The Safety Chronicle

Inspection by the Department of Environmental Protection (DEP)

By: Paula Sweitzer

On November 18, 2014, The DEP conducted an inspection of our Radiation Producing Machines and our Materials License. The inspection started with a thorough review of our records and how we manage the program. This review was conducted in my office where we reviewed electronic and paper files. Next was the physical inspection. We visited all the rooms that contained our radiation producing machines (SEM lab, TEM lab and the X-ray lab) in Mellon Hall. Then we visited every lab that had a radioactive inventory (this included sealed sources and unsealed sources) and our radioactive waste room. There was a brief close-out meeting and we were done. The entire inspection lasted about five hours. The inspector was very impressed with the organization of the program and there were no violations to report! Great news.

What’s New with OSHA in 2015?

By: Ryan Reilly

Starting January 1, 2015 states under Federal OSHA must comply with the new updates to recordkeeping. Previously a fatality or multiple hospitalizations (3 or more employees) was the only requirement for reporting within 24 hours. Under the new rule there are updated lists of industries that are exempt from OSHA injury and illness records. Furthermore the rule states all employers must report: work related fatalities within 8 hours, all work-related inpatient hospitalizations, all amputations and all losses of an eye within 24 hours.
Hot Work

By: Ryan Reilly

The sparks flying from grinders and torches used for cutting, brazing, and welding cause millions of dollars of property loss yearly. Imagine all the laborious effort of design and construction lost in smoke due to inadequate hot work methods. The average hot work loss is more than $1.4 million per incident. In a concerted effort to reduce property loss and minimize fires, training initiatives for alternatives to hot work, permitting procedures and fire monitoring are being implemented through the new MyLEAD system opening January 26, 2015. Many alternatives to hot work can include bolting instead of welding, hydraulic shears or reciprocal saw rather than a torch, threaded pipe vs. torch-soldered joints, hand filing in place of grinding, and roof covering systems that are not torch-applied. If hot work is necessary for operations supervision is critical. Controls such as the 35-foot rule allow isolation of combustibles from open flames and sparks. Other risk reduction controls include: good housekeeping; covering of floor openings with fire-resistant tarpaulin, sealing ductwork; protecting unmovable combustibles with metal shielding or tarpaulin; and monitoring of atmospheres for accumulation of combustible gas mixtures. A hot work permit is a tool; which when used properly covers essential fire safety precautionary measures.

Vehicle Safety & Survival Kit for Your Car

By: Bob Haushalter

Winter is here and along with it cold weather, snow and freezing rain. Although we are not traveling on the rural roads of North Dakota, we should be prepared for black ice and the hazards that follow. Remember last year the November 22, 2014 car pile ups in the Pittsburgh area and surrounding counties? Mostly due to black ice conditions. Or the February 14, 2014 car pile-up on the turnpike in eastern PA. This included over 100 vehicles and motorists stranded for hours.

If you plan on doing some traveling this winter, especially if you travel on barren back roads, you should plan on winterizing your vehicle and include a winter survival kit. The kits can be purchased or you can make your own. Listed below are a few ideas and recommendations:

Winterize Your Vehicle

Make sure your gas tank is full and your cell phone charged (roads could be backed up for hours)

Have a mechanic check your vehicle to make sure it is operating properly. Items to inspect would be: antifreeze levels, battery and ignition system, brakes, exhaust system, fuel and filters, heater and defroster, light and flashing hazard lights, oil, thermostat, windshield wiper equipment and tires.

But remember, even the best tuned up vehicle can slide into a ditch.
Safety Board

By: Paula Sweitzer

EHS has started a Safety Board in the Bushinski Building. This board is to be used by the supervisors and managers in the Facilities Management Department. The Safety Board will be used as a communication avenue and EHS will provide updates as necessary.

Currently the Safety Board has information pertaining to Confined Space Entry, Hotwork, Red Tag, Upcoming Trainings, the Accident/Incident Report, etc. Please let us know if you have any suggestions for the board.

Survival Kit For Your Car

Whether the survival kit is Pre-made or you make your own you should consider including the following items:

- A First Aid Kit and necessary medication in case you are away from home for a prolonged time (this should be in your car year round)
- Blankets or sleeping bags
- Spare winter clothes such as mittens, coats, socks, and hats
- Plastic bags for sanitation
- Canned fruit, nuts, and other high-energy foods (include a manual can opener)
- Bottled water for each person and pet in your car
- Jumper cables
- Flashlight and fresh extra batteries (cold weather drains batteries faster)
- AM/FM radio to listen to traffic reports and emergency messages
- Cat litter or sand for better tire traction
- Shovel
- Ice scraper with brush
- Flares or reflective triangle

Brightly colored cloth (ideally red) to tie to the antenna or hang out a window

What does a light colored car, in a ditch, in a snow storm look like? Nothing. People may pass you and not even notice. Be prepared!!
Fire Safety with Metals Extinguishers

By: Ryan Reilly

**FIGHTING FIRES: WHEN IS IT SAFE?**

- Alarm has been pulled (this action automatically activates the response of the local fire department and our Public Safety; therefore no other calls need to be made)
- Fire is small and contained (smaller than you)
- You can avoid the smoke
- Exit is clear and at your back

Extinguisher is nearby and you have been trained to use it (hands-on fire extinguisher training is available each September)

**OPERATION OF CLASS D (METALS) EXTINGUISHER**

Persons expected to use this extinguisher should be trained in its operation and in the proper fire-fighting technique. The basic operating instructions are contained in the pictogram portion of every extinguisher nameplate (label). The following elaborates on these instructions for metals extinguishers.

- Hold the extinguisher upright. Twist and pull the ring pin snapping the plastic seal.
- Extend the bell shaped nozzle over the fire.
- Keep the extinguisher upright. Squeeze the lever to discharge the extinguisher. Cover all burning metal with dry powder until the fire is extinguished.
- **NOTE:** If greater range is required, disconnect the wand assembly at the quick connect and use the hose to lob the chemical onto the fire. Be careful not to spread the fire surface when using this technique.
- Reapply powder to visible hot spots.
- To avoid reignition, allow metal to cool before cleanup.

Evacuate and ventilate the area immediately after use. The fumes and smoke from any fire may be hazardous and can be deadly.

For more information on metals fire extinguisher operation see the following link for a video

“Resources tab”, “Videos”, “Stop It Burning”, at time 12:46  [www.amerex-fire.com](http://www.amerex-fire.com)

You Tube Link: [https://www.youtube.com/watch?v=sJ5TlaYPGs](https://www.youtube.com/watch?v=sJ5TlaYPGs)
Chemical Label Components .... What HazCom Labels Must Contain

Reference: Business & Legal Reports, 2014

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party.

Product identifier can be (but is not limited to) the chemical name, code number, or batch number. The manufacturer, importer, or distributor can determine the appropriate product identifier, but the same identifier must appear on both the label and in Section 1 of the SDS.

Signal words are used to communicate the severity of a chemical’s hazard: “Danger” for more severe hazards; “Warning” for less severe hazards.

Hazard statements describe the nature of a chemical’s hazards and their severity. All applicable hazard statements must appear on a label, and chemical users should always see the same statement for the same hazards no matter what the chemical is or who produces it.

Precautionary statements describe preventive measures chemical users should take to reduce the risk of handling the chemical. There are four types of precautionary statements: prevention to minimize exposure, response in case of accidental spillage or exposure, storage, and disposal.

Supplementary information is any additional information a chemical manufacturer or distributor decides to provide, such as hazards not otherwise classified on the label, recommended personal protective equipment, directions for use, expiration date, or fill date. This section must also state the percentage of ingredients of unknown acute toxicity when present in a concentration of 1 percent or higher.

Pictograms consist of a symbol on a white background framed within a red border, and each represents a distinct hazard. There are eight mandatory pictograms.

Think Twice When Walking On Ice!

Reference: Midwest Employers Casualty Company, 2014

Winter weather conditions such as snow, sleet, and ice all pose a risk for slip and fall injuries. Keep yourself safe by following these safety tips:

- Wear footwear with good traction or use ice cleats.
- Walk like a duck by slowing down and taking small steps.
- Scan ahead and be aware of where you step.
- Remove snow from your shoes before entering a building.
OSHA’s Top 10 Most Frequently Cited Standards for FY 2014:

1. Fall protection in construction (29 CFR 1926.501): 6,143 violations. Common mistakes include failing to provide fall protection to employees working at heights, unprotected sides and edges, failing to use fall protection equipment correctly, and failing to provide protection from falling objects.

2. Hazard communication (29 CFR 1910.1200): 5,161 violations. Common mistakes include failing to have a written program, failing to have safety data sheets (SDSs) for each chemical in the workplace, labeling mistakes, and lack of employee training, including the hazards of chemicals in the workplace.

3. Scaffolding in construction (29 CFR 1926.451): 4,029 violations. Citations often stem from scaffolds that are not fully planked, a lack of portable or hook ladders to access scaffold platforms, loading scaffolds in excess of their capacity, and failing to protect employees from fall hazards.

4. Respiratory protection (29 CFR 1910.134): 3,223 violations. Lack of a written program is the most common citation. Other common mistakes include not performing a medical evaluation on employees who must wear respirators, failing to select and provide a respirator appropriate for the activity, failing to conduct fit testing, and failing to train employees.

5. Lockout/tagout (29 CFR 1910.147): 2,704 violations. Many citations are issued for the lack of a hazardous energy control program. Other mistakes include failing to apply locks and tags as necessary and failing to remove unauthorized employees from the area during service and maintenance.

6. Powered industrial trucks (29 CFR 1910.178): 2,662 violations. Lack of operator training is the most common pitfall. Other mistakes include forklifts that are not in safe operating condition and modifications and additions that are not approved by the forklift manufacturer. Industries that frequently violate this standard include warehousing and storage and machine shops.

7. Electrical, wiring methods (29 CFR 1910.305): 2,490 violations. Citations often occur when flexible cords are used in place of fixed wiring, conductors enter boxes unprotected, employees are exposed to live contacts, and circuit boxes are not designed to prevent moisture from entering.

8. Ladders in construction (29 CFR 1926.1053): 2,448 violations. Common ladder hazards include using a ladder not designed for the load it is carrying, using extension ladders that do not provide enough overhang at the top to ensure stability, and using an inappropriate type of ladder for the job.


Reference: Business & Legal Resources, 2014
Chemical Label Components Quiz

1. The product identifier on a GHS label identifies the chemical supplier
   __ True   __ False

2. The signal word on a GHS label indicates:
   a. Weight of container  b. Severity of hazard  c. Expiration date for chemical

3. The product identifier must be cross-referenced to the SDS
   __ True   __ False

4. The word “Warning” on a GHS label means the chemical is more hazardous than a chemical
   labeled with the word “Danger.”
   __ True   __ False

5. The hazard statement on a GHS label identifies first-aid and emergency information.
   __ True   __ False

6. Precautionary statements indicate:
   a. Nature of hazard  b. Degree of hazard  c. Measures to minimize exposures