

OSHA makes additional changes to Respiratory Protection Standard

The Occupational Health and Safety Administration's (OSHA) Respiratory Protection Standard (29 CFR 1910.134) requires that respirators be worn in situations when it is necessary to protect the health of an employee from contaminated or oxygen-deficient air. This 27-year-old standard was strengthened two years ago by changes to better protect the health and lives of self-contained apparatus wearers. Some of the required changes of the revision include:

- **Written plan** with work site-specific procedures to tailor program to each work site.
- **Hazard evaluation** to characterize respiratory hazards and conditions of work to assist employers in selecting appropriate respirators.
- **Medical evaluation** to determine ability of workers to wear the respirator selected.
- **Fit testing** of tight-fitting respirators to reduce face seal leakage and ensure that the respirators provide adequate protection. OSHA requires that the fit testing be administered at least annually.

- **Training** to ensure that employees use respirators safely.
- **Periodic program evaluation** to ensure that respirator use continues to be effective.

Recent Revisions that Address Quantitative and Qualitative Fit Testing

The revision of the standard dealing with fit testing requires detailed protocols for qualitative or quantitative methods. OSHA allows the use of either method in ensuring compliance, regardless of whether the respirator is used in a positive or negative pressure mode. However, each method has its advantages and disadvantages. Some points to consider when choosing which method to use are:

Qualitative fit testing is a pass/fail evaluation that relies on the response of the respirator wearer to various test agents, such as banana oil or irritant smoke. Its advantages include low cost, ease of performance, and minimal time constraints. However, its

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HUD's new lead-based paint rule now in effect

The U.S. Department of Housing and Urban Development (HUD) has made provisions to its new lead-based paint (LBP) regulation (24 CFR Part 35) that applies to housing activities supported by funding administered by its Office of Community Planning and Development (CPD). Grantees, subrecipients, and HUD field staff are responsible for implementing the requirements. All provisions of the rule went into effect Sept. 15, 2000. LBP requirements established by the new regulation fall into the five major categories listed below.

Notification. Grantees must meet four notification requirements.

- **Lead hazard information pamphlet.** Occupants, owners, and purchasers must receive the EPA/HUD/Consumer Product Safety Commission (CPSC) lead hazard information pamphlet, or an EPA-approved equivalent.
- **Disclosure.** Check that property owners have provided purchasers and lessees with available information or knowledge regarding the presence of LBP and LBP hazards prior to selling or leasing a residence.
- **Notice of lead hazard evaluation or presumption.** Occupants, owners, and purchasers must be notified of the results of any lead hazard evaluation work or the presumption of LBP or lead hazards.

- **Notice of lead hazard reduction activity.** Occupants, owners, and purchasers must be notified of the results of any lead hazard reduction work.

Lead Hazard Evaluation. The evaluation activity required depends on the nature of the activity funded and the amount of federal funding and may include either a visual assessment, paint testing, or risk assessment, or a combination of those items.

Lead Hazard Reduction. The reduction activity required depends on the nature of the activity funded and the amount of federal funding and may include the use of interim controls or abatement of identified hazards.

Ongoing Maintenance. Ongoing maintenance depends on the grantee's relationship with the federal government.

Response to Children with Environmental Intervention Blood Lead. When a poisoned child with an environmental intervention blood lead level is identified in some types of properties, the new regulation prescribes certain activities.

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Environmental Briefs

President Clinton proposes strategy to end childhood lead poisoning, allow stricter enforcement on lead-based paint

President Clinton is proposing a \$165-million, 10-year strategy to end childhood lead hazards, strengthening enforcement of lead regulations, advancing research, and improving health monitoring and intervention. Fiscal year 2001 priorities include spending \$120 million for grants and other housing and urban development efforts to reduce lead-based paint hazards in low income homes with children under age six, and spending \$6 million through the EPA and the Department of Justice to increase public education and enforcement of lead-disclosure rules. *Source: Environmental Health Perspectives, National Institute of Health, June 2000.*

Reducing polluted runoff: the Storm Water Phase II Rule

In December 1998, EPA entered the Storm Water Phase II Rule into the Federal Register. The Phase II Rule will extend regulation of storm water from construction activities greater than five acres to construction activities equal to or greater than one acre. It also will regulate small municipal separate storm sewer systems in urbanized areas not currently covered by the Phase I Rule. Regulation of these entities will become effective mid-2001.

Also, as of February 2000, all categories of industrial activity, except construction, can now claim the no exposure exemption under the Phase II Rule. The no exposure exemption allows industries to avoid storm water permits if there is no exposure of industrial materials or activities to storm water. Under the Phase I Rule only category, 11 industries are allowed to claim this exemption. For more information, visit www.epa.gov/owm/sw/phase2. (See Alert Vol. 8, Nos. 10, available online.)

Automobile manufacturers require EMS

Some automotive suppliers are implementing environmental management systems (EMS) as part of a mandate from automotive companies General Motors (GM), Ford, and Toyota. GM manufacturing suppliers have until Dec. 31, 2002, to implement an EMS; Ford suppliers have until July 1, 2003; and Toyota suppliers have until Dec. 31, 2003. EMS is a tool that uses an international standard, known as ISO 14001, to systematically manage environmental activities, products, and services, and to help achieve environmental obligations and performance goals. The new requirement applies to about 5,000 Ford and GM suppliers worldwide.

EPA makes new metal sludge RCRA final rule

By encouraging metals recovery from hazardous wastewater treatment sludge, a new Resource Conservation and Recovery Act (RCRA) final rule will help the metal finishing industry meet voluntary waste-reduction goals as part of EPA's National Metal Finishing Strategic Goals Program (SGP). SGP grew out of EPA's Common Sense Initiative (CSI).

The new rule allows large quantity generators to accumulate hazardous waste code F006 sludge onsite for 180 days (or 270 days, as applicable) if the waste is going for recycling to recover the metals. This rule addresses a barrier to metals recovery and recycling identified by CSI. The longer accumulation time enables generators to send larger shipments of waste off-site for metals recovery less often, making it a more attractive waste management option. The rule was published in the March 8, 2000, Federal Register (60 FR 12378) and became effective immediately in North Carolina. For more information about the rule, visit: www.epa.gov/epaoswer/hazwaste/gener/f006acum.htm or call the RCRA/Superfund Hotline at (800) 424-9346 or (703) 412-9810.

EPA report shows improved air quality

On Aug. 7 EPA released its annual air quality trends report showing that air quality nationally continues to improve. The most recent 10-year period (1990 - 1999) shows these nationwide improvements:

- carbon monoxide concentrations decreased 36%
- lead concentrations decreased 60%
- nitrogen dioxide concentrations decreased 10%
- smog concentrations decreased 4%
- particulate matter concentrations decreased 18%
- sulfur dioxide concentrations decreased 36%

The report is a summary version of the longer Air Quality Trends report that EPA has issued in the past. Details are available at www.epa.gov/airtrends.

EPA proposes rule for cooling water intake structures at new facilities

EPA has proposed a new rule intended to protect fish and other aquatic organisms from being killed or injured by cooling water intake structures used by industries. It will establish new requirements to protect the most biologically sensitive areas, including tidal rivers and estuaries and will establish minimum standards for cooling water intake structures at new facilities. Section 316(b) of the Clean Water Act (CWA) directs EPA to ensure that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact. The proposed rule would apply to new facilities that use large amounts of cooling water, primarily facilities in these industries: steam electric power generation, pulp and paper making, chemical manufacturing, petroleum refining, and primary metals manufacturing (including iron and steel making and aluminum manufacturing).

In 1976, EPA published a final regulation implementing CWA section 316(b). However, industry groups challenged the regulation, and the U.S. Court of Appeals for the Fourth Circuit Court returned it for procedural errors in 1977. In 1995, EPA entered into a consent decree with the Riverkeeper and a coalition of other individuals and environmental groups and committed to complete a section 316(b) rule by August 2001. The Court Order, now in effect, required EPA to propose this regulation for new facilities by July 20, 2000, and to propose a regulation for existing facilities by July 20, 2001.

EPA believes this proposal would affect nearly 98 facilities during the next 20 years and would have an annual compliance cost of \$12 million. The proposal would set requirements to help preserve ecosystems near cooling water intake structures at new facilities. Expected benefits include a significant decrease in death or injury to aquatic organisms that would otherwise be drawn into cooling water systems or pinned against structure components at the entrance of cooling water intake.

New EPA deputy administrator appointed

The president announced Aug. 3 his recess appointment of W. Michael McCabe as EPA's deputy administrator. McCabe, from Pennsylvania, served as the regional administrator of the EPA Mid-Atlantic Region, where he directed the implementation of federal environmental programs in the states of Delaware, Maryland, Pennsylvania, Virginia, West Virginia, and the District of Columbia. As deputy administrator, he will function as chief operating officer for the EPA and will work with the EPA administrator to provide agency leadership. The deputy position also serves as the acting administrator in the administrator's absence. McCabe is a Duke University graduate.

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CURRENT REGULATION	NEW REGULATION
<p>Notification. Distribute the “Project Your Family” lead-based paint hazard brochure to all purchasers, occupants, and owner-occupants of pre-1978 housing.</p> <p>Property owners must disclose the presence of lead-based paint and provide prospective buyers/occupants with any existing documentation on known lead-based paint hazards in the dwelling unit, in accordance with Section 1018 of the Residential Lead-Based Paint Hazard Reduction Act of 1992.</p>	<p>Notification. Current requirements continue to apply.</p> <p>The new regulation also requires written notice to occupants informing them of the results of lead hazard evaluation or reduction activities.</p>
<p>Identification of defective paint. Conduct a visual inspection for defective surfaces.</p>	<p>Lead hazard evaluation. Conduct a visual assessment, paint testing, or risk assessment, depending on the activity. May choose to presume the presence of lead-based paint and/or lead hazards.</p>
<p>Treatment of defective paint. Cover surfaces with permanent wall covering, or scrape and repaint the surface.</p>	<p>Lead hazard reduction. Conduct lead hazard reduction activities including paint stabilization, interim controls, standard treatments, or abatement depending on the requirements for the activity type.</p> <p>Safe work practices must be used when performing lead hazard reduction or rehabilitation work that disturbs painted surfaces known or assumed to contain lead-based paint.</p> <p>Conduct clearance to confirm that no lead-based paint hazards remain when work is complete.</p> <p>Conduct ongoing maintenance in some situations.</p>
<p>Ongoing maintenance. No ongoing maintenance requirements.</p>	<p>Ongoing maintenance. Ongoing maintenance is required for some program activities that have an ongoing relationship with the Federal government.</p>
<p>EBL children. EBL requirements apply to all programs.</p> <p>If an EBL child under age six (seven for CDBG) will reside in a unit, test chewable surfaces and treat by: (1) permanently covering surfaces; or (2) removing paint and repainting surfaces.</p>	<p>Child with environmental intervention blood lead level.</p> <p>Tenant-based rental activities require a risk assessment and interim controls or abatement if a child with an environmental intervention blood lead level is identified. Grantees must communicate with state and local health agencies to provide and receive addresses of children with environmental intervention blood lead levels. They must compare information on environmental intervention blood level cases with addresses of families receiving Federal assistance.</p> <p>Rehabilitation and acquisition, leasing, support service and operations activities have no requirements for children with environmental intervention blood lead level.</p>
<p><i>El’s Industrial Hygiene Department provides lead-based paint program management services. For more information about these or any of the other services we provide, please call El at (800) 717-3472.</i></p>	

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disadvantages includes low reliability and dependence on the sensitivity of the wearer to the test agents used, resulting in clearance of respirators that do not adequately protect the exposed worker.

Quantitative fit testing uses numerical measurements to assess the adequacy of a respirator by measuring its fit to the wearer. Advantages to this method of testing include greater accuracy and reliability, as the method does not rely on the sensitivity of the wearer to test agents. However, disadvantages include the use of expensive equipment and the need for highly-trained personnel to provide the fit testing using their fit test mechanisms.

In determining which fit testing method is more appropriate for your employees, keep in mind that the method chosen should provide the

necessary accuracy in meeting your respiratory fit factor requirements. A fit factor is a numerical estimate of the fit of a given respirator to the face of its wearer, specific to the particular make and model. OSHA requires that the type of fit test performed provide the accuracy in fit factor that must be achieved. For example, if your facility is classified as a more hazardous operating environment, requiring greater accuracy to ensure the protective capacity of your respirators, ***you most likely will need to use quantitative fit testing. Regardless the method you choose, the standard mandates that testing be administered annually.***

El’s Occupational Health and Industrial Hygiene departments provide a variety of services that include medical evaluations, respirator fit testing, pulmonary function testing, and indoor air quality monitoring. For more information about these or any of the other services we provide, please call El at (800) 717-3472.

OSHA finalizes self-audit policy

Government safety inspectors will not routinely request that employers who voluntarily evaluate work sites for potential safety and health problems provide the findings to the government during safety and health inspections, the Occupational Safety and Health Administration (OSHA) announced July 27.

In formalizing the policy first announced this past October, OSHA said that a voluntary evaluation — or “self-audit” — will not be used to justify a citation if the hazard has been corrected and the employer has taken steps to prevent its recurrence. OSHA also said that a voluntary self-audit, when coupled with a “good faith” attempt to correct an existing hazard, will eliminate a potential “willful” violation of the Occupational Safety and Health Act of 1970 and will result in penalty reductions.

“We’re formalizing this policy because we want employers to find and fix hazards and not fear that we’ll use this information against them,” OSHA Administrator Charles N. Jeffress said. Jeffress said that only in rare cases, such as when an employer blatantly ignores or refuses to correct hazards likely to result in serious injury or death, could self-audits be used as the basis for issuing a willful citation.

Although not required, OSHA took public comment on last year’s draft. The policy, effective immediately, appeared in the July 28 *Federal Register*. Suggestions that OSHA included in this final policy are:

- Expanding the definition of “self-audit” to include evaluations conducted by a third party
- Broadening the types of people who may conduct self-audits to include competent employees and management officials;
- Ensuring that OSHA personnel are fully trained in this policy so that it will be consistently applied
- Allowing employers to provide self-audits report as evidence of “good faith” attempts to fix hazards

El’s Occupational Health Services Department provides self-audit consulting services, among many other services. For further information, contact El at (800) 717-3472.

Upcoming Conferences

October

- 10-13 **N.C. / S.C. Association of Occupational Health Nurses**, Spring Maid Beach Resort, Myrtle Beach, S.C., (828) 496-3221
- 18-20 **American Industrial Hygiene Association, Carolinas Section**, Holiday Inn, Mt. Pleasant, SC (704) 342-6163
- 25-27 **Carolinas Air Pollution Control Association**, The Wyndham, Myrtle Beach, S.C., (919) 859-3926

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