The Newsletter of the Office of Environmental, Health & Safety Compliance *March/Spring 2007*

V.I.E.W.S.

VIEWS & INFORMATION ON ENVIRONMENTAL & WORKPLACE SAFETY

OSHA Requirements for Employees at Brownfield Sites

by
John Wuthenow CIH
Bureau of Environmental Planning and Analysis

Brownfields are defined as a real property, the expansion, redevelopment or reuse of which may be complicated by the presence or potential presence of a hazardous contaminant. A key characteristic of a Brownfield is that it is generally targeted for redevelopment. The designation of a site as a Brownfield does not necessarily mean that it is contaminated; it can merely mean that the site has not been certified "clean" due to past industrial or commercial use. The hazards these sites pose tend to be restricted to on-site workers and not individuals living or working in the vicinity.

Generally, Brownfield sites cannot have a level of contamination that would place them on either the National Priority List (NPL) or a State Priority List. Sites where levels of contamination do not warrant inclusion on either type of priority list are not likely to cause immediate or serious health effects to individuals living or working around them, although they may pose hazards for employees conducting work on the site. Brownfield sites are generally not highly contaminated; however, the types and levels of contaminants present can vary considerably. When contaminants are present, they may be located in surface soil, buildings, containers (drums, underground tanks), subsurface soil, or ground-water aquifers. Environmental contaminants usually found at studied sites have included petroleum hydrocarbons, construction debris with lead paint or asbestos containing materials, treated wood containing creosote, cadmium, chromium, or arsenic, and containers of abandoned industrial chemicals.

Brownfields are deemed hazardous waste sites if the site meets the Occupational Safety and Health Administration (OSHA) definition of an uncontrolled hazardous waste site. HAZWOPER may also apply if the government Brownfields or Voluntary Clean-up Program (VCP) requires compliance by participants with the standard. New York State has often allowed clean-ups to proceed under these programs to avoid the stigma of being

Inside this issue:

Department of Environmental Protection

Emily Lloyd
Commissioner

Office of Environmental, Health & Safety Compliance

Gerould J. McCoy
Assistant Commissioner, Environmental, Health & Safety Compliance

59-17 Junction Blvd.
10th Floor
Flushing, NY 11373

Phone: (718) 595-4782

Editor
Kevin Z. Moore

Contributors

Environmental Coordination Committee

Health & Safety Coordination Committee

Training Coordination Committee

labeled a hazardous waste site. OSHA's Hazardous Waste Operations and Emergency Response Standard (HAZWOPER 29 CFR 1910.120) applies to work done at a Brownfields site if there is potential exposure to hazardous substances as a result of clean-up operations on a site that falls within the scope of the standard. Clean-up operations include procedures that remove, contain, stabilize, or process hazardous substances in order to make the site safer for people and the environment. Such operations might involve excavating and removing contaminated soil or constructing engineering controls to contain site contaminants.

Clean-up operations fall within the scope of HAZWOPER if they are conducted on a government-identified (federal, state, or local) uncontrolled hazardous waste site or a Resource Conservation and Recovery Act (RCRA) corrective action site. While there is some room for interpretation of the definitions, OSHA provides a bottom line test to determine if HAZWOPER requirements apply. That is, HAZWOPER does not apply to workers in areas that have been characterized by a competent person as having no reasonable possibility of exposure. If this is the case, *other* OSHA standards may apply.

Safety and health training required for site workers and supervisors at Brownfields will depend on the activities these employees will perform, as well as whether or not the site is covered by the HAZWOPER standard. If you have determined that your site is covered by HAZWOPER, then you must adhere to applicable training requirements. HAZWOPER requires that site workers and supervisors attend a minimum number of hours of initial training and annual refresher training. It provides a recommended outline for these classes in the non-mandatory appendix to the policy. Initial HAZWOPER training requirements are based on the frequency and level of exposure that site employees might encounter. Employees who need initial training must also receive eight hours of on-site field experience under the direct supervision of a trained, experienced supervisor. Site supervisors need additional training. Requirements for 40-hour or 24-hour initial training are possibilities too. Each site worker and supervisor must receive eight hours of refresher training each year to review critical health and safety requirements and procedures and to introduce new or revised requirements and procedures. Refresher training, however, must be geared toward a worker's or supervisor's site responsibilities.

Once on site, employees on Brownfield's covered by HAZWOPER also need site-specific training and a site-specific Health and Safety Plan (HASP). Training should familiarize employees with the HASP and the exposure controls appropriate for each site task. Training might include, as applicable, site-specific emergency response procedures, site control procedures, levels and types of personal protective equipment, confined space entry procedures, heat and cold stress awareness, air monitoring requirements, decontamination procedures, and any other applicable site requirements. Site-specific training may be conducted throughout the project as site tasks and conditions change.

Reduced employee exposure to hazardous substances can reduce site-specific training; fewer hours of HAZWOPER training are required if employees work in areas that do not have the potential for exposure above the Permissible Exposure Limits (PELs) or other established limits. Where employee exposure levels are low, the procedures for site control, air monitoring, and decontamination will be simpler and medical surveillance programs may not be required. Overall, since controls are in proportion to hazard levels, where hazard levels are reduced, the controls are proportionally reduced.

Employees at Brownfields not covered by HAZWOPER will need to receive training consistent with the hazards and the OSHA requirements associated with their tasks. Training that may apply includes the use and selection of personal protective equipment, hazard communications, hearing conservation, confined space entry, among others. In many cases, employees will have received this type of training to conduct their routine tasks at other work locations; however, they will need site-specific information that describes how these training topics apply to the specific conditions on site.

Guarding In-Ground/In-Floor Door Openings
NYC DEP Guidance
Effective 2/1/07

Overview

The following information provides guidance for guarding against potential fall hazards created by open in-ground or in-floor doors or hatches that are not protected by standard railings. Such doors or hatches are common at locations such as pump stations, well stations, shafts and metering pits and may be located in unguarded residential and public areas (e.g. sidewalks, roads, parking lots, etc.). The openings are generally covered by lockable flush-mounted stainless steel covers of adequate closed strength with shocks (to aid in opening the doors) and a locking mechanism to hold the door in the open position. These types of doors are commonly referred to as Bilco doors because many are manufactured by Bilco.

Definitions

Floor opening– An opening measuring 12 inches or more in its least dimension, in any floor, platform, pavement, or yard through which persons may fall; such as a hatchway, stair or ladder opening, pit, or large manhole. Floor openings occupied by elevators, dumbwaiters, conveyors, machinery, or containers are excluded from 29 CFR 1910.23.

In-ground door/opening – Any door in the ground which, when opened, is a "floor opening" (see definition) subject to 29 CFR 1910.23 requirements.

In-floor door/opening – Any door in a floor which, when opened, is a "floor opening" (see definition) subject to 29 CFR 1910.23 requirements.

Standard railing – A vertical barrier erected along exposed edges of a floor opening, wall opening, ramp, platform, or run- way to prevent falls of persons (with standard strength and construction).

Standard strength and construction – Any construction of railings, covers, or other guards that meets the requirements of §1910.23.

Regulatory Requirements

Based upon the classification of the in-ground or in-floor openings (infrequently used), the following OSHA regulation requires either a standard railing or someone constantly attending the opening while the door is open:

OSHA §1910.23(a)(5)

Every pit and trapdoor floor opening, infrequently used, shall be guarded by a floor opening cover of standard strength and construction. While the cover is not in place, the pit or trap opening shall be constantly attended by someone or shall be protected on all exposed sides by removable standard railings.

Methods of Compliance for Unguarded Openings

The regulatory requirement cited above can be satisfied by using one of the following methods:

- ⇒ Requiring an attendant to constantly monitor any open in-ground or in-floor door without standard railings, communicating this requirement effectively to all staff and supervision responsible for entering such doors, and verifying implementation;
- ⇒ Using a mobile temporary railing system that meets the requirements for standard guardrails with appropriate warning signs to prevent people in the area from falling into the opening;
- ⇒ Using light-weight drop-in gratings that protect the openings; or
- ⇒ Constructing or modifying the door opening so that it has "pop-up" railings that meet regulatory requirements.

Equipment Options
Portable Railings

A variety of portable railings meeting the requirements for standard OSHA (29 CFR 1910.23) railings are available. The drawback to the portable railings is that the bases are heavy to handle; however, devices are available to help move the bases. A representative example of a portable railing is shown at right (source: www.bluewater-mfg.com).

Light-weight Grating

Many manufacturers such as Bilco offer a light-weight grating that fits into the angle supports of the door opening. Bilco's fall protection grating is constructed of corrosion resistant fiberglass and includes lift assistance and an automatic hold open arm for ease of operation and user safety. Bilco offers its fall protection grating in standard and special sizes and kits can be supplied to retrofit the product onto Bilco doors in the field.

Pop-up railings

For new installations or replacements of in-ground door openings, manufacturers offer doors with integral pop-up railings, such as the examples below.

THE OEHSC WELCOMES:

SABRINA T. ARJUNE joins the OEHSC Training Unit as an EHS Training Specialist. In this position, she will serve as the Employee Concerns Liaison (ECL) Coordinator as well as conduct EHS trainings for the various bureaus throughout DEP. Previously, Ms. Arjune was employed at the NYC Department of Education where she developed curricula, taught multi-generational audiences, and implemented technology in the classroom. She holds a B.A. in English with a minor in Secondary Education.

LEROY KNIGHT joins OEHSC as an Environmental Auditor, part of the team responsible for ensuring that all DEP facilities are in compliance with federal, state or local regulations. Before coming to DEP, Leroy was employed by the Dept. of Health & Mental Hygiene for nine years. He began there as an Inspector with the Lead Poisoning Prevention Program where he performed initial and compliance inspections and education outreach. Later, he transferred to the Bureau of Day Care where he also performed inspections and investigations. He also assisted with recommendations on new policies. Subsequent to his being promoted to Supervisor within the Bureau of Pest Control responsible for managing the Mayor's Rodent Initiative and the Mayor's Rodent Indexing programs in the Bronx, he became the DOHMH Pest Control liaison for the ongoing Croton Water Filtration project working closely with DEP to assess the Rodent problem in the surrounding neighborhoods. Later promoted to Assistant Director of the Office of Vector Surveillance and Control, he worked with the Director and other support staff to control the Mosquito problem and prevent the spread of West Nile Virus in New York City.

SEENA SWEET joins the OEHSC Training Unit as an EHS Training Specialist. Before coming to DEP, she served as a Staff Developer, Teacher Trainer, and Program Coordinator at the Queens Borough Public Library. She taught ESOL (English to Speakers of Other Languages) to adults in New York City and overseas. With OEHSC, Seena specializes in Right-to-Know Training, a course of instruction in workplace safety. For her, the classroom is a place where information relevant to on-the-job safety may be given and exchanged. In her view, a class is an informed conversation about workplace safety in which employees and instructor/trainer engage in discovering and discussing environmental, health & safety issues relevant to the safest performance of their duties here at DEP. She holds a B.A. in English Language Arts from Hunter College and a TESOL Certificate from the New School University of New York.

SHALIM UDDIN comes to DEP as an Environmental Auditor. He is a graduate of Long Island University, where he received a Master of Science degree in Environmental Studies in 2005. He also attended Environmental Health & Safety courses at Hunter College where he studied Air Quality, Occupational Safety & Health, Industrial Ventilation, Environmental Occupational Toxicology, Noise & Radiation, and Environmental Investigation & Remediation. As a research scientist at DEP, he conducts environmental, health and safety audits of facilities and/or operations to ensure compliance with federal, state, or local regulations and agency policies; prepares technical reports that identify deficiencies and provide recommended corrective actions; researches local, state, and federal laws and regulations to determine applicability to facilities and/or operations, assist in the agency's research efforts in health and safety issues and other research projects; makes and records observations on the progress of research investigations and evaluates data; conducts workplace assessments/audits/investigations and understand industrial process, and assists directors with research, reports, presentation, data gathering, filing and various technical and administrative tasks. Shalim is a member of the American Indoor Air Quality Council (IAQ) and the American Industrial Hygiene Association.