



The New England Consortium's Quarterly

A Newsletter about Working with Toxic Materials, Health and Safety Training, Law and Public Policy

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UML Students Learn about Occupational Health and Safety

The 40-Hour Hazardous Waste Site Personnel Basic Health and Safety course is held every January for the general public but especially for faculty, staff and students at the University who are on Winter break. Since it is break time it is the best time for the students to study and learn valuable and life saving skills to obtain jobs in today's precarious job market. Students spent five days working with TNEC instructor's Bridget McGuiness, Thomas Estabrook and Claudie Grout to learn about safety on the job. The student's degree fields ranges from Criminal Justice, Liberal Arts, and Engineering to Physics and Community Health. The course is offered at a discounted rate for current UML faculty, staff and students.

Marybeth Couture '09, an Environmental Health student who participated in the training commented, "I have become knowledgeable on matters of having a safe work environment; people shouldn't have to risk being injured while working."

All hazardous waste site workers are required to complete this course before working at such a site under OSHA's 1910.120 standard. During the five days the students participated in classroom presentations and tabletop exercises. They dressed out in level 'A' and 'B' suits and applied what they learned in live interactive drills. The hands on teaching styles of the TNEC instructors are designed to provide the students with practical and applicable knowledge. The students learned about chemical



From left to right: Gregg D'Angeli '09, Criminal Justice—Michael Cooke '09, Liberal Arts—Cindy Morel '09, Environmental Science—Gillian Raffaelo '11, Civil Engineering—Nick Tranghese '10—Civil Engineering, Tjianika Corvino '09, Physics and Radiological Sciences—Melinda Ferullo '12, Civil Engineering—Marybeth Couture '09, Environmental Health.

New 40-hour Scheduled in April

TNEC has scheduled an additional 40-Hour Hazardous Waste Site Personnel Basic Health and Safety Course in April. The course is scheduled for the week of April 13-17. To enroll just go to our [website at www.uml.edu/t nec](http://www.uml.edu/t nec).

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UML Students Learn about Occupational Health and Safety

hazards, air monitoring, medical surveillance, respirators and protective clothing, as well as site control in an emergency.

TNEC continues to be the New England region's worker health and safety training leader. TNEC's courses meet or exceed the OSHA 1910.120 standard for protecting hazardous waste site workers and employees who respond to hazardous material emergencies in their workplaces. TNEC encourages more students and faculty to take advantage of this training opportunity. In today's economic climate having these skills enhances your chances in getting jobs, especially for Criminal Justice majors, Engineering, Environment Health and Community Health majors.

"I have become knowledgeable on matters of having a safe work environment; people shouldn't have to risk being injured while working."

Environmental Health Student Begins her Practicum

Marybeth Couture '09 majoring in Environmental Health in the School of Health and Environment recently took part in worker health and safety training with The New England Consortium (TNEC). Marybeth (pictured in the photo donning a Chemical Protective Suit) is working on her Practicum in Occupational Health and Safety. Ms. Couture is working with Dr. Craig Slatin, TNEC Principal Investigator and Chair of the Department of Health and Sustainability and Dr. Joel Tickner, Associated Professor with the Lowell Center for Sustainable Production.

Marybeth hopes to pursue a career as an Occupational Health and Safety Consultant and to better understand the role of worker health and safety. Marybeth is attending TNEC training courses. She has successfully completed the 40-Hour Hazardous Waste Site Personnel Basic Health and Safety Course, Confined Space and the 24-Hour Emergency Response Course.

TNEC work is supported under a National Institute of Environmental Health Sciences (NIEHS) grant. For further information on TNEC and the courses they offer visit their website at www.uml.edu/t nec or call Therese O'Donnell at extension 3329.



Marybeth Couture



Ttjanika Corvino '09 pulls on her air supply before participating in a mock drill.

News from the COSH's From the Rhode Island Committee on Occupational Safety and Health

Hazards of Crystalline Silica

During the 1930s the Gauley Bridge tunnel project in West Virginia an estimated 475 workers died from acute silicosis (169 African-American workers who died in the tunnel were buried in a mass grave in nearby fields). An additional 1,500 workers contracted chronic silicosis.

Silicosis, caused by the inhalation of free crystalline silica, can severely scar lung tissue and destroy the lung's ability to pump oxygen into the blood stream. Each year nearly 300 workers die from this disease in the US, hundreds more are disabled, and another 3000 to 7000 new cases are added each year. The industry that leads in premature mortality (years of potential life lost) from silicosis is construction.

Chronic silicosis can occur after 10-30 years of exposure to respirable crystalline silica dust at relatively low concentrations. Acute silicosis, however, may develop after exposures to very high levels of respirable crystalline silica in as little as a few weeks to five years post exposure. Accelerated silicosis is characterized by the same features as chronic classic silicosis except that the time from initial exposure and development of radiographic findings and symptoms and change in pulmonary function are much shorter. There is also a rapid progression to progressive massive

fibrosis with severe respiratory impairment. (Workers with silicosis are at higher risk for tuberculosis TB and atypical (non-tuberculous) mycobacterial disease.) Workers who inhale respirable crystalline silica can also develop other respiratory diseases, such as chronic obstructive pulmonary disease [COPD] e.g., chronic bronchitis, emphysema, and lung cancer.

The International Agency for Research on Cancer (IARC) has classified inhaled crystalline silica in the form of quartz or cristobalite from occupational sources as carcinogenic to humans (Group 1), IARC's highest ranking.

Crystalline silica is found in soil, granite, and concrete. Exposure can occur whenever these media are drilled crushed, impacted, and abraded

High risk work activities include:

- *Chipping, drilling, crushing rock*
- *Abrasive blasting*
- *Sawing, drilling, grinding, concrete and masonry*
- *Demolition of concrete / masonry*
- *Removing paint and rust with power equipment*
- *Dry sweeping or air blowing of concrete rock sand dust*
- *Jack hammering on concert, masonry and other surfaces.*

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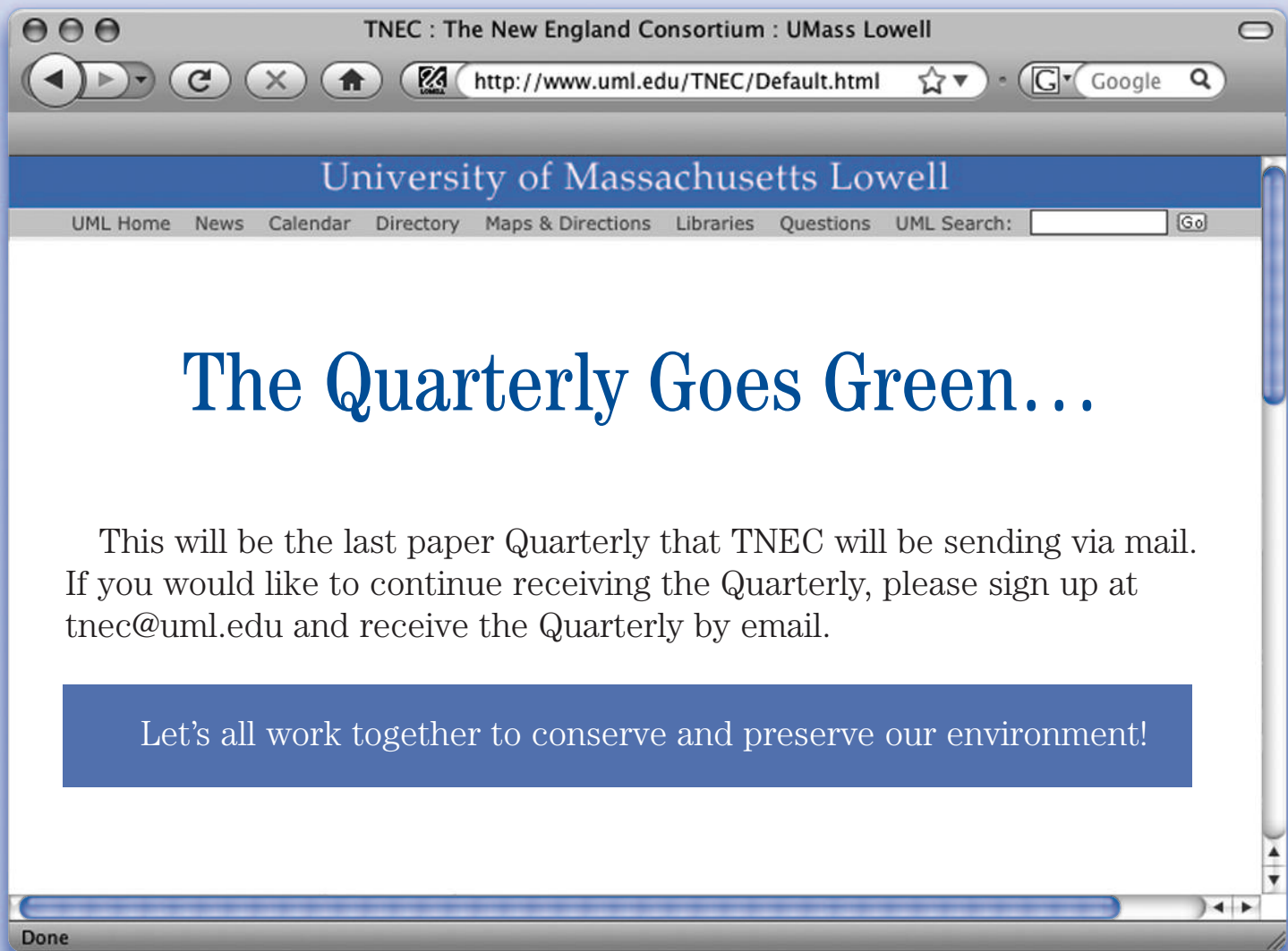
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