they receive.

We've developed "People Come First," a model approach to providing excellent customer service. Through this customer service program, we will design customer-friendly processes to make it easier for our clients to reach us and get the information or services they need. We promise to offer respectful, professional service. And when things don't go right or we get complaints, we'll use that as an opportunity to refine and improve our service for the next customer.

"People Come First" isn't just a slogan. It's a focus on excellence. And it applies to service within OSHA as well as service to the public.

Quality customer service is a way of life. It's an approach to our business—preventing occupational injuries and illnesses and saving lives on the job—that we want to embed in OSHA's culture. We look to our stakeholders, our partners, and our colleagues to give us feedback on our progress and tell us how we can improve. We won't settle for less than the best. Let us know how we're doing. [JSHQ](#)



A handwritten signature in black ink that reads "Charles N. Jeffress". The signature is fluid and cursive.

Charles N. Jeffress  
Assistant Secretary of Labor  
for Occupational Safety and Health

**Q** OSHA seems to be increasing its partnership programs. How can readers obtain more information about this topic?

**A** The best way to learn more about OSHA's partnership programs is through the agency's website. OSHA recently launched a new page on the website that highlights successful safety and health partnerships and encourages new voluntary partnerships to reduce workplace injuries and illnesses.

Under the banner of "Partner with OSHA: New Ways of Working," the site describes nearly 80 current partnerships. Many of these joint ventures focus on areas addressed in OSHA's Strategic Plan. The site also provides valuable information on public and private collaborations and a step-by-step guide on how to initiate new partnerships.

"We are always striving for new and effective ways to reduce workplace injuries and illnesses," says OSHA Administrator Charles N. Jeffress. "This site highlights successful partnerships and offers recommendations on ways to establish new working relationships and address our common goal of improving workplace safety."

Program partners may receive outreach, training, technical assistance, and onsite consultation services. Partnerships also benefit employers and employees by reducing workplace injuries and decreasing workers' compensation premiums.

OSHA incentives offered to partnering employers include focused inspections limited to only the most serious hazards, reduced fines, no penalties or citations for other-than-serious violations, and new opportunities to share safety and health program expertise and resources.

The new partnership page is available on OSHA's website at [www.osha.gov](http://www.osha.gov).

On December 13, 2000, OSHA received a *Hammer Award* for its Strategic Partnership Program. *Hammer Awards* are the initiative of Vice President Gore to recognize teams of employees who have made significant contributions in support of reinventing government principles. This is OSHA's 16<sup>th</sup> *Hammer Award*.

**Q** OSHA just revised its workplace poster. Do employers have to replace their current poster with the new revision?

**A** No. The new plain language workplace poster (OSHA 3165) introduced on August 9 replaces the previous poster (OSHA 2203). As supplies of OSHA 2203 diminish, the new poster will be phased in to take its place. Although employers are not obliged to replace the posters they already have, they are required to post an OSHA notice of employee rights in a prominent location.

In keeping with the goals of the National Partnership for Reinventing Government, the new poster tells workers in plain language that they have the right to a safe and healthful workplace, how they may file a complaint, report an emergency, or seek OSHA advice, and that they have a right to confidentiality.

The poster—*You Have a Right to a Safety and Healthful Workplace. It's the Law!*—is free and also available in Spanish (OSHA 3167). Both versions are online at [www.osha.gov](http://www.osha.gov) under **Publications**. Copies also can be obtained from

OSHA's Publication Office, Room N3101, 200 Constitution Avenue, N.W., Washington, DC 20210; or call any OSHA office, usually listed under Federal Government in local telephone directories.

(NOTE: Employers in states operating OSHA-approved state plans should obtain and post the state's equivalent poster if it has one.)

**Q** Does OSHA offer or sponsor safety and health training?

**A** Yes. OSHA established the Training Institute Education Centers program in response to the high demand for occupational safety and health training from private sector and other Federal agency personnel. To meet this demand, OSHA initiated a pilot project in October 1992 to provide increased opportunities for training to these groups. At that time, four education centers offered six of the Training Institute's most popular courses. Today, there are 12 education centers presenting a total of 15 different Training Institute courses. These 12 non-profit organizations are the only groups outside of OSHA permitted to conduct these particular courses.

OSHA selected all of the education centers through a series of competitions announced in the *Federal Register*. In choosing them, OSHA considers such factors as occupational safety and health training experience, availability of training facilities and laboratories, and geographic accessibility. Although OSHA does not fund the centers (they rely on tuition and fees), the agency provides orientation and technical support on OSHA policy issues. Also, OSHA sends representatives to many course presentations to

update participants on agency activities and policies.

OSHA is planning to conduct a new round of competition for additional education centers sometime in 2001. Meanwhile, current education centers are listed on OSHA's website [www.osha.gov](http://www.osha.gov).

**Q** The Congress recently passed legislation to strengthen OSHA's bloodborne pathogens standard regarding needlestick injuries. What is OSHA's position on that legislation?

**A** On October 27, 2000, the U.S. Senate unanimously approved *The Needlestick Safety and Prevention Act*. Prevention Action signed the new bill on November 2, 2000.

The legislation parallels OSHA's revised compliance directive on bloodborne pathogens issued in November 1999, which emphasizes the use of safer medical devices to help reduce needlesticks and other sharps injuries. It requires employers to identify, evaluate, and use effective safer medical devices.

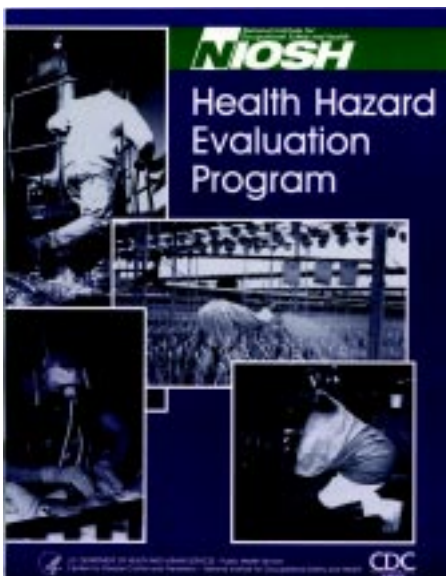
OSHA originally revised its bloodborne pathogens compliance directive to update an earlier directive issued in 1992 and to reflect the availability of improved devices. The directive did not place new requirements on employers, but recognized and emphasized technological advances. OSHA believes that the new legislation will raise awareness of the standard's requirements and make it clear to employers that they have a responsibility to use commercially available safer medical devices to protect their workers. [JSHQ](#)

# What's Happening?

## NIOSH

### *Publications and e-Products*

The brochure, *Health Hazard Evaluation Program* (NIOSH Publication No.2000-132), and a flyer of the same name, are now available from the National Institute for Occupational Safety and Health. NIOSH performs health hazard evaluations of workplaces to determine if there are hazardous materials or harmful conditions for workers. The publication explains NIOSH's many responsibilities and how the evaluation program works.



A new CD-ROM—*NIOSH Pocket Guide to Chemical Hazards* (NIOSH Publication No. 2000-130) is available from NIOSH. The CD contains a selection of databases and documents available on the NIOSH website. It also contains the *OSHA Sampling and Analytical Methods* and the *2000 Emergency Response Guidebook*, currently available on OSHA's website ([www.osha.gov](http://www.osha.gov)) and the

Department of Transportation website ([www.hazmat.dot.gov](http://www.hazmat.dot.gov)). All materials are available by calling 1-800-356-4764 and/or by visiting [www.cdc.gov/niosh](http://www.cdc.gov/niosh)



### *Youths and Agricultural Accidents*

Young people under 20 face a serious risk of death from work-related injuries in agricultural operations, particularly when engaged in crop production activities and working with tractors and other vehicles and industrial equipment, according to findings by NIOSH. Analyzing 5 years of data, NIOSH found that 12.2 occupational fatalities occurred for every 100,000 youths working in agriculture, more than twice the rate for fatal occupational injuries overall in the U.S. for a comparable period (5.1 fatalities per every 100,000 workers). The youth agricultural fatalities most often involved head injuries, most often occurring from May to August and more often in the midwest than in any other section of the country. According to NIOSH, each year about 33,000 young people under 20 are seriously injured on farms, and more than 100 are killed.

Additional information on this and other NIOSH research and recommendations on agricultural safety and health is available at [www.cdc.gov/niosh/agtopics.html](http://www.cdc.gov/niosh/agtopics.html).

### *More Resources Needed to Prevent Injuries and Illnesses*

"To date (the U.S.) has not invested the resources needed to address (the) significant and evolving health problem" of work-related injury and illness," NIOSH's *Performance Highlights Report, 1995-1999*, says. "Congress recognized that NIOSH must rely on others in the occupational safety and health community to have an impact on the overall level of hazards, injuries, and illnesses in the workplace," says NIOSH Director, Linda Rosenstock, in the foreword to the 45-page report. Nevertheless, she says, "NIOSH has developed initiatives and programs to create and nurture partnerships with these other stakeholders in pursuit of this common mission."

The report indicates that NIOSH is conducting active programs of research, surveillance, prevention interventions, information dissemination, and health professional education that "span the spectrum of activities necessary for preventing work-related illness, injury, disability and death." NIOSH is the primary federal agency responsible for conducting research and making recommendations for preventing work-related illness and injury. The report lists NIOSH's four major "accomplishment" categories: Research, Surveillance, Prevention Interventions and Information,

Training, and Capacity. The report is available online at [www.cdc.gov/niosh](http://www.cdc.gov/niosh).

## Vermiculite Research

NIOSH has announced plans for new research into the distribution and concentration of asbestos contamination in vermiculite. Recently, there have been concerns expressed about the occupational and public health risks from exposure to vermiculite, including risks to former miners and residents of Libby, Montana, the location of a major vermiculite mine, and by consumers who come in contact with vermiculite end-products such as insulation and potting soil. A fact sheet, *NIOSH Research in Libby, Montana: Job-Related Asbestos Exposures and Health Effects in Mining and Milling of Vermiculite*, discusses institute research conducted in the 1980s on job-related exposures and health effects among workers who mined and milled vermiculite in Libby. The fact sheet is available online at [www.cdc.gov/niosh](http://www.cdc.gov/niosh).

## OSHA

### New Partnership Agreement

OSHA's Jackson, MI, Area Office has signed an agreement with the Mississippi Chapter of the Associated Builders and Contractors (ABC) to improve safety and health at construction sites. The partnership, based on a national prototype, also recognized ABC's "Platinum Partner" contractors who have exemplary safety and health programs at their work sites. "Members of Mississippi ABC and the OSHA area office staff have

worked together during the past several years to reduce worker injuries and illnesses," says Clyde Payne, Area Director for OSHA's Jackson Area Office. "OSHA, by signing this partnership agreement, recognizes ABC's important contributions and the efforts members continue to make toward the goals of safer and healthier construction sites."

Among other things, the agreement stipulates that after OSHA conducts a verification audit at a job site, the site will be removed from OSHA's targeted and programmed inspection lists for 12 months. Other incentives include assurances that OSHA will process most complaints using the phone and fax method and will conduct unprogrammed inspections only in response to reports of imminent danger, fatalities, catastrophic accidents or signed complaints. ABC has a four-step program that qualifies its members as "Platinum Partners." To achieve this, contractors must meet stringent safety and health guidelines including:

- A 3-year history without fatalities, catastrophic accidents, or willful, repeat, or serious OSHA violations.
- An occupational injury and illness rate well below the national construction industry average of 8.8 percent.
- A site-specific, written safety and health program, with significant employee involvement based on guidelines from either the American National Standards Institute or OSHA.
- Designated safety personnel who have completed OSHA's 30-hour construction safety course or its equivalent.
- Supervisor training programs as effective as, and modeled after,

OSHA's 10-hour construction course.

- Effective employee training programs which include recognition and abatement of hazards specifically associated with the employee's job.

"This agreement is a major milestone marking our commitment to worker safety and our team effort with OSHA to reduce employee injuries and illnesses on the job," notes C.J. Buddy Edens, ABC's Executive Vice President. The Mississippi ABC comprises more than 1,200 employers with more than 15,000 construction workers throughout the state.

## Publications

OSHA recently updated and revised *Ergonomics: The Study of Work* (OSHA 3125). The publication is available online at [www.osha.gov](http://www.osha.gov), or from OSHA's Publications Office, P.O. Box 37535, Washington, DC 20013-7535; phone: (202) 93-1888; fax: (202) 693-2498.





A new edition of OSHA's workplace poster is now available in plain language. Both English (OSHA 3165) and Spanish (OSHA 3167) versions can be downloaded from the OSHA website or ordered from the agency's Publications Office. The new poster—*You Have a Right to a Safe and Healthful Workplace. It's the Law!*—informs workers of their rights to a safe workplace. Employers are required to post an OSHA notice of employee rights in a prominent location. The posters tell workers they have the right to a safe workplace, how they may file a complaint, report an emergency, or seek OSHA advice, and that they have a right to confidentiality. Existing posters (OSHA 2201 and 2203) need not be replaced, but OSHA will no longer produce these.

The posters are available online at [www.osha.gov](http://www.osha.gov), or from the OSHA Publications Office, or any OSHA office, usually listed under Federal Government in local telephone directories.

The OSHA poster and other Department of Labor posters that

employers may be required to post are also available online at [www.dol.gov](http://www.dol.gov) under **Laws & Regs.**

In addition, the Department has a new website—[www.dol.gov/elaws](http://www.dol.gov/elaws)—that highlights more than 20 electronic compliance assistance advisors from the Employment Standards Administration, the Mine Safety and Health Administration, OSHA, the Pension and Welfare Benefits Administration, and the Veterans' Employment and Training Service. The interactive software deals with regulations on topics such as workplace and mine safety and health, retirement benefits, and wage, hour, and other workplace standards. The site also has an advisor on required posters.

## The Web

A new OSHA page available on its website highlights successful safety and health partnerships and encourages new voluntary partnerships in reducing workplace injuries and illnesses. Under the banner "Partner With OSHA: New Ways of Working," the new site describes nearly 80 current partnerships, many of which are addressed in OSHA's Strategic Plan.

The site also provides valuable information on public and private collaborations and a step-by-step guide on how to initiate new partnerships. Incentives offered to partnering employers include focused inspections limited to only the most serious hazards, reduced fines, no penalties or citations for other-than-serious violations, and new opportunities to share safety and health program expertise and resources. Program partners may receive outreach, training, technical assistance, and onsite consultation services. Partnerships

also benefit employers and employees by reducing workplace injuries and decreasing workers' compensation premiums. The new partnership page is available on OSHA's website, [www.osha.gov](http://www.osha.gov), under the **What's New** and **Outreach** pages.

OSHA and the European Agency for Safety and Health at Work have a joint website at <http://osha.eu.int/eu-us/> to provide wider access to job safety and health information from each agency. Created as part of the ongoing partnership between the two safety organizations, the website enables those in the European Union (EU) and the U.S. to obtain information on many safety and health topics of joint interest, such as best practices, statistics, and research. The site links visitors to detailed data from each organization. Links to both agencies' individual sites focus particularly on construction safety and ergonomics. At their 1998 conference, the U.S. and the EU agreed to address these topics first on their joint webpage.

## VPP Update

### New VPP Star Site, A New England First

OSHA has recognized International Paper's Androscoggin Mill at Jay, ME, as a Voluntary Protection Program (VPP) *Star* site, the highest level a company can achieve in the VPP. The facility is the first pulp and paper mill in New England to receive this recognition. VPP is a cooperative effort between employees and OSHA aimed at recognizing, emphasizing, and encouraging good safety and health program management.



Private businesses that apply for VPP recognition and meet the program's demanding requirements are models of excellence in workplace safety and health. OSHA approves applicants for VPP after a thorough written review of the facility's safety and health programs and an intensive onsite visit to review documentation, interview employees, and check worksite conditions. The key elements of success are a combination of management leadership and employee participation, a comprehensive survey and analysis of workplace hazards, a well-planned and executed prevention and control program, and ongoing safety and health training.

"VPP *Star* status is a clear indication that the employees at Androscoggin have developed the 'best of the best' when it comes to safety and health programs," says Ruth McCulley, OSHA Regional Administrator.

VPP worksites achieve substantially lower worker injury rates than expected for their industries. Reduced injury rates lead to reduced company costs. VPP participants frequently point to improved employee morale, productivity, and product quality as unexpected benefits of improved safety and health program management.

"Being a *Star* site means that everyone takes safety seriously," adds Keith Fields, manager, industrial hygiene and safety for the Androscoggin mill. "Every employee has a role in safety from observing each other to wearing the right protective equipment to following safe work procedures."

## VPP Sites

A listing of new and current members in OSHA's Voluntary Protection Programs.

### *Star Program*

#### *New*

- International Paper, Androscoggin Mill, Jay, ME
- Homogeneous Metals, Inc., Clayville, NY
- Equistar Chemicals, Morris, IL
- Potlatch Corporation, Clearwater Wood Products Mill, Lewiston, ID
- Webcraft Direct Marketing, Inc., Chalfont, PA
- Lucent Technologies, Bell Innovations Wireless Networks Group, Whippany, NJ
- Honeywell Aircraft Landing Systems, Allentown, PA
- BorgWarner Air/Fluid Systems Corporation, Dixon, IL
- Monsanto Agricultural Sector, Matthews, MO
- Koch Petroleum Group LP, East Plant, Corpus Christi, TX
- Koch Petroleum Group, LP, West Plant, Corpus Christi, TX
- International Paper, Auburn Corrugated Container Plant, Auburn, ME
- American Ref-Fuel Operations of SEMASS, L.P., Rochester, MA
- Lucas-Milhaupt, Inc., Cudahy, WI
- General Electric Company, Springfield, MO

#### *15-Year Star*

- Honeywell International Inc., Nevada, MO

#### *11-Year Star*

- Huntsman, Conroe Site, Conroe, TX

#### *8-Year Star*

- Corning, Inc., General Machine Shop, Corning, NY

#### *7-Year Star*

- ExxonMobil Chemical, Baytown Olefins Plant, Baytown, TX
- Novartis Crop Protection, Inc., St. Gabriel, LA

#### *6-Year Star*

- Georgia Pacific, Leaf River Operations, New Augusta, MS
- Milliken & Company, Avalon Plant, Toccoa, GA
- Weyerhaeuser Paper Company, Columbus, MS

#### *4-Year Star*

- Huntsman, Conroe Site, Conroe, TX

#### *3-Year Star*

- CIBA Specialty Chemical Corporation, St. Gabriel Plant, St. Gabriel, LA
- Tenneco Automotive, Paragould, AR
- Adirondack Resource Recovery Associates, Hudson Falls, NY
- Reliant Energy Limestone Electric Generating Station, Jewett, TX
- VF Jeanswear, Inc., Springfield, MO
- Tropicana Products, Inc., Northeast Distribution Center, Jersey City, NJ

### *Demonstration to Star*

- Austin Industrial Inc., at Equistar Channelview Complex, Channelview, TX
- H.B. Zachry Construction at Monsanto, Luling, LA
- C. A. Turner at Huntman C-4, Port Arthur, TX
- Harmony Construction at Occidental Chemical Taft, Hahnville, LA
- Gregg Industrial at Texas Eastman, Longview, TX
- Mundy Industrial Contractors, Inc. at Dow Laporte, Deer Park, TX
- United Space Alliance at Johnson Space Center, Houston, TX
- JE Merit Constructors at CIBA St. Gabriel, LA
- Austin Industrial, Inc., at Hunstman Conroe, TX
- EII at Infineum Tech Center, East Cranford, NJ
- EII at Infineum Chemical Linden, East Cranford, NJ
- Austin Industrial, Inc., at Equistar Channelview, Houston, TX
- Mundy Industrial Contractors, Inc., at Solutia, Alvin, TX
- Mundy Industrial Contractors, Inc., at Ticona, Houston, TX
- JE Merit Constructors at Novartis St. Gabriel, LA
- Harmony Construction at Occidental Chemical Convent, LA
- HB Zachry at Equistar Victoria, TX
- HB Zachry at Equistar Matagorda, TX
- SAIC at NASA JSC, Houston, TX
- Facility & Plant Service at IBM
- Mundy Industrial Contractors, Inc., at Celanese Corpus Christi, TX
- Austin Industrial, Inc., at Huntsman Project- Austin, TX
- Flour Daniel at Solutia Gonzalez, FL
- C. A. Turner at Huntsman A&O, Port Arthur, TX

### *Merit to Star*

- Lucent Technologies, Reading, PA
- Temple-Inland Forest Products Corporation, Fletcher Wallboard Plant, Fletcher, OK
- Rohm and Haas Texas, Inc., Deer Park, TX
- Wheelabrator South Broward Inc., Ft. Lauderdale, FL
- Weyerhaeuser Containerboard Packaging, Amarillo, TX
- U.S. Department of Defense, Tobyhanna Army Depot, Tobyhanna, PA
- G-P Gypsum Corporation, Cuba, MO

### *Merit*

- Rifenburg Construction, Inc., Route 332 Reconstruction Project, Farmington, NY
- DynMcDermott Petroleum Operations, Inc., Winnie, TX
- J.R. Simplot Company, Don Plant, Pocatello, ID
- International Paper, Freedom Woodyard, Freedom, NH
- Georgia Pacific, Claxton Chip-N-Saw Mill, Claxton, GA

### *One-Year Merit*

- Department of the Interior, Bureau of Reclamation, Elephant Butte, Truth Or Consequences, NM
- SGI Integrated Graphic Systems, Houston, TX

This brings the total participants to 530 sites in the Federal VPP: 475 in Star, 53 in Merit and 2 in Demonstration. [JSHQ](#)

### *NASA Prime Contractor Gets VPP Star Status*

OSHA awarded the multiple sites of United Space Alliance (USA), the prime contractor for the National Aeronautics and Space Administration (NASA), VPP *Star* status due to their outstanding safety records. In a September ceremony, OSHA representatives presented VPP *Star* site flags and framed plaques to the chairs of each of the four USA building committees in Houston, TX.



# Mark Your Calendar

## OSHA Training Institute Schedule

### *221 Principles of Industrial Ventilation*

Studies the principles of industrial ventilation as a means of controlling hazardous air contaminants. Students study the classification of ventilation systems, fundamentals of air flow, make-up air, fans, ventilation system surveys and OSHA's policies and standards. Includes a laboratory with a simulated industrial ventilation system.

Tuition: \$912  
Dates: 3/01/01 - 3/09/01

### *223 Industrial Toxicology*

Looks at the principles of toxicology as applied to industrial processes including updates of recent toxicological data related to OSHA standards, biological monitoring, biotransformation, current methods of toxicological testing, and chemical hazards encountered in industrial environments stressing new toxicological information in support of hazard recognition.

Tuition: \$480  
Dates: 3/27/01 - 3/30/01

### *225 Principles of Ergonomics Applied to Work-Related Musculoskeletal and Nerve Disorders*

Covers using ergonomic principles to prevent musculoskeletal disorders including work physiology, anthropometry, video display terminals, and risk factors such as vibration, temperature, materials handling, repetition, and lifting, in health care. Students will look at industrial case studies covering analyses and design of work stations and equipment, laboratory sessions in manual lifting, and coverage of current OSHA compliance policies.

Tuition: \$480  
Dates: 3/20/01 - 3/23/01

### *315 Tower Safety Course*

Assists students in recognizing the hazards associated with constructing and maintaining communication towers with emphasis on acceptable abatement methods, applicable standards, and implementing CPL 2-1.29, Interim Inspection Procedures During Communication Tower Construction Activities.

Tuition: \$480  
Dates: 3/27/01 - 3/30/01

### *503 Update for General Industry Outreach Trainers*

Provides an update on OSHA general industry standards and OSHA policies.

Tuition: \$432  
Dates: 3/20/01 - 3/22/01

### *510 Occupational Safety and Health Standards for the Construction Industry*

Covers OSHA policies, procedures, and standards and construction safety and health principles. Topics include scope and application of the OSHA construction standards with emphasis on areas that are the most hazardous, using OSHA standards as a guide.

Tuition: \$624  
Dates: 3/26/01 - 3/30/01

To register for courses or to obtain a training catalog, write to the OSHA Training Institute, 1555 Times Drive, Des Plaines, IL 60018; or call (847) 297-4913. See also **Outreach** on OSHA's website at [www.osha.gov](http://www.osha.gov).

## OSHA Training Institute Education Centers

The OSHA Training Institute also has a program for other institutions to conduct OSHA courses for the private sector and federal agencies. These include Eastern Michigan University/United Auto Workers, Ypsilanti, MI (800) 932-8689; Georgia Technological Research Institute, Atlanta, GA, (800) 653-3629; Great Lakes OSHA Training Consortium, St. Paul, MN, (800) 493-2060; Keene State College, Manchester, NH, (800) 449-6742;

Metropolitan Community Colleges—Business and Technology Center, Kansas City, MO, (800) 841-7158; National Resource Center for OSHA Training, Washington, DC, (800) 367-6724; National Safety Education Center, DeKalb, IL, (800) 656-5317; Niagara County Community College, Lockport, NY, (800) 280-6742; Red Rocks Community College and Trinidad State Junior College, Lakewood, CO, (800) 933-8394; Texas Engineering

Extension Service, Mesquite, TX, (800) 723-3811; University of California, San Diego, CA, (800) 358-9206; and University of Washington, Seattle, WA, (800) 326-7568.

For tuition rates and registration information, contact the institution offering the courses and see also OSHA's website at [www.osha.gov](http://www.osha.gov). For alternate course locations noted in parentheses, please contact the institution for more information.

### 201A Hazardous Materials

Location: National Resource Center for OSHA Training (Silver Spring, MD)	Dates: 03/12/01 - 03/15/01
Location: University of California San Diego	Dates: 03/12/01 - 03/15/01
Location: University of Washington (Seattle)	Dates: 03/30/01 - 04/07/01*

### 204A Machinery and Machine Guarding Standards

Location: Georgia Technological Research Institute	Dates: 02/19/01 - 02/23/01
Location: National Resource Center for OSHA Training (Silver Spring, MD)	Dates: 02/26/01 - 03/01/01
Location: Red Rocks Community College-Trinidad State Junior College	Dates: 02/27/01 - 03/02/01
Location: University of California San Diego	Dates: 03/05/01 - 03/08/01
Location: University of Washington (Portland, OR)	Dates: 03/19/01 - 03/22/01

\*Presented via two-way video-conferencing





### 222A Respiratory Protection

Location: Great Lakes OSHA Training Consortium (Cincinnati, OH)	Dates: 02/28/01 - 03/02/01
Location: National Safety Education Center (Itasca, IL)	Dates: 02/06/01 - 02/08/01
Location: Texas Engineering Extension Service (Mesquite, TX)	Dates: 02/26/01 - 03/01/01
Location: University of California San Diego	Dates: 03/05/01 - 03/08/01
Location: University of Washington (Seattle)	Dates: 02/21/01 - 02/23/01

### 225 Principles of Ergonomics Applied to Work-Related Musculoskeletal and Nerve Disorders

Location: Georgia Technological Research Institute	Dates: 02/13/01 - 02/16/01
Location: Great Lakes OSHA Training Consortium (St. Paul, MI)	Dates: 02/21/01 - 02/23/01
Location: Keene State College	Dates: 03/05/01 - 03/08/01
Location: Metropolitan Community Colleges Business and Technology Center	Dates: 02/19/01 - 02/22/01
Location: Niagara County Community College	Dates: 02/20/01 - 02/23/01
Location: Red Rocks Community College-Trinidad State Junior College	Dates: 01/03/01 - 01/05/01
Location: University of California San Diego	Dates: 02/26/01 - 03/01/01
Location: University of Washington (Seattle)	Dates: 03/09/01 - 03/16/01*

\*Presented via two-way video-conferencing



### 226 Permit-Required Confined Space Entry

Location: Great Lakes OSHA Training Consortium	Dates: 03/14/01 - 03/16/01
Location: Keene State College	Dates: 03/12/01 - 03/15/01
Location: Niagara County Community College	Dates: 02/26/01 - 03/01/01
Location: Red Rocks Community College-Trinidad State Junior College	Dates: 03/26/01 - 03/28/01
Location: University of California San Diego	Dates: 02/19/01 - 03/21/01
Location: University of Washington (Seattle)	Dates: 03/17/0 - 03/24/01*

### 309A Electrical Standards

Location: University of California San Diego	Dates: 03/19/01 - 03/22/01
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### 500 Trainer Course in Occupational Safety and Health Standards for the Construction Industry

Location: National Safety Education Center (Hillside, IL)	Dates: 03/19/01 - 03/23/01
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### 501 Trainer Course in Occupational Safety and Health Standards for General Industry

Location: Great Lakes OSHA Training Consortium (Cincinnati, OH)	Dates: 02/26/01 - 03/01/01
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### 502 Update for Construction Industry Outreach Trainers

Location: Keene State College	Dates: 02/21/01 - 02/23/01
Location: Metropolitan Community Colleges Business and Technology Center	Dates: 03/12/01 - 03/14/01
Location: Red Rocks Community College Trinidad State Junior College	Dates: 02/19/01 - 02/21/01



\*Presented via two-way video-conferencing

### 503 Update for General Industry Outreach Trainers

Location: Keene State College (Auburn, ME)      Dates: 03/21/01 - 02/23/01

Location: Metropolitan Community Colleges-Business and Technology Center      Dates: 02/26/01 - 02/28/01

Location: National Safety Education Center (Itasca, IL)      Dates: 03/06/01 - 03/08/01

Location: Red Rocks Community College Trinidad State Junior College      Dates: 02/21/01 - 02/23/01

Location: University of Washington (Seattle)      Dates: 03/12/01 - 03/14/01



### 510 Occupational Safety and Health Standards for the Construction Industry

Location: Metropolitan Community Colleges Business and Technology Center      Dates: 03/05/01 - 03/08/01

Location: National Resource Center for OSHA Training (Morgantown, WV)      Dates: 03/26/01 - 03/29/01

Location: University of California San Diego      Dates: 03/12/01 - 03/15/00

### 521 OSHA Guide to Industrial Hygiene

Location: Texas Engineering Extension Service (Austin, TX)      Dates: 02/12/01 - 02/15/01

Location: University of California San Diego      Dates: 03/26/01 - 03/29/01

JSHQ



# Mammograms

Not just once, but for a lifetime



**T**he National Cancer Institute has free booklets about breast cancer screening. For answers to your questions about cancer and to order these publications, call NCI's Cancer Information Service at 1-800-4-CANCER (1-800-422-6237). Persons with TTY equipment, dial 1-800-332-8615.

Visit NCI's website for the patients, the public, and the mass media at <http://rex.nci.nih.gov>  
or NCI's main website at <http://www.nci.nih.gov>

# Federal

Developed biannually, the agenda includes all regulations expected to be under development or review by the agency during that period. The following list is from the agenda as published in the **Federal Register**/Vol. 65, No. 231/Thursday, November 30, 2000.

## Prerules

### Title and Regulation Identifier Number (RIN)\*

Occupational Exposure to Ethylene Oxide  
**1218-AB60**

Process Safety Management of Highly Hazardous Chemicals  
**1218-AB63**

Grain Handling Facilities  
**1218-AB73**

Cotton Dust  
**1218-AB74**

Prevention of Needlestick and Other Sharps Injuries  
**1218-AB85**

Occupational Exposure to Perchloroethylene  
**1218-AB86**

Sanitation  
**1218-AB87**

Hearing Loss Prevention in Construction Workers  
**1218-AB89**

\*Office of Management and Budget (OMB) Identification Number. For copies of OSHA final rules published in the *Federal Register*, contact the Superintendent of Documents, Government Printing Office, Washington, DC 20402. GPO products also can be ordered online at [www.gpo.gov](http://www.gpo.gov).

## Proposed Rules

Safety and Health Programs (for General Industry and the Maritime Industries)  
**1218-AB41**

Confined Spaces in Construction (Part 1926): Preventing Suffocation/Explosions in Confined Spaces  
**1218-AB47**

Permissible Exposure Limits (PELs) for Air Contaminants  
**1218-AB54**

Plain Language Revision of the Flammable and Combustible Liquids Standard  
**1218-AB61**

Plain Language Revision of the Mechanical Power-Transmission Apparatus Standard  
**1218-AB66**

Electric Power Transmission and Distribution; Electrical Protective Equipment in the Construction Industry  
**1218-AB67**

Occupational Exposure to Crystalline Silica  
**1218-AB70**

Standards Improvement (Miscellaneous Changes) for General Industry, Marine Terminals, and Construction Standards (Phase II)  
**1218-AB81**

Plain Language Revision to Spray Application  
**1218-AB84**

Signs, Signals, and Barricades  
**1218-AB88**

Changes to State Plans  
**1218-AB91**

## Final Rules

Steel Erection (Part 1926) (Safety Protection for Ironworkers)  
**1218-AA65**

Glycol Ethers: 2-Methoxyethanol, 2-Ethoxyethanol, and their Acetates: Protecting Reproductive Health  
**1218-AA84**

Recording and Reporting Occupational Injuries and Illnesses (Simplified Injury/Illness Recordkeeping Requirements)  
**1218-AB24**

# Register

Ergonomics Programs: Preventing Musculoskeletal Disorders  
**1218-AB36**

Occupational Exposure to Tuberculosis  
**1218-AB46**

Employer Payment for Personal Protective Equipment  
**1218-AB77**

Consultation Agreements  
**1218-AB79**

Walking Working Surfaces and Personal Fall Protection Systems (1910) (Slips, Trips, and Fall Prevention)  
**1218-AB80**

Plain Language Revisions to the Exit Routes Standard  
**1218-AB82**

Cotton Dust: Washed Cotton Exemption  
**1218-AB90**

## *Long-Term Actions*

Respiratory Protection (Proper Use of Modern Respirators)  
**1218-AA05**

Longshoring and Marine Terminals (Parts 1917 and 1918) - Reopening of the Record [(Vertical Tandem Lifts (VTLs))]  
**1218-AA56**

Scaffolds in Shipyards (Part 1915 - Subpart N)  
**1218-AA68**

Access and Egress in Shipyards (Part 1915, Subpart E) (Shipyards: Emergency Exits and Aisles)  
**1218-AA70**

Accreditation of Training Programs for Hazardous Waste Operations (Part 1910)  
**1218-AB27**

Indoor Air Quality in the Workplace  
**1218-AB37**

Occupational Exposure to Hexavalent Chromium (Preventing Occupational Illness: Chromium)  
**1218-AB45**

General Working Conditions for Shipyard Employment  
**1218-AB50**

Fire Protection in Shipyard Employment (Part 1915, Subpart P) (Shipyards: Fire Safety)  
**1218-AB51**

Metalworking Fluids: Protecting Respiratory Health  
**1218-AB58**

Fall Protection in the Construction Industry  
**1218-AB62**

Safety Standards for Scaffolds Used in the Construction Industry - Part II  
**1218-AB68**

Safety and Health Programs for Construction  
**1218-AB69**

Control of Hazardous Energy (Lockout) in Construction (Part 1926) (Preventing Construction Injuries/Fatalities: Lockout)  
**1218-AB71**

Occupational Exposure to Beryllium  
**1218-AB76**

Consolidation of Records Maintenance Requirements in OSHA Standards  
**1218-AB78**

## Federal Register Continued

Oil and Gas Well Drilling  
and Servicing  
**1218-AB83**

Woodworking Machinery  
**1218-AB92**

Ergonomics Programs  
in Construction (Part 1926):  
Preventing Work-Related  
Musculoskeletal Disorders  
among Construction Workers  
**1218-AB94**

Subpart S - Electrical Standards  
**1218-AB95**

Occupational Health Risks in the  
Manufacture and Assembly of  
Semiconductors  
**1218-AB96**

Commercial Diving Operations:  
Technical Amendment  
**1218-AB97**

### Completed Actions

Nationally Recognized Testing  
Laboratories Programs: Fees  
**1218-AB57**

Revocation of Certification  
Records for Tests, Inspections,  
and Training  
**1218-AB65**

JSHQ

## OSHA a Finalist in Innovations Award

In August, OSHA received special recognition as a finalist in the prestigious *Innovations in American Government Award* for its innovative *Expert Advisor* software. OSHA's *Expert Advisors* are a series of interactive software programs that make it easier to understand OSHA's regulations, especially for those with little background in workplace safety and health. They help businesses answer a few simple questions and provide reliable answers on how regulations apply to their unique workplaces.

The *Innovations in American Government Award Program*, sponsored by the Ford Foundation and administered by Harvard University's John F. School of Government and the Council for Excellence in Government, began in 1986. OSHA was one of 25 finalists selected from more than 1,300 applications from cabinet

members, governors, mayors, and county executives. Finalists receive a \$20,000 grant. OSHA will use the funds to expand awareness of the Advisors.

To use the *Expert Advisors*, employers and employees download the software, answer simple questions, and then receive reliable answers tailored to their unique workplaces. These interactive, problem-solving systems help users, especially small businesses, recognize common workplace safety and health hazards and apply OSHA standards.

OSHA *Expert Advisor* software currently is available on topics such as fire safety, hazard awareness, asbestos, lead in construction, lockout/tagout, cadmium, respiratory protection, cost of injury, and lead in general industry. The Advisors are available free online at OSHA's website—[www.osha.gov](http://www.osha.gov).

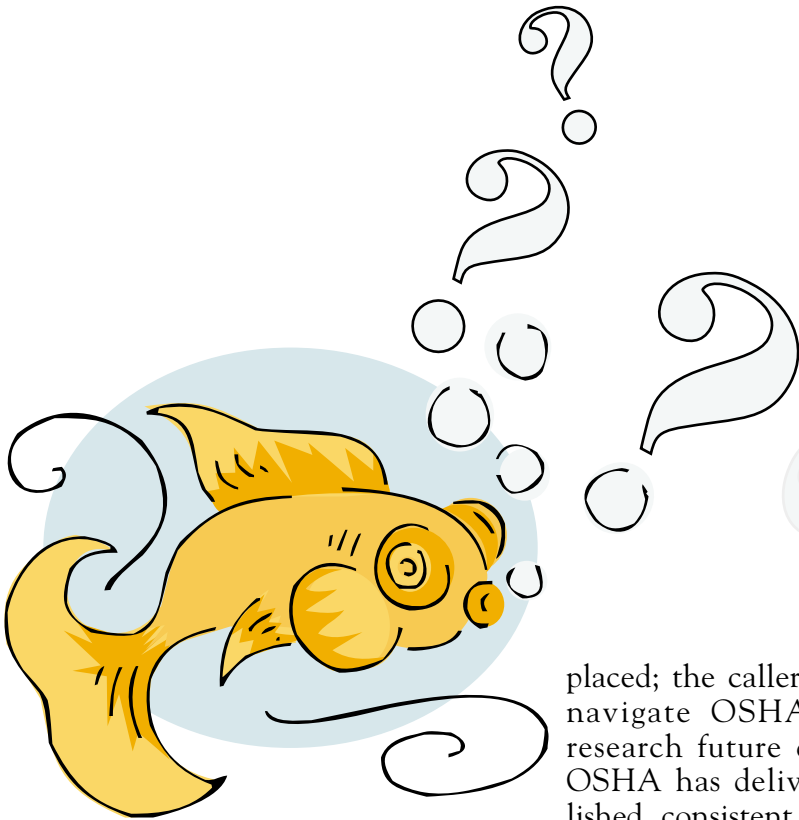


OSHA receives *Innovations in American Government Award* from the Council for Excellence in Government. From left to right: Kelly Diffily, Project Leader, and Robert J. Walker, Vice President, *Innovations in American Government and Partnership for Trust in Government*, Council for Excellence in Government; Edward Stern, OSHA Directorate of Technical Support; and OSHA Assistant Secretary Charles N. Jeffress.

# Fishing Lessons

by Maryann Garrahan

*“Give a man a fish and you feed him for a day.  
Teach a man to fish and you feed him for a lifetime.”  
- Chinese Proverb*



Almost 94 percent of the people who call OSHA's National Office in Washington, DC, with compliance questions have Internet access; yet, about half of them are unfamiliar with OSHA's website. To try to provide better customer response, since early 1999, OSHA's Office of Health Compliance Assistance (OHCA) and OSHA's Office of General Industry Compliance Assistance (GICA) are offering "fishing lessons" to callers with compliance questions. With contractor support, callers receive instruction on how to surf through OSHA's website to locate regulatory or technical information that answers their immediate questions. Callers simultaneously learn how to navigate the website to find key sources of information—standards, preambles, directives, publications, and interpretive letters—for future questions. By the time a call is completed, the caller has a response to his or her question, usually the same day as the call was

placed; the caller knows how to navigate OSHA's website to research future questions; and OSHA has delivered an established, consistent response to the inquiry.

The compliance guidance phone staff handle calls from private employers, local and state government organizations, and non-OSHA federal employees. At the outset, many callers need to understand the difference between federal and state OSHA jurisdiction. If the caller's workplace is under the jurisdiction of an OSHA-approved state safety and health plan, the compliance staff will explain what that means as well as provide any federal interpretation of compliance issues, as requested.

In addition, the staff are quick to refer calls to the appropriate locales for specific information. For example, calls about open OSHA inspection cases or complaints go to the applicable area, regional, or state plan offices.

Listening and understanding the question are key to getting callers what they need. Callers may be largely unfamiliar with OSHA standards and what they cover. They may think of OSHA

as a starting point for any questions on public health and safety. Understanding the caller's question allows the phone staff to determine which OSHA standards may apply and then help locate the appropriate OSHA document on the website. Guiding the caller to that document is the important final step in this process, one that requires the same care and patience as listening to the initial question. A caller who has Internet access does not necessarily know what a Uniform Resource Locator (URL) is or how to use a browser.

During 1999, when the service began, the phone compliance staff handled an average of 220 calls each month. That number rose sharply in 2000 to an average of 360 calls handled each month. The calls address a wide spectrum of questions and concerns, including workplace issues for which no standard exists. Each call is logged into a database so that OSHA can track public inquiries and use these as a guide for compliance assistance efforts.

Based on phone line data, about 88 percent of inquiries receive responses based on material currently posted on the Agency's website; some are referred to

outside parties. In cases where questions are outside OSHA jurisdiction and phone staffers know the proper outside referral source, they provide it from a list compiled over the past 2 years. If the inquiry is within OSHA jurisdiction and the answer cannot be found in website material, the phone staffers contact designated OSHA personnel for assistance.

Getting callers “hooked” onto the OSHA website benefits everyone. The public can locate the documents they need to help answer their questions and OSHA can deliver an established and consistent response. And that’s no fish tale! [JSHQ](#)

*Garrahan is Acting Director, OSHA Office of Health Compliance, Washington, DC.*

## Compliance Guidance Numbers

Organizations	Numbers
OSHA (Occupational Safety and Health Administration) Guidance	(202) 693-2190 (health) or (202) 693-1850 (safety)
OSHA (Ergonomics Help Line)	(202) 693-2116
NIOSH (National Institute for Occupational Safety and Health)	(800) 356-4674
DOT (Department of Transportation)	(202) 366-4488
ADA (American Disabilities Act)	(800) 232-9675
NAICS (North American Industrial Classification System)	(888) 75-NAICS
CPSC (Consumer Products Safety Commission)	(800) 638-CPSC
EPA (Environmental Protection Agency)(Acid Rain Hotline)	(202) 564-9620
EPA (Asbestos Small Business Ombudsman)	(800) 368-5888
EPA (Environmental Justice Hotline)	(800) 962-6215
EPA (Indoor Air Quality Information Hotline)	(800) 438-4318
EPA (National Antimicrobial Information Network)	(800) 447-6349
EPA (National Hispanic Indoor Air Quality Hotline)	(800) 725-8312
EPA (National Pesticide Telecommunications Network)	(800) 858-7378
EPA Office of Pesticide Programs	(703) 305-7090
EPA (National Lead Information Center Hotline)	(800) 424-5323
EPA (National Radon Hotline)	(800) 767-7236
EPA (Stratospheric Ozone Information Hotline)	(800) 296-1996
EPA (Pollution Prevention Information Clearinghouse)	(202) 260-1023
EPA (RCRA, Superfund, & EPCRA Hotline)	(800) 424-9346 (703) 412-9810
EPA (Safe Drinking Water Hotline)	(800) 426-4791
EPA (Wetlands Helpline)	(800) 832-7828

# OSHA Receives Hammer Award

On December 13, 2000, OSHA received its 16<sup>th</sup> *Hammer Award*. The National Partnership for Reinventing Government presented the prestigious award to OSHA for its Strategic Partnership Program. This regional and national program improves workplace safety and health through cooperative voluntary agreements between OSHA and private sector employers and employees.

The *Hammer Award* recognizes teams of federal employees and their partners whose work resulted in a government that works better and costs less. Jean Logan, Deputy Director of Safety and Health for the National Partnership for Reinventing Government, presented the award to OSHA and emphasized the value of these team efforts. Assistant Secretary Charles Jeffress says, "We are very pleased to be honored with a *Hammer Award* for our efforts to encourage voluntary compliance through partnership."

These partnerships help encourage, assist, and recognize efforts to eliminate serious hazards and achieve a high level of worker safety and health. An OSHA Strategic Partnership aims to have a measurable, positive impact on workplace safety and health that goes beyond what historically has been achievable through traditional enforcement methods and through a focus on individual work sites. And of course partnership programs help OSHA leverage its resources and increase the agency's effectiveness by working with organizations outside the agency to achieve a common goal—reduce worker injuries and illnesses.

Partners at the award ceremony included the United Brotherhood of Carpenters and Joiners of America (UBC), Clark Construction Group, Inc., and Associated Builders and Contractors, Inc. These and other organizations all are participating in the program to improve worker safety and health. Clark Construction is partnering with OSHA on the project for the UBC's new office building and ABC is partnering with OSHA on the national level, including overseeing local ABC chapter agreements with OSHA area offices nationwide.

By sharing skills, expertise and limited resources, OSHA and its partners are working to produce the kinds of lasting, systematic changes

that save lives and prevent injuries. These partnerships can help employers develop practical skills needed to identify hazards and solve problems; establish effective safety and health programs; reduce workers' compensation costs; increase productivity, reduce absenteeism, improve their company's relationship with OSHA; and provide opportunities to help business, industry, and the community. Employees benefit through reduced risks of injury, illness, or death on the job; increased practical safety and health knowledge and skills; enhanced morale and quality of work life. For more information on OSHA partnerships, visit OSHA's website at [www.osha.gov](http://www.osha.gov). [JSHQ](#)



OSHA team members receive Hammer Award. From left to right, front row: Paula White, Director, Federal-State Operations; Charles N. Jeffress, OSHA Assistant Secretary; Jean Logan, Deputy Director of Safety and Health, National Partnership for Reinventing Government; Tyna Coles; Cathy Oliver, OSHA partnership liaison; Judith Weinberg; Jennifer Kim; Doreen Berg; Clayton Todd (seated); Jennifer Kim, and Audie Woolsey. From left to right, back row: S.R. Srinivasan (OSHA Dallas Region); Christopher Warren, Rogelio Carrasco, Richard Fairfax, Louis Rowe, and Ken Gerecke (OSHA Philadelphia Region).





# Protecting Construction Workers from Power Lines

by Earl W. Hicks

## Power Lines and Electrocutions

Every day four construction workers die on the job in this country. Think about construction fatalities and probably the first things that come to mind are trenching, accidents, or falls. Yet, the second leading cause of worker deaths in construction (after falls) is electrocution. Many workers are unaware of the potential electrical hazards in their work environment, making them more vulnerable to the danger of electrocution. Sometimes, it is just a matter of not knowing the environment—not being aware of all energized power sources, from overhead and underground power lines to damaged receptacles and connectors.

“Training and education are key to increasing awareness about electrical hazards in construction,” says OSHA’s Bruce Swanson, director of the agency’s construction directorate. “If we want to reduce the fatality rate, we need to make sure employers and workers are better trained in OSHA requirements and safety work practices.”



The primary cause of construction electrocutions is contact with overhead power lines. OSHA data showed that in 1998 and 1999, 277 workers died from contact with overhead power lines.<sup>1</sup>

*A construction worker, while attempting to hook a load to a crane, was electrocuted when the crane’s load line contacted an overhead 7,200-volt power line.*

Electrocutions occur when workers using cranes, metal ladders, scaffolds, conveyors, front-end loaders, dump trucks, or other equipment or materials come into

contact with an overhead power line. All too often, workers die during what appears to be accident-proof activity: unloading supplies from a truck, moving ladders from the side of a structure, adding the final touches to a roofing job—all while near power lines. Poor planning and a moment’s inattention may lead to contact with high voltage and death or serious injury.

According to Tom Marple, Director of OSHA’s Office of Construction Services in Washington, DC, most construction electrocutions result from “contact with energized sources such as cranes contacting overhead power

<sup>1</sup>U.S. Department of Labor, Bureau of Labor Statistics, *Census of Fatal Occupational Injuries*, Table 1, “Fatal occupational injuries by event or exposure, 1994-99,” (Washington, DC, August 2000). See also [www.bls.gov](http://www.bls.gov).

lines. These injuries show time and again, employers should determine if power sources in the vicinity of workers are live and if the employees could come into contact with them.”

The Department of Labor’s Bureau of Labor Statistics’ data support Marple’s claim. Of the 279 workplace electrocutions in 1996, 116 were from contact with overhead power lines.<sup>2</sup> Most workers electrocuted by coming into contact with overhead power lines are working with cranes, working on scaffolds, or using ladders. Construction employers and workers must pay particular attention to distances separating them from high-voltage lines when working on elevated equipment or structures.

### Cranes

Overhead power lines and cranes can be a disaster waiting to happen for crane operators and crew members. OSHA data from 1984 through 1994 show that 87 electrocutions occurred to crane operations personnel.<sup>3</sup> The reason is simple. Tall equipment such as

*OSHA data showed that in 1998 and 1999, 277 workers died from contact with overhead power lines.*

a crane with a mobile extension arm can quickly close the safe distance separating it from overhead power lines.

*A 20-year-old truck driver died when the boom of a crane he was operating remotely from behind the truck contacted overhead power lines.*

OSHA requirements for operating cranes near overhead power lines call for specific clearance distances between work and lines of various electrical loads, safety devices such as boom guards, insulating links or proximity warning devices, and observers, among other things.<sup>4</sup> Good safety

sense requires employers and workers to consider all power lines as energized unless the owner of the line or electric utility company indicates otherwise.

Employers, crane operators, supervisors, and others who work around cranes must be fully aware of the hazards of operating cranes near overhead power lines. For example, employers can increase worker awareness of the risk of injury by posting signs at the crane operator’s station and outside the crane warning that failing to maintain safe minimum clearances could result in electrocution.

### Scaffolds

Workers using scaffolding face hazards similar to those using cranes. When the worker is elevated, the safe distance between the work and energized overhead power lines is shortened. Erecting scaffolds, relocating them, and working on the platform itself all require workers to maintain safe distances from power lines.

*Six workers were using a mobile, elevated work platform to install aluminum siding on a warehouse under construction. While relocating the platform, three of the crew died when the top rail contacted a power line.*

Clearance between the power lines and scaffolds should be monitored at all times. If a scaffold is to be moved in the vicinity of



<sup>2</sup>U.S. Department of Labor, Bureau of Labor Statistics, *Census of Fatal Occupational Injuries, 1996*. See job-related electrocutions by selected characteristics, 1996 and Abstract: “Fatal Electrocutions in the Workplace Profiled.” Both are available online at [www.bls.gov](http://www.bls.gov).

<sup>3</sup>Data from OSHA Integrated Management Information System, OSHA’s internal database on inspections.

<sup>4</sup>*Title 29 Code of Federal Regulations (CFR), 1926.550, A-15, Subpart N, “Cranes, Derricks, Hoists, Elevators, and Conveyors.”*

overhead power lines, a “competent person”<sup>5</sup> should be assigned to observe the clearance and warn others if the minimum distance is not maintained.

But the scaffolding alone isn’t the problem. Conductive tools used by workers on scaffolds also contribute to electrocutions. When scaffolds, conductive tools, or other materials contact overhead power lines, workers receive serious and often fatal injuries. Brick masons, carpenters, painters, construction laborers, plasterers, and others who use scaffolding may risk contact with energized overhead power lines. OSHA regulations set forth specific distances that workers on scaffolds must maintain to separate them from power lines.<sup>6</sup> The following minimum clearances must be maintained between scaffolds and exposed, energized power lines:

- 2 feet for insulated power lines of less than 300 volts, and
- 10 feet for insulated power lines of 300 volts or more and for all uninsulated power lines.

In addition to maintaining safe distances, employers can help their workers using scaffolds avoid overhead power line contact by replacing electrically conductive tools and materials with non-conductive ones. Manufacturers or purchasers of scaffolds can also help by attaching conspicuous decals to each scaffold section warning about the hazards of contacting overhead power lines.

Because the risk of electrocution is high for construction workers on



scaffolds, contractors should establish emergency procedures to follow if contact with an overhead power line occurs. These procedures might include keeping all unauthorized personnel away from the area and having workers trained in cardiopulmonary resuscitation available onsite.

### *Ladders*

Another frequent contributor to electrocutions is ladders. Whether

made of metal, fiberglass or wood, ladders extend the reach of workers and the potential for closing the minimum safe distance between workers and energized power lines.

*Two painters were relocating a double-rigged aluminum ladder after painting one side of a warehouse. They lost control of the ladder and it struck a 7,200-volt power line and electrocuted both painters.*

<sup>5</sup>A competent person, by way of training and/or experience, is knowledgeable of applicable standards, is capable of identifying workplace hazards relating to the specific operation, is designated by the employer, and has authority to take appropriate actions (see 29 CFR 1926.32). Some OSHA standards add additional specific requirements that must be met by a competent person.  
<sup>6</sup>29 CFR 1926.451 (f)(6), Subpart L, “Scaffolds.”

## Working Around Power Lines: Stay Away! Stay Alive!

ALWAYS DO	NEVER DO
<ul style="list-style-type: none"> <li>• Always keep a safe distance of 10 feet or more between you and your equipment from the power lines.</li> <li>• ALWAYS survey the site for overhead power lines. LOOK UP!</li> <li>• ALWAYS when using crane/equipment near energized power lines of 50,000 volts (50 Kv) or more, make sure the minimum distance between the lines and any part of the crane is 10 feet plus 1/2 inch for each 1,000 volts over 50,000 volts.</li> <li>• ALWAYS request an observer to assist you where it is difficult to maintain the desired clearance by visible means.</li> <li>• ALWAYS require that the only job of the observer is to help the operator maintain the safe clearance.</li> <li>• ALWAYS treat overhead power lines as if they were energized.</li> <li>• ALWAYS, when in doubt, call the electric company to find out what voltage is on the lines.</li> <li>• ALWAYS ask the electric company to either de-energize and ground the lines or install insulation while you are working near them.</li> <li>• ALWAYS make sure ladders and tools are nonconductive.</li> </ul>	<ul style="list-style-type: none"> <li>• Never get closer than 10 feet to an overhead power line!</li> <li>• NEVER work at a site without checking for power lines. LOOK UP!</li> <li>• NEVER, when using cranes/equipment near energized power lines of 50,000 volts (50 Kv) or more, get closer than 10 feet plus 1/2 inch for each 1,000 volts over 50,000 volts.</li> <li>• NEVER use cranes/equipment alone where it is difficult by visible means to maintain the desirable clearance.</li> <li>• NEVER allow the observer to perform another job while helping the operator to maintain a safe clearance.</li> <li>• NEVER forget that overhead power lines could be energized.</li> <li>• NEVER take a chance without consulting first with the electric company to find out what voltage the lines carry.</li> <li>• NEVER work near power lines until you are certain that they have been de-energized and grounded or insulated by the electric company.</li> <li>• NEVER work with ladders and tools if they have not been rated nonconductive.</li> </ul>

OSHA regulations<sup>7</sup> for safely using ladders around overhead power lines require the following:

- Prohibiting the use of conductive ladders near energized lines.
- Clearly marking conductive ladders by attaching tags or stickers reading “Caution, do not use around electrical equipment.”
- Using only tools designed to withstand indicated voltages.
- Keeping ladders at least 10 feet away if the overhead power line is 50,000 volts (50 kilovolts) or less. For higher voltages, keeping ladders at least 35 feet away.

### Training and Information Programs

Local training and information efforts can make a significant difference in reducing electrocutions related to overhead power lines. Both OSHA Region VII (Kansas City, MO) and Region IV (Atlanta) have local emphasis programs (LEPS) that have proven effective in averting deaths among construction workers.

OSHA's Kansas City Region, concerned about the frequency of electrocutions caused by overhead power lines, began outreach and training programs for employers and employees in 1999. Area offices contacted individual contractors, insurance companies, labor unions, and associations as well as construction organizations.

“When we determined that 85 percent of construction-related electrocutions in our region involved overhead power lines, we decided to concentrate on that area,” notes Marcia Drumm, Deputy Regional Administrator.

<sup>7</sup>For further information, please refer to the 29 CFR Part 1926. You may also contact your local OSHA area office.

The safety tips on this card are not intended to be all inclusive, they are simply a starting point to help prevent electrocutions from overhead power lines.

<sup>7</sup>27 CFR Part 1926.1053 (b)(12), Subpart X, “Stairways and Ladders”; and Part 1926.951 (a)(2)(c), Subpart V, “Tools and Protective Equipment.”

“Our most recent initiative, *Falls and Electrocution from Overhead Power Lines*, is devoted to reducing electrocutions involving contact with overhead power lines in construction.”

Part of this initiative, *Electrocutions—Don’t Get Zapped*, is in its third year and features overhead power lines training materials for both employers and employees online at <http://www.osha-slc.gov/Region7/overheadpowerlines/>. Other outreach materials, such as CD-ROMs and Spanish and English pocket cards, are available from the region by calling Peggy Taylor at (816) 426-5861.

OSHA’s Atlanta Region also is making sure that employers and employees throughout its area receive guidance on how to avoid overhead power line contact. Atlanta’s Regional Administrator, Cindy Coe, learned from accident

*...most construction electrocutions result from “contact with energized sources at an elevation, such as cranes contacting overhead power lines....”*

*— Tom Marple, Director of OSHA’s Office of Construction Services, Washington, DC*

reports and compliance inspection input there was a problem with electrocutions from overhead power lines, particularly in Florida.

Coe explains, “We initiated an LEP in Florida to adjust working procedures near overhead power lines. We developed training aids that included producing a compact disk and a two-sided laminated pocket card in English and Spanish with ‘always do’ and ‘never do’ information for working around overhead power lines. Our material aids even included a hard-hat sticker with a power-line awareness message.”

The OSHA region also formed a partnership with the Construction Safety Council, which provided its power line hazard awareness training to all of Region IV’s compliance officers. The power line hazard awareness training is a 2-hour course that covers such topics as:

- Identifying high-risk activities and equipment.
- Establishing safe power line working clearance.



- Identifying preventive measures.
- Using protective technology.
- Responding to power line contacts.

In addition, the Construction Safety Council believes that inadvertent power line contacts can be eliminated or reduced through administrative controls, according to Paul A. Satti, a project manager with the Council. Toward that end, the Council has initiated power line avoidance train-the-trainer programs and power line hazards awareness courses. Information about the program can be found at its website named the Power Line Resource Center at <http://www.buildsafe.org/pages/powerpg.htm>.

The partnership seems to be working, according to Coe. In Fiscal Years (FY) 00, 99, and 98 the number of electrocutions relating to overhead power lines declined:

- FY 98: 15 electrocutions—7 from overhead power line contact
- FY 99: 8 electrocutions—6 from overhead power line contact
- FY 00: 6 electrocutions—3 from overhead power line contact.

To assist employers and employees in improving electrical safety in the workplace, OSHA has various materials and resources available, including training and education. For more information on electrical safety in construction and OSHA assistance, visit OSHA's website at [www.osha.gov](http://www.osha.gov). [JSHQ](#)

*Hicks is Team Leader, Division of Communications Production, OSHA Office of Public Affairs, Washington, DC.*



### OSHA-Related Publications

Information on these and other materials are available on OSHA's website at [www.osha.gov](http://www.osha.gov).

- A Guide to Scaffold Use in the Construction Industry (OSHA 3150)*
- Assessing the Need for Personal Protective Equipment: A Guide for Small Business Employers (OSHA 3151)*
- Construction Industry Digest (OSHA 2202)*
- Controlling Electrical Hazards (OSHA 3075)*
- Control of Hazardous Energy (Lockout/Tagout) (OSHA 3120)*
- Crane or Derrick-Suspended Personnel Platforms (OSHA 3100)*
- Ground-Fault Protection on Construction Sites (OSHA 3007)*
- Hand and Power Tools (OSHA 3080)*
- Hazard Communication Guidelines for Compliance (OSHA 3111)*
- Personal Protective Equipment (OSHA 3077)*
- Stairways and Ladders (OSHA 3124)*
- Training Requirements in OSHA Standards and Training Guidelines (OSHA 2254)*

# Even Forrest Gump Understands Customer Service is Important

by Robert Pitulej, Cathy Oliver, and Gus Georgiades

OSHA has free consultation programs that help companies learn about maintaining safe and healthful workplaces, and OSHA's Voluntary Protection Programs recognize and reward employers with excellent safety and health programs.

Wasn't it Forrest Gump who said, "Life is like a box of chocolates. You never know what you are going to get"? That seems to be how the American public views the service it receives from its government. The results of the Hart-Teeter surveys on public trust indicate that a majority of Americans feel disconnected from their government. It is no longer a government, "of, by, and for the people."<sup>1</sup>

At OSHA, we are working hard to ensure the public will receive the professional customer service they

desire and deserve when they open the OSHA "box of chocolates." Remember, Forrest Gump believed deeply in public service and, like most citizens, appreciated the benefits and protections the government provides.

OSHA has always focused on serving the American worker by developing high-quality safety and health regulations aimed at protecting workers, by obtaining workplace compliance towards these standards, and by finding ways to educate employers and employees about workplace safety and health responsibilities. OSHA has free consultation programs that help companies learn about maintaining safe and healthful workplaces, and OSHA's Voluntary Protection Programs recognize and reward employers with excellent safety and health programs. OSHA also has placed a great deal of resources over the last decade into developing a world class public website, where the public can seek and download valuable information, data, and tools for free—an effort that has received praise from our customers.

We have implemented innovative strategies for the more than 6 million work sites we cover nationwide. For example, in responding to workers' (customers') work site complaints, OSHA established a phone and fax system. With this option, compliance staff can talk with an employer and exchange information about correcting a workplace problem rather than making an onsite visit. This allows us to respond faster to a workplace

<sup>1</sup>1999 Hart-Teeter Poll conducted for the Council for Excellence in Government. For more information on the poll, see [www.excelgov.org/publication/excel/default.htm](http://www.excelgov.org/publication/excel/default.htm)

problem and to visit the workplaces throughout the country where the most serious hazards exist. Otherwise, with our limited resources, we would only get to each workplace in America about once every 80 years.

Because OSHA is providing a variety of services for its customers, Forrest might be puzzled that some members of the public still think OSHA is not providing the best customer service it could. Data and information from our recent OSHA internal employee surveys and other surveys conducted with the American Industrial Hygienists Association, and the American Society of Safety Engineers shed some light on this question. Our own staff and some of our customers told us we needed to do better with our level of customer service. A main concern was a lack of

To assure the best services for our customers, OSHA has adopted a “People Come First...” customer service model.

consistency of answers throughout the agency about particular safety and health problems.

In response to these internal and external concerns—as well as the legal mandates placed on OSHA by various congressional laws such as the *Government Performance and Results Act* and several Presidential Executive Orders and Memoranda—the head of OSHA,

Assistant Secretary of Labor Charles Jeffress, decided to put together an agency customer service team.

The team’s goal was to consolidate the various customer service initiatives and practices and to formalize the overall customer service program. The team developed an agencywide customer service policy and principles. They also put together an action plan to implement this customer service program and drafted an agencywide customer service directive. Assistant Secretary Jeffress believes this comprehensive approach to customer service helps ensure quality customer service as a way of life at OSHA. He reiterates, “It’s an approach to our business—preventing occupational injuries and illnesses and saving lives on the job—that we want to embed in our culture.”

OSHA’s Customer Service Policy includes a commitment to the highest level of customer service, both to our staff and to our customers. This level of service helps the agency mission to protect the American worker. To assure the best services for our customers, OSHA has adopted a “People Come First...” customer service model. The seven parts of the model include a commitment to customer service; identifying your customers; determining what your customers expect; designing customer-friendly processes; providing respectful and professional service; seeking positive outcomes; and improving OSHA processes, systems, and overall customer service culture.

Customer service standards are the cornerstone of the program. Key to the effort is the commitment to meeting customer needs. OSHA will strive to know customers’ expectations and to



OSHA senior executives discuss issues during customer service training. From left to right: Charles Adkins, Regional Administrator, Kansas City, MO; Dick Soltan, Regional Administrator, Philadelphia, PA; Steve Witt, Director of Technical Support; and Paula White, Director of Federal-State Operations, Washington, DC.



establish customer service standards to meet those expectations.

Consistent with its Customer Service Policy, OSHA developed customer service principles, to serve as a general guide for conduct towards customers, stakeholders, and fellow OSHA staff. Everyone in OSHA shall continue to:

- Be Respectful and Cooperative—positive, polite, considerate, and respectful towards others.
- Be Professional—knowledgeable, technically proficient and accurate.
- Be Responsive—give prompt and willing service.
- Take the Initiative—recognize what needs to be done and do it.
- Have Integrity—honest and reliable.
- Deliver Quality Services and Products—meet or exceed customer expectations.

As part of a cascading customer service implementation policy, all of OSHA's senior executives participated in a customer service workshop this past September.



Senior executives participate in customer service training.

An important aspect of the customer service program is the commitment to set at least one customer service goal or measure at the work unit level annually.

The workshop served as a reminder of the strong support for customer service and excellence expected of OSHA executives. OSHA's senior leaders received an overview of the "People Come First..." model and reaffirmed their commitment to customer service by signing a poster-sized version of OSHA's Customer Service Policy and Principles. That's right Forrest, it was a symbolic replication of the signing of other important documents like the Declaration of Independence.

An important aspect of the customer service program is the agreement to set at least one customer service goal or measure at the work unit level annually. Everyone in OSHA will receive 12 hours of basic customer service refresher training. Part of the training includes viewing a 5-minute customer service video message. Regional and national directorate representatives are being trained to facilitate the work unit goal setting, as well as to provide refresher training on some of the basics of customer service. OSHA's Customer Service Policy Team will report to the head of OSHA yearly on the progress the agency has made in achieving its work unit goals.

Just as Forrest Gump received recognition for his outstanding public service, OSHA plans to reward noteworthy examples of

customer service by OSHA staff. OSHA's customer service program has a long-term goal—to make sure that when our customers open our "box of chocolates," they receive high-quality customer service. Even Forrest Gump understands the message, "People come first. It's that simple when it comes to customer service." [JSHQ](#)

*Pitulej and Georgiades are program analysts in OSHA's Office of Reinvention; and Oliver is Chief of Voluntary Protection Programs, Directorate of Federal-State Operations, Washington, DC.*

# Houston Partnership Builds on a History of Cooperation

by John Lawson



of communication and cooperation. At its foundation is the shared goal of ensuring safe and productive construction work sites. From agency inception, OSHA has worked with construction organizations, including the AGC, to advise and assist them in promoting worker safety and health in construction workplaces in Houston.

The AGC has been a recognized leader in construction worker safety since the early 1930s and was one of the first construction associations to publish a safety manual for its members. The revised manual<sup>1</sup> continues to be used at construction sites throughout the United States. AGC continues to actively participate with consensus standard groups on construction safety and health issues and with the National Safety Council in promoting safety and health in construction.

Since the early 1980s, OSHA and the AGC's Houston Chapter have worked together to reduce construction injuries and illnesses in the area. So, the idea of a formal partnership was the next logical step when the AGC approached OSHA in 1997 about doing just that. The proposed partnership would recognize construction contractors with exemplary safety and health programs and low injury and illness rates, similar to OSHA's Voluntary Protection Programs (VPP).<sup>2</sup> In fact, one anticipated outcome would be to a Short-Term Demonstration Program for General Contractors within VPP.

<sup>1</sup>Associated General Contractors of America, *Manual of Accident Prevention in Construction, Revised* (Washington, DC, 1977).

<sup>2</sup>VPP's rigorous requirements include implementation of comprehensive safety and health programs. One use OSHA makes of the VPP Demonstration Program is to test the feasibility and effectiveness of alternative VPP requirements when existing requirements do not adequately "fit" an industry.

## A Beginning

A select group of general contractors at construction locations in Houston, TX, are finding and immediately correcting hazards that might cause worker fatalities, serious injuries, and illnesses. They have eliminated or effectively controlled hundreds of such hazards, and the lives of Houston area construction workers are safer as a result. This effort is part of the Strategic Partnership developed between the Houston Chapter of the Associated General Contractors (AGC) and the

Houston North and South OSHA Area Offices.

According to John B. Miles, Jr. OSHA Regional Administrator in Dallas, "The continued commitment of major construction companies to safety and health of all employees working at their sites is instrumental in the reduction of fatalities and job-related injuries and illnesses in the Houston Area. OSHA is pleased to recognize the efforts of its Houston OSHA/AGC Partners."

The relationship between the Houston AGC and the OSHA area offices reflects a long history

Presently, general construction contractors are eligible for VPP. Because applications for VPP are accepted from individual sites, however, the short-term nature of many construction sites precludes them from meeting requirements for the length of time their safety and health program has been operating. A VPP Short-Term Construction Demonstration Program would explore the feasibility of bringing more construction sites into VPP.

Based on the initial partnership proposal, an ad hoc group of representatives from OSHA and Houston AGC teamed up and developed a preliminary plan with the following goals:

- Showcasing AGC member companies with exceptional safety and health programs;
- Raising safety and health awareness among subcontractors at participating company sites by showing that excellent jobsite safety and health programs result in more productive workplaces;
- Reducing injuries, illnesses, and fatalities among construction workers; and
- Promoting the prestige of being selected as a subcontractor at a participating AGC/OSHA partnering contractor's sites—being the best of the best.

### **The Next Step**

The AGC team explored the initial proposals with the Houston AGC Chapter's Safety and Health Committee to see if there might be interest among AGC member companies. And there was! AGC unanimously approved the initial proposal and also spoke with officials of the Houston Area Building Trades Council, whose member unions represent workers at many Houston area job sites. The Houston OSHA Offices'



Strategic Teams began developing ideas and providing input on how both partners could realize their goals. They focused on how to facilitate a partnership that would meet the requirements of the OSHA Strategic Partnership Program<sup>3</sup> and how such a cooperative initiative could most effectively promote safety and health at partnering construction sites.

After further discussion and revision of the original proposal, in June 1999, OSHA and AGC signed a formal written partnership agreement that had the support of the Houston Chapter AGC, local building trade unions, and OSHA. This new agreement—SHAPE, or the Safety and Health Associated General Contractor Partnership for Excellence—outlined stringent safety and health guidelines for contractors, including the following:

- An occupational injury and illness rate 15 percent below the most current industry average rate published by the Bureau of Labor Statistics, and an Experience Modifier Rate<sup>4</sup> of .65 or below;
- A site-specific written safety and health program based on OSHA guidelines<sup>5</sup> that includes employee involvement and that provides effective safety and

*This new agreement—SHAPE, or the Safety and Health Associated General Contractor Partnership for Excellence—outlined stringent safety and health guidelines for contractors.*

<sup>3</sup>For more information, see Judith Weinberg, Christopher Warren, and Audie Woolsey, "OSHA's Strategic Partnership Program: Protecting Workers, Transforming Relationships," *Job Safety & Health Quarterly* 11(4):18-27, Summer 2000.

<sup>4</sup>The workers' compensation premium paid per employee.

<sup>5</sup>See "Safety and Health Program Management Guidelines," *Federal Register* 54(18):3908, 3916, January 26, 1989, available online at [www.osha.gov](http://www.osha.gov).



- Falls (e.g., floor, platforms, roofs);
- Struck-by (e.g., falling objects, vehicles);
- Caught-in or between (e.g., cave-ins, unguarded machinery, equipment); and
- Electrocution (e.g., overhead power lines, power tools and cords, outlets, temporary wiring).

These inspections determine if the company meets the high standards required to participate in the partnership. If the company successfully passes inspections at the two selected sites, the company and its employees working at all its sites in and around Houston are accepted into the partnership for a 1-year term. The company may renew its participation each year by going through an AGC Safety and Health Committee reappraisal process and OSHA reinspection.

Jay Marak, Safety Manager, Houston Chapter Associated General Contractors, says, “AGC is dedicated to improving workplace safety. In today’s competitive marketplace, and even tighter labor market, general contractors are

health protection for all workers, including all subcontractors at the site;

- Training for employees on hazards specific to their jobs;
- Designated safety personnel who have at least 1 year of experience in managing an effective construction safety and health program, and who have undergone appropriate training in identifying construction safety and health hazards.

Joe Reina, OSHA Deputy Regional Administrator, Region VI, who assisted in the partnership negotiations with the Houston Chapter of Associated General Contractors, notes, “I’m proud of the example that the Houston OSHA/AGC Safety and Health Partnership sets for construction contractors. This partnership shows that government, associations and employers working together permit all of us to achieve our common goal of protecting the health and well-being of workers.”

Houston AGC Chapter. If the company satisfactorily passes the review of the Safety and Health Committee, the Committee forwards to both Houston OSHA offices a package containing the candidate company’s safety and health program and list of working sites. The OSHA offices, working together, pick at least one site in each area office’s jurisdiction to receive an OSHA focused inspection. A focused inspection is a

*“This partnership shows that government, associations and employers working together permit all of us to achieve our common goal of protecting the health and well-being of workers.”*

*– Joe Reina, OSHA Deputy Regional Administrator, Dallas, TX*

### **The Program**

Candidate general contractors apply to participate with the Safety and Health Committee of the

review of the site’s safety and health program and concentrates on the top four hazards that cause 90 percent of deaths and injuries in construction:

committed to protecting their greatest resources—their employees. AGC continues to improve construction industry performance through proven,

effective safety techniques for the industry. The Houston Chapter of AGC and OSHA have committed to work as partners to achieve construction workplace safety through shared goals and objectives. This partnership is an excellent opportunity for the 'Best of the Best' construction contractors to get recognition for their efforts in providing a safe workplace for their employees. We at the AGC are proud to be able to offer this program to our members."

The partnership focuses on contractors finding and fixing hazards at their worksite. Participants receive OSHA construction training and site supervisors and company safety and health individuals review their worksites and immediately correct any hazards found. Participants report quarterly to OSHA the hazards they find. As one benefit of the partnership, participating company sites are much less likely to be inspected repetitively from the programmed list by OSHA while participating in the program. OSHA, however, continues to inspect company sites per OSHA policy involving fatalities, catastrophes, complaints, and referrals. The company also receives a partnership banner to display at its sites. But most of all, the company enjoys the prestige of being part of an elite group of contractors with exceptional safety and health programs in Houston.

The first company to qualify, W. S. Bellows Construction Corporation, received approval in January 2000. Soon thereafter, Williams Industries also qualified for the partnership. Tommy Lee, Safety Manager, W.S. Bellows Construction Corporation, states, "We take the Partnering Program very seriously. Not only does it give us the recognition, it also keeps us

*The Houston Chapter of AGC and OSHA have committed to work as partners to achieve construction workplace safety through shared goals and objectives.*

in the spotlight. This puts an even larger emphasis on safety than before due to the fact that people are constantly evaluating us. Safety has been number one in our company for years and now the partnering is a nice way of being

recognized for our efforts. It's a matter of pride. We know we're good, and now the rest of the world does, too. But recognition is only part of it. We're getting subcontractors who want to work with us because they know the job will be safe. We're able to pick the best subs."

Gary Williams, President, Williams Industries, says, "Williams Industries is very proud to have our safety record and achievements recognized by the AGC/OSHA Partnering Program. Our safety efforts began with a comprehensive safety and health program that includes safety training, safety audits, and safety reports on a regular basis. It is also reinforced by the Contractor Furnished Insurance Program and mandatory drug testing program. Realizing safety is an essential component to the successful completion of every



project, Williams makes safety a top priority on every job site.”

Williams Industries Safety Director Roy Harris adds, “The OSHA/AGC partnering program has enhanced our safety program by making Williams Industries set higher standards in safety. Our goal is ZERO accidents.”

At this writing, these two companies alone have conducted more than 540 self-inspections at their sites since joining the partnership. They have found and

Charles H. White, President, Tellepsen Builders, L. P., points out, “Tellepsen is very proud to be an OSHA partner. Through the OSHA/Tellepsen partnering program we can achieve our common goal of eliminating injuries and illnesses. The partnering relationship will allow us to mutually benefit from each other’s experience and knowledge to improve our safety record.”

Bob Bunning, Safety Director at Tellepsen, also thinks “The OSHA

The program has proven, in less than a year, that partnership can bring changes in the workplace. The partnering sites are becoming safer places to work as participants identify and correct hazards. Just as significant, the safety and health awareness of subcontractors is improving, and many subcontractors are taking what they are learning about safety and health and applying their new knowledge at non-partnering construction sites. The partnership’s impact thus is beginning to be felt throughout the Houston construction industry.

As a result of the success of the Houston OSHA/AGC Partnership, the Houston North and South OSHA offices and Houston AGC have begun working together to reach out to Hispanic contractors in the Houston Area. The goal of this joint effort is to bring construction safety and health training to Spanish-speaking contractors and their employees and to increase safety and health awareness on their job sites.

By laying a foundation of high standards for worker safety and health protection, and by encouraging employers to take advantage of the training and technical assistance available to contractors, OSHA and AGC are demonstrating that business and government can work cooperatively to save lives and prevent injuries and illnesses.

OSHA’s Houston South Area Office Director, Raymond Skinner, sums it up: “We have a great thing going on down here in Houston’s construction industry. Construction is an extremely dangerous industry—it represents about 6 percent of the work force nationwide, yet was responsible for 20 percent of the workplace fatalities in 1999 according to the

*“Our safety efforts began with a comprehensive safety and health program that includes safety training, safety audits, and safety reports on a regular basis.”*

*– Gary Williams, President, Williams Industries*

taken immediate steps to correct 273 hazards related to the work of subcontractors. The value to site workers is obvious. But the value to OSHA also is significant: The agency could never conduct so many inspections of two companies’ sites in such a brief period of time. By committing to self-inspect and by holding their subcontractors up to the high standards of the partnership, these two exemplary contractors are freeing OSHA to focus its limited resources on companies in greater need of oversight and assistance.

Currently, four companies have been recognized as meeting the high standards and qualifying for membership in the Houston OSHA/AGC Partnership. In October, two additional companies, Tellepsen Builders L.P. and Craig, Sheffield and Austin, Inc., joined the partnership.

partnering program is opening new avenues of communication between Houston AGC Safety Committee members and the Houston North and South Offices. This open communication concept is resounding our shared commitment to eliminate injuries and illnesses.”

Tommy Sheffield, Principal and Safety Director, at Craig, Sheffield and Austin, Inc., describes what it means to his company to be in the OSHA program. “It has always been the policy of Craig, Sheffield and Austin, Inc. to provide safe work areas and use safe methods and practices in conducting our business operations. Being a member of the first OSHA Partnering program in Harris County will enhance this policy and build a strong working relationship with OSHA.”

*“Through Strategic Partnership between contractors, workers, and OSHA, we are beginning to see much safer workplaces.”*

*– Raymond Skinner,  
Houston South Area  
Director*

Bureau of Labor Statistics.<sup>6</sup> Through Strategic Partnership between contractors, workers, and OSHA, we are beginning to see much safer workplaces, and I know that the enthusiasm can't be stopped. These companies that have been recognized for exemplary safety and health performance realize that safety and health are so important to them, they are willing to make a difference in assuring their employees come to work each day unharmed and go home to their families the same way—unharmed. The beauty is that this program is completely voluntary, and both the employees and their employers are proud of their accomplishment.”

If you would like to learn more about partnering with OSHA, go to OSHA's website [www.osha.gov](http://www.osha.gov) and select the **Partnership** link. Or contact your nearest OSHA office.

JSHQ

*John Lawson is Area Director, Houston North Area Office, Houston, TX.*

<sup>6</sup>U. S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries, 1999 (Washington, DC: BLS, 2000), “Table A-10. Fatal occupational injuries by industry, 1994-99.”

## CONSTRUCTION FOCUSED INSPECTIONS INITIATIVE

Handout for contractors and employees.

The goal of Focused Inspections is to reduce injuries, illnesses, and fatalities by concentrating OSHA enforcement on those projects that do not have effective safety and health programs/plans and limiting OSHA's time spent on projects with effective programs/plans.

To qualify for a Focused Inspection, the project safety and health program/plan will be reviewed and a walkaround will be made of the jobsite to verify that the program/plan is being fully implemented.

During the walkaround, the compliance officer will focus on the four leading hazards that cause 90 percent of deaths and injuries in construction. The leading hazards are:

- falls, (e.g., floors, platforms, roofs)
- struck by, (e.g., falling objects, vehicles)
- caught in/between (e.g., cave-ins, unguarded machinery, equipment)
- electrical (e.g., overhead power lines, power tools and cords, outlets, temporary wiring)

The compliance officer will interview employees to determine their knowledge of the safety and health program/plan, their awareness of potential jobsite hazards, their training in hazard recognition, and their understanding of applicable OSHA standards.

If the project safety and health program or plan is found to be effectively implemented, the compliance officer will terminate the inspection.

If the project does not qualify for a Focused Inspection, the compliance officer will conduct a comprehensive inspection of the entire project.

If you have any questions or concerns related to the inspection or conditions on the project, you are encouraged to bring them to the immediate attention of the compliance officer or call the area office at \_\_\_\_\_.

\_\_\_\_\_ **qualified as a FOCUSED PROJECT.**

Project/site

Date

Area Director

This document should be distributed at the site and given to the Contractor for posting.



# Being Informed Is a Healthy Choice!

*Spanish-language publications from the National Cancer Institute*

Information about

- ▶ Smoking
- ▶ Nutrition
- ▶ Cancer detection
- ▶ Cancer treatment
- ▶ Cancer clinical trials

*To order publications on these topics and to find out about other materials from the National Cancer Institute, call the Cancer Information Service at 1-800-4-CANCER (1-800-422-6237). Persons with TTY equipment, dial 1-800-332-8615.*



# fatal facts

## Accident Report – No. 57

### Accident Summary

Accident type	Electrocution
Weather	Clear/Hot/Humid
Type of Operation	Installers
Crew Size	Window Shutter
Competent Safety Monitor on Site?	2
Safety and Health Program in Effect?	No
Was the Worksite Inspected Regularly by the Employer?	Partial
Training and Education Provided?	No
Employee Job Title	Some
Age/Sex	Helper
Experience at This Type Work	17/M
Time on Project	1 Month

### Brief Description of Accident

One employee was climbing a metal ladder to hand an electric drill to the journeyman installer on a scaffold about 5 feet above him. When the victim reached the third rung from the bottom of the ladder, he received an electric shock that killed him.

The investigation revealed that the extension cord had a missing grounding prong and that a conductor on the green grounding wire was making intermittent contact with the energizing black wire, thereby energizing the entire length of the grounding wire and the drill's frame. The drill was not double insulated.

### Inspection Results

As a result of its investigation, OSHA issued citations for violations of construction standards.

### Accident Prevention Recommendations

The employer must:

1. Use approved ground-fault circuit interrupters or an assured equipment grounding conductor program to protect employees on construction sites [Title 29 of the Code of Federal Regulations (CFR) Part 1926.404(b)(1)].
2. Use equipment that provides a permanent and continuous path from circuits, equipment, structures, conduits, or enclosures to ground [29 CFR Part 1926.404(d)(6)].
3. Inspect electrical tools and equipment daily and remove damaged or defective equipment from use until it is repaired [29 CFR Part 1926.404(b)(iii)(C)].

### Sources of Help

- OSHA General Industry Standards [29 CFR Parts 1900-1910] and OSHA Construction Standards [CFR Part 1926] together include all OSHA job safety and health rules and regulations covering construction.
- OSHA-funded free consultation services listed in telephone directories under U.S. Department of Labor or under the state government section where states administer their own OSHA-approved programs.
- *A Guide to Scaffold Use in the Construction Industry* (OSHA 3150), *Controlling Electrical Hazards* (OSHA 3075), *Ground-Fault Protection on Construction Sites* (OSHA 3007), and other publications, technical information, standards, and assistance are available online at [www.osha.gov](http://www.osha.gov).
- Courses in construction safety are offered by the OSHA Training Institute, 1555 Times Drive, Des Plaines, IL 60018, (847) 297-4810 and are listed on OSHA's website.



Detach Here

Note: The case described here is representative of fatalities caused by improper work practices. No special emphasis or priority is implied nor is the case necessarily a recent occurrence. The legal aspects of the incident have been resolved and the case closed. U.S. Department of Labor, Occupational Safety and Health Administration, 200 Constitution Avenue, N.W., Washington, DC.

## Accident Report – No. 11

### Accident Summary

Accident Type	Electrocution
Weather	Fair and Cold with Wet Ground
Type of Operation	Remodeling
Crew Size	2
Collective Bargaining?	No
Competent Safety Monitor on Site?	Yes
Safety and Health Program in Effect?	No
Was the Work Site Inspected Regularly?	Yes
Training and Education Provided?	No
Employee Job Title	Carpenter
Age/Sex	33/M
Experience at This Type of Work	30 days
Time on Project	3 days

### Brief Description of Accident

Two employees were installing aluminum siding on a farm house when it became necessary to remove a 36-foot-high metal pole CB antenna. One employee stood on a metal pick board between two ladders and unfastened the antenna at the top of the house. The other employee, who was standing on the ground, took the antenna to lay it down in the yard. The antenna made electrical contact with a 7,200-volt power transmission line 30 feet 10 inches from the house and 23 feet 9 inches above the ground. The employee handling the antenna received a fatal shock, and the other employee a minor shock.

### Inspection Results

Following its investigation, OSHA issued one citation for two

alleged serious violations of its construction standards. Had these standards been adhered to, the fatality might have been prevented.

### Accident Prevention Recommendations

1. Note the presence of power lines and be extremely cautious when working near them. Train employees to recognize hazards [Title 29 of the Code of Federal Regulations (CFR), Part 1926.21(b)(2)].

2. Do not permit employees to work near any part of an electrical power circuit that might be contacted in the course of the work. Guard all electrical power circuits against accidental contact by insulating the circuit or deenergizing it or by other effective means that would protect the employees (CFR 1926.400(c)(1)).

### Sources of Help

- OSHA General Industry Standards [29 CFR Parts 1900-1910] and OSHA Construction Standards [CFR Part 1926] together include all OSHA job safety and health rules and regulations covering construction.
- OSHA-funded free onsite consultation services. Consult your telephone directory for the number of your local OSHA area or regional office for further assistance and advice listed under the U.S. Labor Department or under the state government section where states administer their own OSHA-approved safety and health programs.
- A *Guide to Scaffold Use in the Construction Industry* (OSHA 3150), *Controlling Electrical Hazards* (OSHA 3075), *Ground-Fault Protection on Construction Sites* (OSHA 3007), and other publications, technical information, standards, and assistance are available online at [www.osha.gov](http://www.osha.gov).

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