CHEMISTRY BUILDING HEALTH AND SAFETY COMMITTEE

Minutes of the meeting held at 2:00pm on Monday 15th May 2017

Present: Prof. R. Winpenny (Chair) (REPW), Dr. T. Singleton (TS), Dr. P. Gorry (PG), Dr. J. Morrison (JM), Dr. J. Gardiner (JG,) Mr. S. Holden (SH), Mr. M. Mullin (MM), Mr. M. Carroll (MC), Mr. C. Turnbull (CT), Mr. M. Jackson (MJ), Mr. G. Smith (GS), Miss Chor Yeung (CY) and Mrs. C. Starkie (minutes).

In attendance: Miss C. Davidge (CD).

1. Apologies received

Prof. F. Livens (FL), Dr. J. Slaughter (JS), Dr. T. Aspinall (TA) and Mrs. K. Law (KL).

2. Minutes of previous meeting held on Monday 13th March 2017

These were accepted as a true and accurate record.

3. Matters arising

3.1 The move to incinerating laboratory glass waste is still to go ahead. SH is still to supply a detailed costing to REPW.

3.2 Flash Bang Show Risk Assessment should be reviewed and rewritten on approved University template – REPW requested that this be completed as a matter of urgency.

3.3 Monitoring of the activities in laboratory 3.05 are ongoing.

3.4 Review of defective fire doors is ongoing. Currently there are faults with three doors.

3.5 Installing swipe card access to CRR area is ongoing. MC is waiting for final quote

3.6 Safety Bulletin “Chemical incompatibility” and “Treating Chemical Burns” has not yet been sent out.

3.7 New postgraduate representative has been appointed to the Committee (Chor Yeung).

3.8 No audit of proper fume hood use has yet been carried out – this will be carried out at a weekend to give a better picture of the situation.

3.9 Floor numbers are now fitted to each lift lobby.

3.10 UG training in safe use of needles will have been completed early in the next Academic year.

3.11 Individual sharps containers will be used in the Undergraduate teaching areas from the start of the Academic year.

3.12 Occupational Health referral system has been reviewed and the results are very variable.

3.13 REPW has approved the format of the proposed office self-inspection form.

3.14 Survey of pressurised gases present in the building has been completed.

3.15 TA has supplied copy of Risk Assessment for centrifuge use in MIB.

4. Correspondence

The following correspondence had been received:

- The latest Plant Not Available report from Richard Cutting (zero in Chemistry)
- A PUWER survey template from Richard Cutting which was passed to MC.
- Information regarding the proposed move to a "Tiger waste" scheme from Risk and Compliance.
- A request from Greater Manchester Police (via Risk and Compliance) to update details of the building Explosives Licence.

5. School Safety Advisors report

5.1 Flammable storage cabinets

An application has been made to Faculty to fund the installation of ~80 fire-resistant cabinets for storage of flammable solvents throughout the building.

When installed "Stage 2" - to connect as many of these as possible to the Local Exhaust Ventilation - will be carried out.

5.2 Changes to stores' work practices

Some discussion took place regarding the proposed changes to the way the Chemistry stores operate which had been raised by members of the Academic staff to improve safety and service. In simple terms they would become a delivery service supplying the building's laboratories.

MC had discussed the new system with stores management and they were in agreement with the proposed changes.

CD raised that stores staff would require extra training – SH said that this would be arranged.

It was decided to consult more widely – Safety Champions, Post-Doctoral Researchers and PhD students.

5.2 LabcUp chemical inventory system

CT gave a brief account of the progress made with introducing LabcUp in the Chemistry Building.

Some discussion took place as some of the Committee members had experience of this or very similar systems. It was felt that if LabcUp did not communicate directly with the University's Oracle purchasing system then it might entail a great deal of work to use it.

REPW volunteered his research group as the first next area for the roll-out.

5.3 Unpacking chemicals in stores

Some discussion took place over the current system for receiving chemicals into stores (both to be held there and those going into the wider building). It was felt that the current system left plenty to be desired but no obvious improvement was apparent and that this matter should be left open for further thought.

5.4 Cyanides and other material storage

Recent events seemed to indicate that the storage of these kinds of substances could be improved. SH would write an all-School e-mail detailing requirements which would be that they were stored in the Health and Safety Office safe or kept under lock and (controlled) key locally.

5.5 "Tiger waste" stream

The University is introducing a waste stream for non-contaminated laboratory waste (wrappings, packaging, clean gloves etc.).

After some discussion the Committee decided that the current waste system used in the Chemistry Building (all lab waste to clinical waste bags for incineration) was safer and less complicated – avoiding the possibility 0f contaminated waste being sent away via the wrong stream - and that the current system would carry on.

5.6 Laboratory waste bins

Inspections had shown that there were some inventive uses of various articles put into service as waste bins in the laboratories. Given the potential for an ignition in a bin the Committee resolved that only metal waste bins should be used in the laboratory areas.

5.7 Out-of-hours access to non-School of Chemistry personnel

This matter was raised on behalf of a School PI who had previously had a request out-of-hours access for a co-supervisee from the School of Materials refused.

The Committee agreed that uncontrolled access would be a security hazard as well as a Health and Safety hazard, but individual requests could be considered on a case-by-case basis.

5.8 Needlestick injuries

The Committee noted that it was possible that the introduction of Luer-locked needles throughout the building had contributed to a number of (clean) needlestick injuries in the Undergraduate teaching areas.

It was felt that the planned training would address this issue and in any case a clean needlestick was preferable to a needle coming apart and causing a potential chemical contamination.

5.9 Rotary evaporator vacuum protection

It was resolved that the annual inspection programme should be used to check the adequacy of protective arrangements for vacuum equipment (e.g. on rotary evaporators).

6. USC update

CD informed the Committee that Safety Services had issued a “Lessons Learnt” from the HASMAP audit in the Schools of Chemistry and Physics & Astronomy and this had been received by REPW.

Safety Services are keen to emphasise that inspections should be carried out across the University and that outcomes should be monitored reviewed and resolved by the Committee.

7. HASMAP report

Little progress has been made with the action plan since the last Committee meeting

8. OHSTAG Annual monitoring report

Little progress has been made with the action plan since the last Committee meeting.

In the light of this (and item 7) REPW asked that a meeting be convened between himself, SH and Rachael Barker.

9. Accidents

Date	Type	Person	Description	Action following
13/03/2017	Chemical contamination	MChem	Spilt bromine water (some got into glove)	
14/03/2017	Chemical contamination	MChem	Felt burning sensation on arm when pouring diethyl ether	
16/03/2017	Needlestick	UG	Stabbed thumb whilst unsheathing needle	Treated by First Aider.
23/03/2017	Fire	UG	Reflux glassware came apart whilst being lifted.	Investigation report submitted to Safety Services. Lab script and CRA will be rewritten , demonstrator training will be reviewed before experiment is carried out again.
28/03/2017	Glass cut	UG	Kept hand on rotary evaporator connector and turned motor on.	
06/04/2017	Loss of chemical		Diethyl ether bottle shattered in storage (had evaporated when discovered).	
13/04/2017	Loss of chemical		Still overheated forcing solvent into fume hood.	Follow up actions complete (report still to be issued)

19/04/2017	Chemical contamination	PhD	Chemical fumes caused eye pain.	Follow up still in progress. Accident was not Reported at the time and indicated that there might be issues with fume hood operation understanding.
20/04/2017	Blade cut	PhD	Cut hand with scalpel when removing cable tie.	Treated by First Aider.
25/04/2017	Needlestick	UG	Stabbed thumb whilst unsheathing needle	Treated by First Aider.
26/04/2017	Blade cut	Tech staff	Cut hand opening package.	Treated by First Aider.
28/04/2017	Near miss	UG	Attached glass pipette to air tubing and pipette shot across lab when air turned on	
02/05/2017	Chemical contamination	Contractor	Opened secondary container of solid waste and was contaminated with powder. Inner container contained mercuric cyanide.	Investigation in progress. Verbal report of known findings will be made at Committee meeting.
02/05/2017	Chemical contamination	Postdoc	Chemical permeated glove.	
04/05/2017	Incorrect waste disposal		Needles found in waste oil container.	

10. Latest inspections/arrangements for inspections

Annual inspections have fallen behind schedule and the rate for the rest of the year will be increased.

11. MIB update

There had been a number of accidents involving sharps.

The Tiger waste stream was being introduced.

PI refresher Health and safety training was 100% complete.

LabcUp would be introduced in the future.

12. AOB

JM announced that he would not be a member of the School at the date of the next meeting. The Committee thanked him for his efforts as a member of the Committee and in the wider building.

The Long Term Maintenance programme is now starting in earnest and may present challenges to carry out safely.

REPW asked JG if he could organise the updating of P&M sheets 10 and 11 ("Destruction and Disposal of Residues" and "Carcinogens").

REPW felt that problems with Estates were on the increase and asked that Safety Services seek to assist in rectifying this.

Actions arising from the previous meeting that are completed:

Item	Action	Status
3.7	New postgraduate representative has been appointed to the Committee (Chor Yeung).	Complete
3.9	Floor numbers are now fitted to each lift lobby.	Complete
3.9	Produce Safety Bulletin "Safe use of Needles".	Complete
3.15	TA has supplied copy of Risk Assessment for centrifuge use in MIB.	Complete

Actions arising from the meeting/ongoing:

3.1	Supply REPW with detailed quote for moving to incineration of waste laboratory glass.	SH
3.2	Review Flash! Bang! Show risk assessment.	SH
3.3	Continue to monitor the installation of compressed gas cylinders in laboratory 3.05 and ensure that any installation is compliant with a suitable risk assessment.	SH
3.4	Arrange repairs to all defective fire doors and monitor as required.	SH/MC
3.5	Install swipe card access system to CRR area.	MC
3.6	Annual update of the P&M sheets.	SH/REPW
3.7	Produce Safety Bulletin etc on topic of chemical incompatibility and treatment of chemical burns.	SH
3.8	Carry out audit for compliance with proper fume hood use.	SH

3.10/11	Complete UG training in safe use of needles and individual sharps containers will be used in the Undergraduate teaching areas from the start of the Academic year.	JS
3.12	Review Occupational Health referral system for handlers of CMR's. REPW will contact John Newton regarding this.	SH/REPW/RB
3.13	Introduce office self-inspection throughout the building.	SH/REPW
5.1	Install fire resistant solvent cabinets throughout the building.	SH
5.2	Consult more widely on the proposed changes to stores operations within the building.	SH/Reps
5.3	Continue with the introduction of LabcUp into the research sections of the building.	SH/MC
5.5	Inform building occupants of the requirements when storing cyanides.	SH
5.7	Install metal waste bins throughout the building.	SH
5.8	Maintain the current out-of-hours access policy and examine other access requests on a case-by-case basis.	REPW/SH
7/8	Meet to discuss making progress with the HASMAP and OHSTAG targets.	REPW/RB/SH

Appendix 1 Current status of P&M sheet updating

No.	Topic	Current issue and author	Responsible
1	Classic Techniques	EMA 2009	Break up large document. (Health and Safety Office)
2	Distillation and sublimation	EMA 2008	

3	Cryogenics	RA/SH 2012	Complete and on intranet
4	Chromatography	GS 2007	Gareth Smith
5	Pressurised Gases	SH 2017	Complete and on intranet
6	Solvents	EMA 2010	Liddle Group
8a	Hydrogenation – atmospheric pressure	RS/EMA 1998	With Mike Greaney
8b	Hydrogenation – high pressure	RS/EMA 1998	With Mike Greaney
9	Ozonolysis	SH 2017	Complete and on intranet
10	Destruction and disposal of residues	CIFW 2002	John Gardiner
11	Carcinogens	CIFW 2002	John Gardiner
12	Destruction of alkali metals and organic derivatives	MJ 2017	Mark Jackson/Liddle Group Done requires putting on intranet
13	HF	ASB 2017	Complete and on intranet
14	Cyanides	DC 2017	Complete and on intranet
15	Reduced pressure working	EMA 2010	With SH requires putting on intranet.
16	Lasers	SPK 2015	Review only
17	High magnetic fields	RA 2017	Complete and on intranet
18	Centrifuges	TA 2017	Tanya Aspinall/John Gardiner Done – minor amendments required
20	Drug precursors	SH 2017	Complete and on intranet
21	Laboratory clearance checklist	1999	Health and Safety Office
22	Use of fume hoods	EMA 2010	Health and Safety Office
23	Waste disposal	SH 2017	Complete and on intranet
24	Prescription Safety Spectacles	SH 2017	Complete and on intranet
25	Oxygen depletion	proposed	Health and Safety Office

26	Azides	proposed	John Gardiner
27	Chemical spillages	proposed	Health and Safety Office
28	Pyrophoric Materials	proposed	