Volume 12, Issue 2 - Spring 2016

## **Mosquito Season Bites Back!**

Excerpt taken from DNREC Article, DNREC Website



Aedes Mosquito



Asian Tiger Mosquito

DNREC urges Delaware residents to take a proactive approach in dealing with the mosquito season by eliminating sources of standing water.

From early May through the first hard freeze in the fall, mosquitos are common where people live, work or recreate in urban and suburban settings.

In addition to their annoying bites, mosquitoes are of particular concern due to their potential to carry and transmit illnesses, with the house mosquito a known carrier of West Nile virus, and the Asian tiger mosquito a possible Delaware vector for West Nile, Chikungunya and Zika viruses.

During mosquito season, property owners are urged to do their part by regularly draining or changing unneeded sources of standing water that are stagnant for four or more consecutive days – cleaning debris from clogged rain gutters and emptying water from corrugated downspout extenders; frequently changing water in birdbaths; draining unused swimming pools and kiddie wading pools; and by preventing or draining standing water from outdoor containers such as discarded tires, cans, buckets, flower pot liners, children's toys, unprotected water cisterns, upright wheelbarrows, uncovered trash cans, upturned trash can lids, open or lidless dumpsters, plugged or undrained boats, sags in tarps covering boats or ATVs, or other water-holding containers.

The Division of Public Health credits prevention as the best medicine. "First and foremost, use an EPA-certified insect repellent. Stay inside where it's air-conditioned, or use screens in windows or doors. Wear long sleeves. Wear long pants," says Dr. Karyl Rattay Director of the DPH.

For more information about Delaware's Mosquito Control program, including more information about how to prevent or get rid of standing water that produces mosquitoes, call the field offices or the main Dover office at 302-739-9917 or visit http://de.gov/mosquito.

#### **Chem-E Car Race**

April 9th, 2016

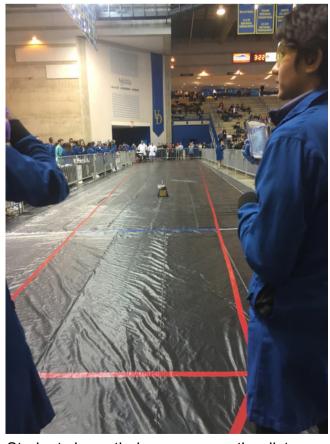
In April the University of Delaware Chemical Engineering Department held a regional Chem-E Car Competition at the Bob Carpenter Center. Representatives from the University of Delaware Chemical Engineering Department contacted EHS with regards to holding the event and inquiring about the desired safety levels and procedures to be set forth in order to have such an event.

The Chem-E-Car Event was a regional competition that included 28 teams from various universities. The teams traveled to the University of Delaware to compete with the objective to have their car travel a specified distance with the appropriate water weight set forth on the day of the competition.

The cars were of all different shapes and sizes (all falling under a general guideline in size set forth by the competition guidelines). The event included solutions/mixtures that contained vegetables, acids, bases, and so much more. The University of Delaware Environmental Health and Safety Department was involved from the first preparation discussions to the final break down on the day of the event. The EHS role included determining/managing how the waste was handled, overall layout of the event, determining safe egress routes, coordinating with the Bob Carpenter Staff to determine a locker room to use as a safety shower/decontamination area, and being onsite the day of the event ensuring that a safe work environment was present for all competitors.

This was the largest regional event held thus far for the Chem-E-Car Competition.

It was an event filled with competitors that put their cars to the test. A majority of the cars did not rise up to occasion and never got off the starting line. This was a tournament of truly gifted individuals that put their hearts and passion into their work. Even though there were failures and the tears of stalled cars on the tracks, it was an amazing day. The Chem-E car race brought together many young bright minds. We hope that these students will continue to light the way toward the future in Chemical Engineering.



Students hope their cars can go the distance



Over 28 teams from across the region competed for First Prize

## **Fire Protection System Obstructions**

By order of the UD Fire Marshal...

Sprinkler systems are designed and engineered to contain and control a fire to the area or room of origin. If properly designed, installed and maintained these systems can save thousands of dollars in damage and provide extra time for occupants to escape.

A factor that can negatively affect the impact of a sprinkler's ability to contain or extinguish a fire is obstructions to the spray pattern. Many times these obstructions are caused by building users who are unaware they may even be causing an unsafe situation.

The National Fire Protection Association (NFPA) requires that no objects be stored less than 18" below a sprinkler system. Maintaining this space ensures that in the event of a fire the spray pattern created by the sprinkler head is not compromised and can reach the object(s) that are on fire.

We often come across this issue on campus in laboratories and storage rooms. Typically this problem arises where storage shelves are being utilized and users stack items up to the ceiling. By doing this you not only obstruct the sprinkler head but also risk the chance of damaging or breaking a sprinkler head, which could cause significant water damage. Ensuring that objects are kept a minimum of 18" below the entire ceiling is a small action that can prevent an unsafe situation from arising.

Contact Kevin McSweeney, at kmcsween@udel.edu or call 831-6847 for more information.



Example of closet clutter blocking fire sprinklers

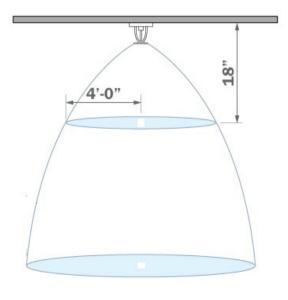
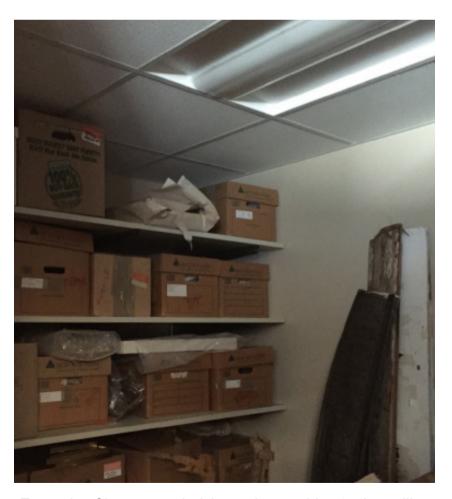


Diagram of the fire sprinkler spray pattern



Example of boxes on shelving units reaching to the ceiling blocking the fire sprinklers

#### **Lessons Learned**

## Laboratory Fire Incident

During the early morning hours of April 6, 2016, Public Safety responded to a fire alarm signal in one of our laboratories.

Upon arrival, Police Officers found an active fire in-progress and quickly generated a fire department response. The fire involved research equipment and associated chemicals. A nearby sprinkler head activated and kept the fire controlled until such time as Aetna Fire Department crews successfully extinguished it with hose lines.

Director Mike Gladle and EHS staff made the early morning response and upon termination by the fire department initiated a coordinated recovery effort by Facilities Custodial Services, Facilities Maintenance and Operations, The College of Engineering, Risk Management Office and others to mitigate the damage and restore partial operations at the building; shortly afterwards the entire building was back in operation.

The fire investigation determined the fire to be "accidental", but preventable.

A few key items were identified as lessons learned to prevent a worse fire incident from occurring.

- 1. Please review your lab set-up and determine if there are any non-essential items within the research area. Items such as cylinders no longer in use, or electrical appliances that are energized and no longer used should be removed from the space, or at least unplugged.
- 2. Emergency contact information and verification of chemicals, compressed gases and other hazardous contents within the lab are critically important and needs to be accurately depicted on the lab entrance placard.
- 3. The EHS team of lab and fire safety professionals are readily available to assist you with these and other items to make your research area safe and more efficient.

Contact Kevin McSweeney, at kmcsween@udel.edu or call 831-6847 for more information



Damage from the Lab Fire



Damage to the work bench from the Lab Fire

# **EHS Employee News**

### New EHS department members!

EHS welcomes two new employees: Dr. Shailendra Singh and Duane Reese.

Dr. Singh has taken the position as the new Chemical Hygiene Officer. He joins us from the University of Florida, where he served as an EHS Specialist.

Shail completed his Bachelors, Masters, and PhD degrees in chemistry in India. He completed postdoctoral research in Organic/Medicinal chemistry at the University of Florida prior to joining their EHS staff. He also recently completed his MBA in Florida.

Shail will be managing the chemical hygiene program and Chemical Hygiene Committee here at UD.

Duane Reese has taken a position as an EHS Specialist.

Duane comes to the University from Harvard Environmental, where he served on many asbestos abatement projects both on campus and throughout the region.

Duane's main responsibilities will be managing our Fall Protection, Confined Space and Construction safety programs in addition to assisting the various departments on campus with their Toxic Gas Monitoring programs.

Shail and Duane will both be great additions to our team and we look forward to working with them and everything they can bring to their positions.



Dr. Shailendra Singh, Chemical Hygiene Officer



Duane Reese, EHS Specialist

## **Household Waste Disposal**

Did you know...?

The Delaware Solid Waste Authority holds collections for household waste weekly all across the State of Delaware.

These collections offered by the DSWA are always FREE!

The community can bring various types of household items like electronics, household cleaners, hazardous waste, latex paints, expired medicine and personal documents that need to be shredded.

Please note, these collections are for Delaware residents only. Personal identification such as a driver's license or passport will be checked for verification when dropping off your waste.

Call 1-800-407-7080 or visit <a href="https://www.DSWA.com">www.DSWA.com</a> for collection dates and locations near you!



Examples of the different types of waste that DSWA collects



DSWA will collect all of your old or used paint

# **EHS Safety Poster Contest!**

Just a reminder for any UD departments attending our Safety Committee Recognition on June 10th...

We will be holding another poster contest!
The posters can be submitted by an individual, committee or department; anyone can participate!
The only criteria we ask is to represent one of the topics listed below:

- Lab Safety
- Shop Safety
- Personal Home Safety

1st, 2nd and 3rd place winners will receive gift cards.

Posters must be submitted no later than June 3rd. Please send your posters to Sandi Quirk (squirk@udel.edu) or Geri Foster (gfoster@udel.edu).

