THE NEWSLETTER OF THE OFFICE OF ENVIRONMENTAL, HEALTH & SAFETY COMPLIANCE MARCH 2009

VIEWS & INFORMATION ON ENVIRONMENTAL WORKPLACE SAFETY

# VIEWS

# Sidewalk Shed Incident at Lefrak

### In From The Field

Have you seen something related to EHS around DEP? Penny Theodorellys from BEC submitted this photo to OEHSC on the recent sidewalk shed incident, which prompted us to feature it in V.I.E.W.S. If you have photos of an EHS event from any DEP facility, why not send them with a brief explanation of what they show to Kevin Moore, V.I.E.W.S. editor? If chosen, they will be featured in a future issue of V.I.E.W.S., and you will receive a free surprise gift. Congratulations to Penny for being our first winner!

Recently, DEP employees at Lefrak observed a fallen sidewalk shed on the third floor parking area. Due to high winds, the shed toppled over and damaged several DEP vehicles as well as some windows in a DEP office. Fortunately, no one was injured.

However, many workers and pedestrians do get hurt in sidewalk shed accidents, almost all which can be prevented by proper engineering, installation, and maintenance of the shed.

For this third floor incident, it appears that the sidewalk shed was not properly protected or installed to withstand the high winds. Generally, the following guidelines apply to the installation of sidewalk sheds and scaffolding:

- Free-standing scaffolds and sidewalk sheds must meet code requirements for overturning and sliding.
- At points of anchorage, the base building elements must be checked for local failure.
- All scaffold components shall be designed to be capable of withstanding, without collapse, four (4) times the maximum loads.

## INSIDE



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**MARCH/SPRING**
**VOL. 7: ISSUE 1**

# Environmental Health & Safety Train-the-Trainer Initiative

**Doreen J. Johann** Director of Compliance Support, NYC Department of Environmental Protection

Environmental Health and Safety (EHS) training is important for employers and employees. Such training, when effective, ensures a safer, healthier, and more productive working environment, no matter what that environment might be. Although we are certain of the importance of EHS training, we've asked ourselves whether you have ever wondered what *really* is needed to conduct an effective EHS training session. It is not as simple a task as you might imagine. For example, trainers must prepare their presentations so they are accurate, informative, and interesting. They must write and produce informational materials for distribution to specific audiences, ensure that equipment such as computers and projectors is working properly, prepare monthly training schedules, coordinate with each bureau's EHS staff, secure a suitable location for the training session, and, on the day of the class, distribute sign-in sheets to register and document attendance. There are also important factors trainers must consider to communicate effectively. In addition to having the knowledge and certification to teach the course, trainers must be confident that the course content and presentation are appropriate to each audience.

In addition, there are psychological issues to confront. Studies show that first-time trainers have a higher level of anxiety than do seasoned trainers and therefore need to become comfortable in their role. Then, too, seasoned trainers may know their presentations backward and forward, but that is because they give the same training over and over and may not consider updating their material. They risk presenting the same material the same way even if their audiences and information change.

The list of goals below shows a few of the responsibilities trainers should consider to prepare themselves to be effective. To assist with these efforts, the Office of Environmental Health & Safety's Compliance Support Division has created an EH&S "**Train-the-Trainer**" (**TTT**) module which will be presented agency wide. The **TTT** audience will include employees who act as trainers in any capacity for their respective bureaus or will be conducting training in the future.

**The goals of the Train-the-Trainer module are to:**

- Have a better understanding of adult learning theory, and
- Understand how to conduct an effective training.

**To achieve these goals, the module covers the following topics:**

- Organization/Preparation
- Adult Learning
- Knowing Your Audience
- Classroom Management
- The Impact of Diversity
- Effective use of Humor
- Trainer's Do's and Don'ts
- Examples of EHS Activities
- Dealing with Fear
- Asking Questions
- Trainer Resources

The **TTT** module features techniques to handle the input of different personalities in a classroom setting such as unexpected questions or distracting situations that may arise and how to teach technical information in a user-friendly way to ensure that participants come away with a sound understanding of how to effectively communicate safety procedures.

The **TTT** training module will be offered beginning in March 2009. Dates for the **TTT** presentation will be sent out to bureau training coordinators and bureau EHS directors to identify people to receive this specialized training.

# Remediation Tracking System/RTS

**David Nadler** Director of Quality Assurance, OEHSC, RTS Administrator

The Agency has rolled out its **Remediation Tracking System** (RTS), a web-based application that tracks remedial activities in all bureaus. Developed by OIT and administered by OEHSC, RTS is intended to be used by all DEP personnel as an informational database.

Check this system if you are going to visit a facility to see if any remediation projects are in process. This will help you know which areas of the facility you should avoid. For example, it will inform you if there is an excavation underway removing PCB-contaminated soil.

The **RTS** can be found on **Pipeline** on the EHS Index (home) page (right column) by clicking the **Track Online** link in the **Remediation Tracking** column. There, you will be able to look through the database and export it to Excel on your desktop. Some of the data fields of interest include: Contract Number, Bureau, Facility, Contact Names and Numbers, Contaminants, and Exclusion Zone Comments. Certain people from the bureaus have been assigned to enter their bureau's data.

If you have questions about using this application, contact David Nadler, the Remediation Tracking System Administrator.

Keep in mind to always check if there are any specific locations that are off limits to visitors that may not have been included in the RTS from your Bureau EH&S office and/or the specific facility.

# E-Waste: What it is and what to do about it

Electronic waste (e-waste) accounts for 70 percent of the overall toxic waste that is currently found in landfills. In addition to valuable metals like aluminum, electronic equipment often contains hazardous materials such as lead and mercury and must be disposed of with caution and care. When placed in a landfill, hazardous materials, even in small doses, can contaminate the soil and underground water

Below is a breakdown of the toxic materials found in your average electronic device. In just 2005, almost two million tons of e-waste ended up in landfills. While toxic materials comprise only a small amount of this volume, it doesn't take much lead or mercury to contaminate an area's soil or groundwater. Keep this in mind when you're figuring out what to do with those old electronic devices.

**Televisions**

Back before there were plasma screen and liquid crystal display (LCD) tubes, we were all watching our Super Bowls and sitcoms on cathode ray tubes (CRT). The CRT model provided room for all your switches and wires in a box behind the screen, but it also stored a lot of lead. Approximately 20 percent of CRTs are comprised of lead, equivalent to between four and eight pounds per unit. Combine this with the fact that the Federal Communications Commission (FCC) is going to require all televisions to run a digital signal by June 2009, and we could be looking at a lot of lead headed for landfills. Even the smallest amounts of lead can be a serious issue, and we're talking about eight pounds per unit on average.

**Cellular Phones**

While your cellular phone may not contain as much toxic material as larger electronic devices, its shelf life is only about 18 months for the average consumer. With hip new products coming out all the time, it's estimated there are over 500 million used cell phones ready for disposal. Cell phone coatings are often made of lead, meaning that if these 500 million cell phones are disposed of in landfills it will result in 312,000 pounds of lead released. But, possibly, the most hazardous component of the cellular phone is the battery. Cell phone batteries were originally composed of nickel and cadmium (Ni-Cd batteries). Cadmium is linked as a human carcinogen that causes lung and liver damage. Alternative batteries contain potentially explosive lithium or toxic lead.

**Computers**

Besides the presence of lead in computer monitors, there are other toxic elements to consider when recycling a PC or Mac. Many laptops have a small fluorescent lamp in the screen that contains mercury, a toxic material when inhaled or digested. Mercury is also contained in computer circuit boards, which also include lead and cadmium. Circuit boards can also feature batteries made of mercury, as well as mercury switches.

What happens after you deliver the goods, in this case the "bads" to an electronic waste recycling center after unloading your old computers, monitors, cell phones and televisions?

Many of us have probably seen a cube of aluminum cans ready to be reformed into new aluminum cans within 60 days, but e-waste is not composed of just one material. Electronic devices are constructed with lots of different materials, so the recycling of e-waste is a more complex process.

**Recycling E-Waste**

To understand the e-waste recycling process, one must first realize that e-waste recyclers (and in general, all recyclers) are interested in both saving these devices from landfills while getting the most value out of these materials. Electronics such as computers and televisions are made with some valuable metals, including copper and gold, which can be sold and then reused in alternative capacities.

From an environmental standpoint, the fact that less valuable materials from electronic items are being recycled and reused is far more important than the fact that recyclers are making money from the e-waste recycling process.

In general, as much as 99 percent of all materials from electronics are recycled, reused in a different capacity, or sold off. The vast majority of these materials are used for new electronic items because some of the material, the plastic, for example, is the right grade for electronic devices. This plastic also can be used for other products, such as plastic components found in the manufacture of lighters because it is the right grade to begin with.

**Putting the Waste in E-Waste**

If 99 percent of the material is recycled, that still leaves a small percentage that will end up in the landfill because it has no reuse value. So what materials fall into this category?
One example is wood paneling on some of the older models of television sets, which has no value to the e-waste collector. This is certainly not an excuse for those with wood paneled TVs to not recycle, as one percent waste is still much better than 100 percent. The good news is that many of the televisions in circulation these days don't have wood paneling on the front.

**Hazardous Waste Disposal**

The other big issue regarding e-waste recycling is the end result for its hazardous materials, including lead and mercury. While e-waste only accounts for two percent of America's garbage in landfills, it accounts for 70 percent of the toxic garbage.

For e-waste recyclers, removing the toxic materials is just as important as removing the most valuable materials like gold and copper. To remove the lead you'll find in computer monitor glass, the glass will be placed in a furnace where the lead can be taken out. Circuit boards are sent to refineries so the mercury can be removed professionally

Recycling is the third R of the three R's: Reduce, Reuse, and Recycle. Recycling takes a product or material at the end of its useful life and turns it into a usable raw material that can be made into another product.

**Source** http://green.msn.com/Home/How-To-Properly-Dispose-Of-Hazardous-Products/

# Celebrating Workplace Eye Health and Safety Month
## Frequently Asked Questions

***What is eye and face protection?***
It is protective equipment such as spectacles, goggles, face shields, or welding shields that are designed to protect the wearer's eyes and face from exposure to a variety of hazards in the workplace.

***When is the use of eye and face protection required?***
The Occupational Safety and Health Administration's (OSHA) eye and face protection standard, **29 CFR 1910.133**, requires the use of eye and face protection when workers are exposed to eye or face hazards such as flying objects, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation.

***Can any eye and face protection be used?***
No, eye and face protection must be selected on the basis of the hazards to which the worker is exposed (i.e., impact, penetration, compression, chemical, heat, harmful dust, light radiation, or a combination of these hazards).

***When must an employer provide eye and face protection for employees?***
Employers must provide eye and face protection for employees whenever they are exposed to potential eye injuries when performing their work, if work practice or engineering controls do not eliminate the risk of injury.

***Is training required before eye and face protection is used?***
Yes, training must be provided to employees who are required to use eye and face protection. The training must be comprehensive, understandable, and repeated as needed (see DEP's Personal Protective Equipment (PPE) policy for details). This training should include, at a minimum:

- Why the eye and face protection is necessary and how improper fit, use, or maintenance can compromise its protective effect.
- Limitations and capabilities of the eye and face protection.
- Effective use in emergency situations.
- How to inspect, put on and remove.
- Maintenance and storage.
- Recognition of medical signs and symptoms that may limit or prevent effective use.
- General requirements of OSHA's eye and face protection standard, **29 CFR 1910.133**

***If employees wear eyeglasses with prescription lenses, are these considered eye protection?***
No. Eyeglasses designed for ordinary wear do not provide the level of protection necessary to protect the eyes against specific workplace hazards.

***Can employees wear glasses while wearing eye and face protection?***
Yes, special care must be taken when choosing eye and face protectors for employees who wear eyeglasses with corrective lenses which include the following:

- Prescription spectacles, with side shields and protective lenses meeting the requirements of **ANSI Z87.1**, that also correct the individual employee's vision.
- Goggles that can fit comfortably over corrective eyeglasses without disturbing the alignment of the eyeglasses.
- Goggles that incorporate corrective lenses mounted behind protective lenses.

***What maintenance and care is required for eye and face protection?***
It is important that all eye and face protection be kept clean and properly maintained. Cleaning is particularly important where dirty or fogged lenses could impair vision.

Note: Eye and face protection equipment should be inspected, cleaned, and maintained at regular intervals so that it provides the required protection to the worker. It is also important to ensure that contaminated equipment that cannot be decontaminated is disposed of in a manner that protects employees from exposure to hazards.

**At DEP, everyone is responsible for safety. If you or anyone on your team is concerned about your working conditions, it's okay to ask your supervisor or your bureau's EH&S liaison how they can help. If you've still got questions, you can call the EH&S Employee Concerns Hotline. It's DEP's responsibility to acknowledge and fix unsafe situations, procedures, and practices. With your help, we'll not only get the job done, we'll make it safer for ourselves, our coworkers, our families, and our city.**

**CALL (800) 897-9677 OR SEND A MESSAGE THROUGH PIPELINE. HELP IS ON THE WAY.**

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