

## SCHOOL of CHEMISTRY HEALTH and SAFETY COMMITTEE

Monday 28<sup>th</sup> October at 15:00 in Room GE.005B

In Attendance

Prof. J. C. Whitehead (Chair), Dr. E.M. Armstrong, Mr. G. Smith (Minutes), Dr. M. Attfield, Dr. P. Quayle, Miss. C. Davidge, Dr. J. Gardiner, Dr. P. Gorry, Mrs. C. Taylor, Dr. N. Bryan, Mrs. R. Watkins

### 1. **Apologies**

Mr. S Holden

### 2. **Minutes of the meeting held on the 22nd July 2013**

The minutes were accepted as a correct record.

### 3. **Matters Arising**

EMA informed the committee that an email had not been sent to PI's to remind them of the importance of signing off safety paperwork personally after concerns were raised by PDRA's that this would result in research grinding to a halt. She suggested that a more pragmatic approach be taken and academics be reminded that they couldn't absolve responsibility with regard to safety.

Coat pegs have not yet been installed in the teaching laboratories for lab coats. EMA will chase this up.

EMA showed the committee an NMR tube holder that she designed and had the workshop make a prototype. It costs approx. £2.50 to produce. The filled nmr tube should be placed in the holder prior to capping. The holder allows the tube to be capped, but if it shatters, glass cannot penetrate the users hand. This initiative was well received by the Committee. EMA said she would get more ordered and they would become available as a Stores items as it was envisaged that each researcher would eventually have their own.

### 4. **Correspondence**

JCW informed the committee that he had received minutes from the MIB and DCF safety committee meetings.

Action: GDS to attach these minutes to our own minutes for uploading onto the intranet.

Guidelines for fume cupboard testing have been received from health and safety services. Our current testing program carried out by Simon Holden is in accordance with these recommendations already so no changes in our testing are required.

The centrally provided PGR health and safety on line modules are now available. Our post-graduates will have to do four of the five modules that are available. Compliance would be monitored by the Education Office.

The annual monitoring report request has been received.

A University Safety circular had been received relating to concentrated nitric acid supplied in plastic bottles. Nitric acid sold in plastic bottles had a 'use-by' date of two years from when the

bottle of acid was first opened. It has been subsequently discovered that the plastic bottles degrade over time and Fisher Scientific now advise that nitric acid supplied in plastic bottles should only be kept for 18 months from the date of manufacture. EMA informed the committee that 5 Winchesters had been discovered in the Chemistry Building which would be disposed of.

CD suggested that we consider stocking small volume bottles of nitric acid now that there was a shorter shelf life on the acid.

Investigation reports had been received in respect of the NMR quench in August and an argon nozzle that had flown off in one of Professor Leigh's fume hoods.

The evacuation report from Ms Carolyn Gamble (the Fire Training and Evacuation Coordinator) following the fire evacuation on Monday, 14 October had been received. The fire drill went well with regard to the evacuation of School of Chemistry Staff and students. Our people were fully evacuated in 5 and half minutes. Manchester Business School were using one of the lecture theatres and their students were slow to leave, the building being fully clear after 7.48 minutes. We should be aiming to be fully evacuated in 3 minutes.

Ms Gamble is to speak to the business school safety advisor about their failure to evacuate promptly from the lecture theatre they were using in the Chemistry building.

GDS asked whether additional fire marshals were required to cover the lecture theatres, however EMA replied that this was part of the House Services Staff job brief.

The School has responded to the request for information from EURATOM which was fed into the University response. NDB informed the Committee that now the returns had been made, there would be serious consequences if additional material was discovered in the future. The first reported returns under the increased reporting regime were due to be made on 14<sup>th</sup> November. EURATOM will be making a return visit/inspection in the New Year.

#### **5. HASMAP audit/ Annual monitoring report**

Concern was previously expressed about safety within the Chemistry buildings mechanical workshop. EMA informed the committee that Peter Wilde had now produced a number of risk assessments for working on the different tools.

GDS suggested that the Mechanical workshop should be inspected, which was agreed.

The Committee had asked for clarification of the recommendation C8.1 of the HASMAP report which suggested that

"The level of supervision (in terms of quality rather than quantity) in the teaching labs should be reviewed and measures put in place to ensure that precautions are consistently applied." JCW had had a response from Mr Andrew Morris which stated that basic lab rules were not consistently enforced, the main things being wearing of fastened up labcoats, safety spectacles and tying back of long hair by the demonstrators (academics included).

JCW asked GDS to write to the director of teaching (Garry Procter) to ask how these concerns were being addressed.

#### **6. Chemical risk assessment form and safety showers**

An open meeting was held on the 31<sup>st</sup> of July where both Staff and researchers could raise their safety concerns and provide constructive suggestions. EMA reported that in

her opinion it was very useful. The meeting covered the chemical risk assessment form and safety showers. Thus items 6 and 7 of the Agenda were discussed as one item on the agenda.

The simplified chemical risk assessment form was circulated and some positive feedback was received. The form will be adopted from October 2013 across the building.

The consensus of the open meeting was that all the researchers wanted a safety shower for their respective laboratories. They were pleased with Diphoterene now being available for each laboratory. However they were keen to increase the quantity that they had within their respective laboratories.

EMA informed the committee that the manufacturer of Diphoterene would be conducting an audit of the Chemistry building and would subsequently provide recommendations on how much was required and where best to locate it.

There was a request for fire blankets for a number of laboratories.

The committee decided following the large support by staff and researchers that safety showers should be reinstalled in the laboratories where they were had been removed.

The researchers reported that they were pleased with the smaller waste containers for solvent waste.

EMA informed the committee that it was her intention to have an open meeting at least once or twice a year. She also proposed that safety champions for each laboratory be created and these to meet with her at least once a quarter.

#### **8. Latest accident/ incidents**

A PGT chemist was scratched accidentally by a friend with a needle containing a toxic chemical. The student went to hospital as a precautionary measure but received no treatment.

A PHD student fainted and banged their head. It is believed a factor in this was very warm room temperature following the heating being turned on in the building and the warm temperatures outside.

A member of staff was given first aid following being knocked down by a cyclist on the way to work. The accident occurred on the pavement near the graphene building. The member of staff received significant cuts grazes and bruising. GDS requested on Simon Holden's behalf the recommendation that a formal notification be sent to UMBUG asking all cyclists to behave responsibly. The idea was dismissed as the accident happened on public land and it was not necessarily a member of the University that was cycling dangerously.

A researcher dropped some glassware in one of the laboratories. It is believed that this was a result of loss of dexterity due to working in the laboratory at temperatures of 13°C.

There was an accident as a result of a slip on wet tiles.

A mercury gauge had been knocked off a shelf and spilled mercury in one of the laboratories.

A NMR machine quenched. A person working in the vicinity of the spectrometer was taken to hospital and subsequently treated for shock. The quench resulted in a full evacuation of the Chemistry building. Following this incident EMA incorporates a video of a NMR machine quench as part of the safety induction, and also showed the same clip to the researchers as part of their refresher training in respect of the new chemical risk assessment forms.

A fire alarm was activated in a laboratory. The cause was a latex glove that had been heated in a very large oven situated close to a smoke detector. When the oven door was opened there was a charred rubber smell which was wafted into the head. As this was to be a regular operation as part of ongoing research and the oven couldn't be moved (no space) Estates had moved the detector to another part of the ceiling grid.

There had been an intruder in the Chemistry building who was seen in a number of locations around the building including Radiochemistry. He was able to get into Radiochemistry using the emergency release button at the north end of the building. After consultation with the fire officer, it was agreed that this emergency release button should be disconnected as it directed people in to rather than out of the controlled area. There is still an emergency release button to enable people in radiochemistry to get out. The police are intending to investigate a prosecution as the intruder entered a controlled area,(but did not gain access to any laboratories).

#### 9. Latest near misses

An argon tap nozzle flew off when it was turned on in a fume cupboard.

There has been a compressed gas outage outside an agreed time which resulted in the failing of a number of pieces of equipment.

A number of people were trapped in the second and third floor following the malfunction of the door interlocks.

JCW asked how many of the accidents/ incidents were RIDDOR reportable? EMA replied that 2 of them were.

CD expressed how disappointed she was with the number of accidents/incidents and near misses as a result of a failing on Estates. CD suggested that JCW raise this with Colin Bailey. EMA replied that she and Rachael Barker had already had a meeting with Kenny Nolan and Duncan Turner to discuss Estates failings and the subsequent financial cost to the School. In addition, Professor David Leigh will be making his own representation on these issues.

CD said that when she studies the accident statistics for the building she does try to attribute if they are attributable to School management or to others i.e. estates.

**10. Latest inspections/ Arrangements for inspections**

EMA informed the committee that a lot of work was being done to set up i-auditor, an app for the i-pad for carrying out inspections. EMA would now be booking out Thursday afternoons to undertake safety inspections. She would co-opt people on to the inspections as required.

**11. School safety alert**

EMA proposed that a poster about the NMR tube holder could be the next School safety alert, to be circulated once the first batch of them had been manufactured.

**12. MIB update**

RW reported the Chemical safety inductions had now been carried out in MIB. A training session for first aiders from the Chemistry Building and MIB is scheduled for the 17<sup>th</sup> of December for the treatment of HF and Cyanide.

GDS asked if the full safety training provided to researchers should be provided for the technicians as well? No decision was made on this.

**13. AOB**

There were no items discussed in AOB.

The meeting finished at 16:00