

CHANGING OSHA RULES ON CONSTRUCTION INDUSTRY COMPLIANCE

The Advisory Committee on Construction Occupational Safety and Health (ACCOSSH) provided an update in July concerning several pending OSHA issues that will significantly impact the construction industry. Many of these issues such as pay for personal protective equipment (PPE), training requirements for operation of industrial trucks, steel erection and OSHA recordkeeping will create new compliance issues for the construction industry.

Costs For Personal Protective Equipment

A proposed rule that will clarify an employer's obligation to pay for all personal protective equipment (PPE)—except safety shoes and prescription eyewear, is now scheduled for release by the end of 1998.

At this time, OSHA does not specify what an employer should or should not provide for PPE with the exception of respirators. [1910.134 (a)(2)] The primary concern for exclusion of payment for safety shoes is obvious—will this exclusion cause present employers who provide safety footwear protection to stop doing so? Other potential issues arising from the proposed PPE payment clarification rule include the reimbursement for lost or damaged equipment and the potential payment for prescription eyewear utilized inside full-faced respirators.

OSHA is taking public comments into consideration concerning the proposed rule. Issues need to be addressed concerning how strictly OSHA should control PPE. For now, OSHA simply says to “provide PPE.” OSHA is awaiting word from the Office of Management and Budget that would allow the agency to conduct a nationwide survey to determine if the standard is economically feasible and can be effectively implemented.

Powered Industrial Trucks

In early 1999, a final rule is anticipated concerning training requirements for the operation of powered industrial trucks. It is believed that OSHA will model the new standard after the voluntary standard issued in 1993 by the American Society of Mechanical Engineers (ASME). The ASME guideline devotes detailed attention to the training aspects of operating powered industrial trucks. This new OSHA standard will take into consideration the hazards and operating procedures for specific worksites. In addition to detailing training requirements, the proposed OSHA standard will address how training received at a previous place of employment can be counted toward current training compliance.

Steel Erection

Currently, OSHA has proposed a revised steel erection standard that was published for public comment in August. Hearings on the proposed rule are scheduled for December. The standard is based on a draft rule developed by Steel Erection Negotiated Rulemaking Advisory Committee (SENRAC). OSHA's proposed steel erection rule is expected to enhance the protection provided to workers engaged in steel erection and to update and strengthen the general safety provisions that address steel erection. This proposal contains requirements for hoisting and rigging, structural steel assembly, beam and column connections, joist erection, pre-engineered metal building erection, fall protection and training. The proposed requirements also address significant hazards in the steel erection industry. The principal hazards addressed by this proposal are those associated with working under loads; hoisting, landing and placing steel joists; and falls to lower levels. The following table summarizes the leading factors for fatal accidents during steel erection.

LEADING FACTORS CAUSING FATAL ACCIDENTS DURING STEEL ERECTION

- ▷ **Collapses while landing or placing a load** - most were the result of placing loads on unsecured or unbridged joists.
- ▷ **Collapses while connecting joists or trusses** - most were the result of prematurely disconnecting the crane before the piece was secure.
- ▷ **Workers struck by objects during miscellaneous activities** - most were the result of walking or working under a load.
- ▷ **Workers struck by objects and then falling** - most were the result of being struck while landing a load or making a connection, by a tool slipping, or by a piece of decking being blown off a pile when fall protection was not provided or used.
- ▷ **Improper use or failure of a fall protection system** - most were the result of employee failure to use available fall protection systems even though the worker was wearing a belt (and in some cases lifelines were rigged).
- ▷ **Unsecured or unstable decking** - most were the result of stepping onto or working on unsecured decking that slipped out of place when fall protection was not provided or used.
- ▷ **Other falls during decking activities** - most were the result of stepping off the metal decking onto insulation (and then falling to the ground) during roofing operations where fall protection was not provided or used.
- ▷ **Plumbing, bolting, welding and cutting** - most were the result of the worker not being tied off while at the work station (whether or not fall protection was provided).

New OSHA Recordkeeping Standard

By Spring, OSHA should have its newly proposed injury and illness recordkeeping standard. This new rule will introduce the 300 Form (an update to the current 200 Form). There will be a number of changes including preserving the distinction in classifying incidents as accidents or illness. Once the rule is final, OSHA's Head, Charles Jeffress will launch an education and training campaign to familiarize employers with the recordkeeping requirements.

In addition to the 300 Form, OSHA is launching its new Construction Accident Information Survey, Form 170. The purpose of the survey form is to gather more specific information on circumstances surrounding fatalities. Examples

of the data to be collected include the type of construction site where the accident occurs (commercial, power plant, highway, etc.), the source of injury and the type of work being done. Although much of this information is being collected in current accident investigations, the 170 Survey Form is designed to standardize the data in machine-readable format. An analysis of the results from 1997 survey data is scheduled for completion by the spring of 1999.

Crystalline Silica

A notice of proposed rulemaking concerning personal exposure to airborne silica is not expected until 2000. The rulemaking would have a widespread impact on construction workers, including sandblasters, stonecutters and tunnelers, along with those in other industries such as foundries and quarries.

OSHA has an existing PEL of 10 milligrams per cubic meter divided by the percent of silica in the dust plus 2 ($10\text{mg}/\text{m}^3 \div \% \text{SiO}_2 + 2$). Recent studies suggest that even this PEL would not protect against silicosis over a 45-year average lifetime exposure. OSHA is considering a comprehensive standard that may include product substitution, engineering controls, medical screening and surveillance, coupled with training and education. A risk assessment will be done to determine whether the exposure limit should be reduced and whether a new standard is technically and economically feasible.

Toilet/Wash Facilities for Women

The Advisory Committee on Construction Occupational Safety and Health (ACCOSSH) Sanitation Workgroup is near agreement on recommending a new construction sanitation rule to OSHA. Driven by the increased presence of women workers in construction, the rule will call for toilet and wash facilities, as well as permitted restroom breaks for female construction workers. This standard should apply to all contractors, regardless of the number of employees.

Fall Protection Update

As a reminder, body belts are no longer allowed as a method of fall restraint. Effective January 1, 1998, OSHA requires the use of a full body harness to better distribute the impact of a fall throughout the body. Additionally, snap hooks used for personal fall protection devices must be a locking type snap hook. This hook is designed to prevent disengagement of the snap hook keeper by the connected member.

Top 25 Cited OSHA Standards in North Carolina

- 1) Electrical, Wiring Methods, Components & Equipment
- 2) Electrical Systems Design
- 3) HAZCOM
- 4) Portable Fire Extinguishers
- 5) Machines
- 6) Electrical, Wiring Design & Protection
- 7) Abrasive Wheel Machinery
- 8) Lockout/Tagout
- 9) Means of Egress
- 10) Guarding Floor & Wall Openings & Holes
- 11) Mechanical Power/Transmission Apparatus
- 12) Walking-Working Surfaces
- 13) Personal Protective Equipment
- 14) Life Safety Code
- 15) Occupational Noise Exposure
- 16) Permit-Required Confined Spaces
- 17) Woodworking Machinery Requirements
- 18) PSM, Highly Hazardous Chemicals
- 19) Bloodborne Pathogens
- 20) Employee Emergency & Fire Prevention Plans
- 21) Medical Services & First Aid
- 22) Powered Industrial Trucks

NC DEPARTMENT OF LABOR FOCUSES ON LOWERING CONSTRUCTION FATALITIES

Several small businesses in North Carolina reported high numbers of workplace construction fatalities over a 12-month period, which ended in August. The state recorded 28 construction-related fatalities. The NC Department of Labor plans to launch an initiative to focus on training and on-site education efforts for these businesses.

Most of these construction-related fatalities occurred in North Carolina's two largest counties, Mecklenburg and Wake. Over a 12-month period, Mecklenburg County reported six deaths and Wake County reported seven on-the-job fatalities. Both counties lead the state in commercial and residential construction with Mecklenburg reporting \$1.8 billion and Wake at \$1.7 billion annually.

LEAD-BASED PAINT RULES AND REGULATIONS IN NC; APPLICABILITY TO COMMERCIAL CONSTRUCTION AND RENOVATION

While most of the focus of regulations involving lead-based paint has historically been centered on child exposure to lead, all construction work involving commercial or public buildings where an employee may be occupationally exposed to lead are subject to requirements of OSHA's construction industry standard 29 CFR 1926.62. In addition, EPA and the North Carolina Department of Environment and Natural Resources (NCDENR) regulations also have provisions that extend coverage to activities involving lead-based paint in commercial buildings. Specifically, the North Carolina Lead-Based Paint Hazard Management Program requires an *abatement permit*, issued by the NCDENR, for lead abatement projects.

While these regulations fall under the jurisdiction of several different agencies, the resulting **focus** is to protect the health and safety of workers involved in construction activities that impact lead-based paint.

Knowing Exposure Levels

Key to Complying with Regulations

If lead is identified on a construction, renovation or demolition project, industrial hygiene sampling must be performed to demonstrate that lead concentrations in air are below the OSHA Permissible Exposure Level (PEL) of 50 micrograms per cubic meter of air (50 $\mu\text{g}/\text{m}^3$).

While the PEL for lead is 50 $\mu\text{g}/\text{m}^3$, if exposure is determined to be at or above the Action Level of 30 $\mu\text{g}/\text{m}^3$ over an eight-hour period, employers are required to provide the following:

- Appropriate respiratory protection;
- Appropriate personal protective clothing and equipment;
- Clothing change areas;
- Hand washing facilities;
- Biological monitoring to consist of blood sampling and analysis; and
- Training regarding HAZCOM and safety requirements.

According to 29 CFR 1910.1025 Appendix C, workers shall receive a baseline physical which should include the following:

- ◆ Detailed work and medical history;
- ◆ Thorough physical examination; and
- ◆ Blood sample and analysis.

If initial determination or subsequent monitoring reveals employee exposure to be at or above the action level but below the PEL ($50\mu\text{g}/\text{m}^3$), the employer shall repeat monitoring every six months. If exposure is above the PEL, quarterly monitoring is required until such a time that two consecutive tests reveal a decrease in levels below the PEL.

Furthermore, an annual examination must be performed for those employees for whom a blood sampling test indicated a blood lead level at or above 40 micrograms per deciliter ($40\mu\text{g}/\text{dl}$) within the past 12 months. If an employee's blood level exceeds $50\mu\text{g}/\text{dl}$, then temporary removal from the site is required.

Other EI Alert articles address issues which impact commercial properties include "Wide-Reaching Amendments to Asbestos in Construction Regulations" in Vol. 6, No.7; "Compliance with Lead-Based Point Rules" in Vol. 8, No. 2; and "Lead Hazard Control – What to Expect" in Vol. 8, No. 5. These EI Alerts can be accessed on our Website at www.ei1.com.

INNOVATIVE PROGRAM DEVELOPED FOR WORK ZONE SAFETY

The Parsippany, New Jersey office of the U. S. Labor Department's Occupational Safety and Health Administration (OSHA) has received an award from Vice President Al Gore for its innovative program to protect highway workers from being struck by passing vehicles.

The five-part program trained more than 300 state troopers and transportation department worksite engineers and technicians to recognize highway construction hazards. To date, more than 4,000 hazards have been identified and corrected, and more than 4,500 highway workers removed from harms way. The hazards included inadequate barricades, improper lane closures, failure to wear high-visibility vests, and failure to place signs.

PHASE II OF EPA'S STORMWATER PROGRAM TO IMPACT SMALLER CONSTRUCTION PROJECTS

The Environmental Protection Agency (EPA) has proposed Phase II of the National Pollutant Discharge Elimination System (NPDES) stormwater program, adding 84 more cities and urbanized counties in North Carolina and **all construction sites larger than one acre** to the list of stormwater sources to be covered under the regulation.

The proposal also grants states the authority to require certain construction sites less than one acre to obtain permits and control stormwater runoff. Minimum requirements for stormwater management programs are as follows:

- Public education and outreach
- Public involvement
- Illicit discharge detection and elimination
- Construction site runoff control
- Post-construction stormwater management in new development and redevelopment
- Pollution prevention and good housekeeping at municipal operations

The EPA aims to issue the final rule in March of next year.

