

SCHOOL of CHEMISTRY HEALTH and SAFETY COMMITTEE

4th August 2008 at 2:00 p.m. in Room 7.27

In attendance: Prof P.O`Brien, Ms C.Davidge, Dr E.M.Armstrong , Mr S.Holden, Mr G.Smith, Dr M.Attfield, Mr J.Robinson, Dr P.Quayle, Mr T Graham, Mr P.Unsworth, Mr J.Martin, Prof F.Livens, Mr K. Greenaway, Mr A.Sutherland.

1. Apologies

Dr P.O`Malley

2. Minutes

The minutes of the last meeting held on 12th June 2008 at 2:00 p.m. in Room 7.28 were passed with minor amendments.

3. Matters Arising

Evacuation chair training has been undertaken by a number of staff within the school. This is further discussed in section 13.

4. Correspondence

Two safety circulars had been received. One was in connection with Risk assessment and the Control of Substances Hazardous to Health Regulations prompted by the report into the accident in the John Garside Building in March. (see Item 9).

The second refereed to mandatory health and safety training for key personnel and dates when refresher training should be undertaken. Local safety induction was also mentioned – a pilot study by the STDU had investigated how these inductions occur and where the holes were. When detailed information was available it should be discussed at the next health and safety committee meeting.

5. Chairman's Business

Health and safety training for academics was discussed. The committee felt the relatively new legislation on corporate manslaughter was of particular relevance to academics and should be included in the training session. EMA informed the committee that preparation for this training had begun.

6. Latest inspections/ Arrangements for inspections

Room 4.06 and ancillary rooms - re-inspected (due to problems interpreting previous inspection report).

1st floor (excluding undergraduate teaching wing) - inspected Thursday 10th July
PQ, GS, JM

2nd Floor To be arranged in August EMA, CD, JR, SH.
Ground Floor To be arranged in September GDS, PQ, AS

7. Latest accident/incidents

There have been two recent reported fires in the Chemistry building, both involving a rotary evaporator and diaphragm pump.

The first fire happened on a Saturday afternoon during routine rotary evaporating of diethyl ether using a rotary evaporator connected to a diaphragm pump. On investigation the diaphragm pump was found to have been used without a suitable trap. Both the rotary evaporator and diaphragm pump were situated in the open laboratory. The pump was not exhausted into a fume cupboard. No one was injured during this fire however it is estimated that the fire has caused approximately £6-8000 of damage. The diaphragm pump has subsequently been returned to manufacturers for inspection.

The second fire happened in room 2.05 while a postgraduate was concentrating fractions of petrol 40/60 collected from a flash chromatography column. The solvent flashed over. The resultant fire was extinguished quickly and with minimal damage.

POB expressed his concern at rotary evaporators being sited on the open bench, instead of inside a fume cupboard. It was agreed that while this was best practise there was simply not enough fume cupboard space for limiting rotary evaporators to fume cupboards.

Concern was also raised over vacuum tubing becoming semi permeable with age. It was suggested tubing should be replaced on annual basis. Other suggestions were the introduction of an additional trap between the rotary evaporator and the pump or an additional bleed between the rotary evaporator and pump.

PQ agreed to investigate how rotary evaporators were used in industry and report his findings to the committee. EMA stated that she would write an email on the recent fires and best working practise with rotary evaporators and diaphragm pumps.

8. Diphoterine/ Hexafluorine

The benefits of Diphoterine and Hexafluorine as part of First aid was put to the committee.

Diphoterine is an amphitricha liquid used for treatment of both acid and alkali burns. Hexafluorine can be used for First aid treatment of HF burns.

Elaine Armstrong purposed the purchase of both Diphoterine and Hexafluorine.

After discussion it was decided that both Diphoterine and Hexafluorine should be purchased provided evidence could be found of their use within British chemical companies.

9. General findings from MIB explosion

A circular was issued by Melanie Taylor concerning findings from the MIB explosion. Findings showed that a COSSH assessment had been undertaken; however the assessment was insufficient with respect to the risk from explosion. The COSSH assessment was found to have been unsigned by the supervisor. The PI supervision was described as good but not sufficient. It was also concluded that there is a need for all PI's to take more responsibility with respect to safety.

POB expressed his concern over being ultimately responsible for safety of Chemists working in MIB. It was decided that POB, EMA, CD should meet to discuss the safety of chemistry staff in MIB.

10. Chemical Risk assessment

Following the explosion in MIB and subsequent investigation MIB have moved to a joint COSSH/DESAR assessment. EMA informed the committee that in certain instances the current COSSH form was not sufficient and that a DESAR assessment would also be required. EMA proposed the use of an electronically filled in joint COSSH/DESAR form to replace the current COSSH assessment form. The committee was in favour of the joint COSSH/DESAR assessment.

11. Safety induction

EMA informed the committee of a planned change to "safety induction" within the School of Chemistry. For the new academic year mandatory safety induction lectures will be run monthly for new starters (post-graduate, academic and support staff).

12. Academic's Health and Safety training.

This subject was discussed as part of the chairman's business.

13. Evac chair training

Six members of staff (John Robinson, Chris Muryn, Gareth Smith, Simon Holden, Steve Mottley, and Andrew Sutherland) undertook evacuation chair training on Friday 1st August. The evac chair trained staff expressed a concern that in the event of a fire they would most likely be situated on much lower floors of the building.

14. Dates of next meetings

Monday 13th October at 14:30 in Room 4.20

Monday 8th December at 14:30 in Room 4.20

Monday 26th January at 14:30 in Room 4.20

Monday 23rd March at 14:30 in Room 4.20

Monday 18th May at 14:30 in Room 4.20

Monday 29th June at 14:30 in Room 4.20

15. AOB

New “passport to work” paperwork was presented to the committee.

The committee expressed thanks to Mr K Greenway for his valued contribution to the Schools health and safety committee.

Elaine Armstrong recommended that the school should purchase a new copy of Brethericks handbook of Chemical Safety Hazards. This was agreed by the Committee.