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Global Warming and Poison Ivy

Mark Banister

Just when you thought you heard everything bad about the increasing levels of carbon dioxide in our atmosphere comes this news from Chemical & Engineering News. Poison ivy grown in atmospheres where the CO₂ levels approximate what is expected in the year 2050 (assuming current increases continue) was found to not only grow faster but also produce a more noxious mixture of irritants than it does presently. Growth rates were two and a half times greater than today's plants and the chemicals were more irritating. Even though in 2050 I expect to be closer to waiting for Willard Scott to announce my 100th birthday on the Today Show than to being exposed to poison ivy, this still indicates a disturbing result of today's climate and atmosphere changes.

Poison ivy even today is nasty enough stuff. The problem is an oil produced by the plant called urushiol, which is so potent that one billionth of a gram is enough to induce a rash in a human. Worse yet, the oil remains "active" on a surface for up to five years!

One myth associated with poison ivy is that scratching spreads the rash. The blisters themselves do not contain the oil and scratching should NOT spread the rash unless there is still oil on your skin. A common thing heard about poison ivy that IS true is that you should never burn it. The oil can become airborne and cause reactions in people with no other contact.

Getting rid of the plant is difficult, and unfortunately fairly harsh chemical applications are necessary. The only other option is physical removal. This is very difficult not only since you need to remove all traces of leaves, plant and roots, but because it is very difficult to do this without making contact with the plant.

If you think you have been exposed, wash the skin thoroughly with water (not soap) and, if you can, rinse the area with rubbing alcohol which helps clear away the oil. After an alcohol application though, you also lose some of your skin's protective oils so don't go right back out to the garden!

Sheltering in Place

Jim Gindlesperger

We all know we are supposed to evacuate a building when the fire alarm sounds, but what do you do if it is more dangerous outside than it is where you are? The answer to that is "Sheltering in Place."

Sheltering in place simply means that you stay inside the building you are already in. In such a situation, NEVER try to get back to the building you usually work in. There may not be enough time to do it safely.

Nearly every building on campus has Floor Marshals, people who have volunteered to assist in emergencies. They will be receiving information on the emergency as it unfolds, so they will have the most up to date information. For that reason, you have to pay attention to what they tell you. They will direct you to the part of the building that is safest, based on the type of emergency.

If you are outside, you may not know of the emergency. Floor Marshals are instructed to look for people who may not be aware that an emergency is in progress. They will warn you that you have to get inside. When you get that order, act immediately. Once inside, listen for further directions from the Floor Marshals. Assist building occupants in closing and sealing doors and windows, if necessary. Blinds and drapes should be closed, and everyone should stay away from windows or objects that may become projectiles. Help building occupants shut down local ventilation (e.g., fume hoods, fans, window air conditioners, etc.).

Do not leave the building for any reason until you receive word from the Floor Marshals that it is safe to do so. Sheltering in place could be done for any number of reasons, such as severe weather alerts, terrorist attacks, a gunman on campus, or a major chemical spill. Each emergency will be different, so don't expect a standard "one size fits all" response. What works for one may not work for another.

Everyone's cooperation will be needed, and knowing in advance what the basic procedures are will be helpful for everybody involved.

Accident and Injury Reporting

Andrew Lawson

Have you ever been injured yourself while working? If so, did you tell your supervisor about it? If the answer is no, did you ever think that you may have been able to prevent the accident from happening again to you or someone else? Maybe you failed to report it in fear of repercussions or ridicule from your peers or supervisor? Accident and injury reporting is something that everyone needs to take the initiative in doing for many reasons. These reasons include:

- Correcting an unsafe work environment
- Learning from your mistakes
- Identifying the need for future training or retraining.
- Preventing the accident from occurring to you or someone else.

The bottom line is, we are all stewards in making sure we work in a safe work environment, and accident and injury reporting is just one of the steps you can take in ensuring a safe workplace. After all, accidents do happen!

To report an injury log onto:
<http://hr.web.cmu.edu/forms/benefits/SupervisorInjuryReport.pdf> and follow the instructions. If you have any questions please call EH&S at 8-8182.

To Reach Us

Telephone: 268-8182
Fax 268-7871
Web: <http://www.cmu.edu/ehs>
Offices: FMS Bldg., 3rd floor

Congratulations!

Jim Gindlesperger



Michael Fouch, Lab Auditor Technician on the EH&S staff, has recently completed the requirements for his Master's Degree in Industrial Hygiene at West Virginia University. This is an outstanding

accomplishment and we congratulate Michael on his achievement. If you see Michael, please offer him your congratulations.

Laser Safety Committee

Mark Banister



EH&S is beginning an expansion of its laser safety activities and is looking for people to serve on a Laser Safety Committee. The purpose of the committee is not only to help disseminate safety information to laser users, but also to create an opportunity for users to bring problems and concerns of laser use to the larger group for help and resolution.

Ideally, we are looking for one representative from each of the departments where lasers are used to serve on the committee. We anticipate quarterly meetings, at the convenience of the members.

If you use lasers in the course of your work, please consider being a part of the committee. If you are interested, please email me at markb2@andrew.cmu.edu with your name and a little bit of info about your laser use. EH&S will work with the various departments to select the most suitable rep for the committee from the interested persons.

Did You Know?

Lightning kills about 100 people each year and injures another 1,000. Remember: No place outside is safe in a thunderstorm! Always take shelter BEFORE a storm hits.

Emergency Planning and Pandemic Preparations

Madelyn Miller

Carnegie Mellon's general emergency operations plan (EOP) was written to provide structure and clarity to essential functions for response. It has proven to be flexible enough to adapt to a new and emerging threat. Last November, a new scenario was created for a response to a wide spread illness, a pandemic. This new scenario has become the most detailed plan

created to date. Many groups from a wide cross section of campus came together to discuss the plans for dealing with a major disease outbreak. While the focus was on the H5N1 virus, it could include illness such as the mumps or seasonal influenza. Our planning includes scenarios from isolation of the ill to a worst case that would require the closing of classes and sending students home.

Our pandemic planning has included critical personnel and departments throughout the University.

- We have formed a Pandemic Flu assessment team of campus experts and key response departments that have participated in planning and preparation of response procedures.
- Leading the pandemic planning is Anita Barking, Director of Health Services, and Madelyn Miller, Director of Environmental Health & Safety. They are coordinating the response to wide spread illness as well as watching for news for changes in world health issues.
- Key decision points are being developed to guide our executive leadership who may have to make decisions about curtailing public events or suspending classes.

While still in draft form, our plan will follow the directions from Centers for Disease Control (CDC) community mitigation strategies for reducing or slowing down the spread of a pandemic.

Some say it is not the plan that is important but the process of the planning. We have found that creating this plan has strengthened our general emergency operations plan and caused us to think more holistically about Carnegie Mellon.

Waste Minimization Priority Chemical List - Jeffrey Harris

The Environmental Protection Agency (EPA) National Partnership for Environmental Priorities (NPEP) recently updated the Priority Chemical List. The new list of 31 chemicals are considered persistent, bioaccumulative, and toxic (PBT). The goal is to substantially reduce or eliminate the use of these chemicals, and/or develop recovery/recycling programs.

Please review the list below and note if your hazardous waste contains any of these Priority Chemicals. If so, be sure they are accurately identified on the Carnegie Mellon Hazardous Waste Certification and Disposal Form (including percentage or parts per million). Then, investigate the possibility of eliminating or reducing their use. Also, contact EH&S to consider possible recovery/recycling programs for that specific waste stream (contact Jeffrey at x87501)

Additionally, if you have these chemicals in your inventory, they should be accurately identified in your chemical inventory (Chemtracker). Material Safety Data Sheets should also be available and reviewed prior to use, and all appropriate safety precautions be taken (example: storage and personal protective equipment).

Organics

Trichlorobenzene
Tetrachlorobenzene
Trichlorophenol
Bromophenyl phenyl ether
Acenaphthene
Acenaphthylene
Anthracene
Benzo(g,h,i)perylene
Dibenzofuran
Dioxins/Furans
Edosulfan, alpha & beta
Fluorene
Heptachlor / epoxide
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclohexane (Lindane)
Hexachloroethane
Methoxychlor
Naphthalene

Polycyclic Aromatic Compounds

Pendimethalin
Pentachlorobenzene
Pentachloronitrobenzene
Pentachlorophenol
Phenanthrene
Polychlorinated
Pyrene
Trifluralin

Metals

Cadmium
Lead
Mercury