

## **DEPARTMENT OF MECHANICAL & INDUSTRIAL ENGINEERING**

### **SAFETY COMMITTEE MEETING**

**APRIL 20, 2004**

**ATTENDEES:** Jim Mills, Len Roosman, Joe Baptista, Mike Smith, Esther Oostdyk, Markus Bussmann

**ABSENT:** Tom Bernreiter, Maurine Kwok, Yvonne MacNeil

**NEXT MEETING:** tentatively scheduled for Monday, July 12, 2004 at 2:00. Confirmation to follow.

#### **ONGOING ITEMS FROM PREVIOUS MEETINGS:**

1. Len, Joe, and Tom will be performing inspections during the next month; reports to be delivered to the next meeting. Tom will perform this cycle of the Bahen Centre inspections, but future responsibilities may change, as Tom is relocating to MC.
2. Cristina Li, Lorna Wong, and Joe will attend a first aid course on April 29 and 30, 2004.
3. Markus will draft two memos (that were initially discussed at the previous meeting): (i) a statement to MIE faculty and instructors, regarding their responsibilities and liabilities as regards their own graduate students and the undergraduate classes that they teach; and (ii) a summary of appropriate actions in the case of accident/injury, to be more widely distributed.
4. Tom has committed to attend the training required to become a management certified member of the MIE Safety Committee.
5. Regarding air quality in RS115, Mike Zitnik of the UofT Health and Safety Office has determined that the recently-installed ventilation system is adequate for maintaining acceptable air quality levels, so long as it is utilized appropriately. Professor Chul Park has indicated that such appropriate use will be enforced.
6. Joe is in the process of procuring emergency diallers for the administrative staff working on the first floor of the Mechanical Engineering building, to provide them a means of issuing a call for help in the case of an emergency.
7. Since the last meeting, Qing Xiang, on behalf of Professor Dongqing Li, has been working with the UofT Biosafety officer, John Valant, to prepare MB51 for the study of isolated E. Coli DNA. According to Qing, a biosafety cabinet was installed and certified, a number of other changes were made, a lab safety manual was prepared, and then John inspected the facilities and issued a BioSafety level 1 certificate. Since this meeting, Markus contacted John Valant, and was informed that Dr. Li has recently submitted an application for another Biosafety certificate, in order to work with live E. Coli bacteria in the lab. John has indicated that this will require further information and another inspection, before another certificate is issued.

## NEW ITEMS:

1. On April 7, Professor Chul Park informed Tony Sinclair of another health issue in RS115. Since January, 2004, graduate student Sue Chang has been working with a nickel powder provided by INCO in support of an EMK-sponsored project. The powder was delivered with the appropriate documentation (including MSDS), which indicate that this powder is a carcinogen, but no one apparently heeded the warnings. It was only when others warned Professor Park of the danger, that he informed Tony Sinclair on April 7, and then halted all research with the material, pending further notice on appropriate practices for safe handling of the material.

On April 20, INCO representatives visited the lab. A subsequent letter, dated April 29 from Quan Yang of INCO to Prof. Park, itemizes a list of concerns, and makes recommendations to improve the handling of the nickel powder. Of note is that the list of concerns includes a statement regarding "insufficient draw from any of the fume hoods in use in the facility due to the number of extraction trunks connected to a single fan." These are the same fume hoods referred to in Ongoing Item #5 (previous page).

2. Two concerns were raised about the students project requirement of MIE241S - Engineering Design and Graphics - taught by Duncan Newman. First, there is the issue of student safety in MB71, the work area used by undergraduate students. The facility is ostensibly unsupervised, and towards the end of term, used around the clock. The second concern is that at the end of term this year, many projects spilled out into the basement hallways of the Mining building, impeding access. The issues of student safety and instructor responsibility/liability will be addressed by memos to be distributed shortly. Joe will look into installing a call box in MB71, for use in case of emergency. The committee also recommended that Len offer a safety seminar to the class, as he already does for a 4<sup>th</sup> year class offered by Prof. Jan Spelt. Finally, it was suggested that Dr. Newman be advised to curtail the scope of the project in coming years, to limit the space required by students to assemble their designs.
3. An undergraduate student in MIE241S, Margaret Lafreniere, lost a fingernail while working on her project. An accident report was submitted in conjunction with Mae-Yu Tan of the MIE U/G office.
4. The UofT Laser Safety Committee has issued a request for an updated list of people using class 3b and 4 lasers. Markus will assemble a list of MIE users, and forward the information to the UofT Laser Safety Officer.
5. Len reported that Lift-Safe Inspection is upgrading the structures of the hoists in the loading dock and the spin pit (MC10). All other lifting devices passed the annual inspection.
6. Len also noted that the UofT Office of Environmental Health and Safety will be holding Chemical Safety and WHMIS training for summer employees, on May 11 and June 10 from 9:00-12:00, in SF1104. Len will post sign-up sheets in MC134 and RS214.
7. Finally, the accident report form has been posted on the MIE website - this information will be included in the second memo described in Ongoing Item #3.