

Paper C



College of Life Sciences

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Annual Health & Safety Report  
2008

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## 1 Introduction

The purpose of this 2008 Health & Safety (H&S) Report is to:

1. document the progress made on the targets set in the 2007 Report;
2. if a target has not been achieved, identify the obstacles and propose how they may be overcome;
3. set new targets for the coming 12 month period.

For details of the College's long term H&S aims and for background information on previously set targets the reader is referred to the 2007 Report.

## 2 Progress on Targets Set in the 2007 Report

### 1. Ensure the principles relating to the Policy and Organising elements of the POPIMAR H&S management model are adopted by CLS and put into effect.

No progress has been made on this. Senior management need to decide whether implementing such a model in CLS is achievable, or even desirable, before this is pursued any further. The H&S Information Officer will arrange a meeting with the relevant individuals before the end of 2008.

### 2. Achieve a >95% attendance rate at the CLS H&S Induction Seminar.

New start and H&S Induction Seminar attendance figures for the period 1/1/2008 to 10/9/2008 are shown below.

• Number of new starts logged in the Staff Database:	147
• Additional new starts*:	+37
• Total number of new starts:	184
• Based at SCRI:	-4
• Based elsewhere:	-1
• Existing personnel on new contracts:	-9
• Never started work:	-4
• Not traceable:	-3
• Started but not yet invited:	-7
• Visitors here for less than 1 moth:	-11
• New starts invited to Seminar:	145
• Attended:	90
• Left CLS without attending:	18
• Still on the invite list:	37

\*Additional new starts are those not logged in the Staff Database but flagged up via their Basic H&S Training Checklists. This group largely consists of short-term visitors (i.e. here for less than 1 month) and undergraduate 'summer' students.

Looking at the current invite list and assuming the 'end dates' in the Staff Database are correct, another 14 new starts are highly unlikely to attend. This gives a total of 32 non-attendees and an attendance rate of 78%, significantly lower than the >95% target.

The non-attendees are primarily summer students and visiting workers based here for 6 months or less, with approximately half spending only 1 to 2 months in CLS. Current policy states that visitors here for 1 month or less must complete a Basic H&S Training Checklist but they are not required to attend the H&S Induction Seminar. It may be appropriate to increase the cut-off to 2 months or less and focus on getting those here for more than 2 months to attend the seminar as soon as possible.

In general, only 50% of invitees attend the seminar when first invited, with the majority of the remainder attending upon the second or third invite. (Only one 2008 start still on the invite list has failed to attend more than 3 times without giving a reason.) It should be feasible to increase the first invite attendance rate to at least 75% and achieve  $\geq 75\%$  attendance at the second invite over the coming 12 month period. All the stragglers will be given a final chance to attend with a third invite. Any one failing to attend more than 3 times will be invited to a one-to-one session at a date/time convenient to them. All those who cannot give a valid reason for repeatedly failing to attend will be reported to their Line Manager. These measures should also serve to achieve the original target of a 95% attendance rate.

### **3. Reintroduce and achieve a >95% return rate on the Induction Questionnaire.**

A new H&S Induction Quiz has been developed (see Appendix A) and this is now issued at the start of the Induction Seminar. Each new recruit is asked to complete their copy during the course of the seminar and hand it in before leaving the venue. This approach is ensuring a 100% return. However, at present, the Quiz sheets are not being checked for omissions or errors, i.e. the training is not being validated. The ideal would be to have the Quiz sheets checked and returned to the new recruits, with any errors corrected, within two weeks. Individuals who have clearly failed to understand basic, essential H&S instructions/guidance will be given one-to-one tuition.

### **4. Achieve a >95% return rate on completed Basic H&S Training Checklists.**

New start and Basic H&S Training Checklist completion figures for the period 1/1/2008 to 10/9/2008 are shown below.

• Number of new starts logged in the Staff Database:	147
• Existing personnel on new contracts:	-9
• SCRI, MRC, DSTT, TMRC:	-43
• Based elsewhere:	-1
• Never started work:	-4
• Not traceable:	-3
• New starts expected to complete Checklist:	87
• Number completed:	82
• Left CLS without completing:	1
• Number still to complete:	4

The 4 new starts still to complete a Checklist will do so very shortly. This will give a completion rate of 99%. Of these 4, one new start has been here for 2 months and this is clearly an unacceptable delay. The delay occurred because the designated trainer was unaware of the new start for several weeks. A reminder to the relevant line managers should prevent this from happening in future. A realistic target would be to have >95% of new starts receiving basic H&S training within 1 week of their start date.

### **5. Develop a comprehensive GLP training package and make this part of H&S induction training for lab based personnel and undergraduate students.**

Good Laboratory Practice (GLP) is now covered in detail as part of the CLS H&S Induction Seminar. The next step is to check that the training has been effective and GLP is indeed being routinely applied in the research labs. This monitoring will be done via regular safety inspections. See section 3.1 for further details.

The School of Learning and Teaching has its own H&S training program for undergraduate students and this covers GLP. Full compliance is achieved in the teaching labs and the staff work hard to ensure high H&S standards are constantly maintained.

**6. Develop a training package for liquid nitrogen users and devise a system to ensure all users undergo training.**

The installation of the Cryodepository tanks in JBC is providing an effective method of identifying many of those requiring training in safe working with liquid nitrogen. Potential users must register with the H&S Information Officer and are only given the access to the facility and the Inventory Database once they have completed a training session. To date, only the GRE tank is in use and 44 users have been trained. The CBI tank and MM tank have been installed and are ready for use as soon as the groups decide how to divide up the available storage space. Other groups have expressed an interest in using the facility but have not yet purchased a tank.

In addition to the Cryodepository training program, liquid nitrogen safety is also covered during the H&S Induction Seminar to ensure all new recruits are given the basic facts. This approach should ensure that, eventually, most liquid nitrogen users will have received training but it does not cater for existing liquid nitrogen users who have no reason to use the Cryodepository facility. An on-line training package for these users must be developed as soon as possible and before the end of 2008.

**7. Fully and successfully establish a risk assessment program on JBC Floors 1 and 4.**

Wyeth's influence ensured that TMRC personnel, based on JBC 4, were quick to start producing risk assessments and they currently have 26 in the CLS Risk Assessment Databases. Although this looks good at first glance, a recent check revealed that only 10 of these assessments have been officially approved and 10 of the unapproved assessments are incomplete. The H&S Information Officer will inform the TMRC Lab Manager and assist with remedial action.

The TMRC pilot highlights the need for systematic checking and official approval of all assessments. This can be very time consuming depending upon the complexity of the assessments. Looking at each table within the database in turn, the numbers of assessments still to be approved are:

- 98 out of 256 in the Risk Assessment table;
- 1191 out of 1704 in the Chemical Hazard Assessments table;
- 7 out of 23 in the Microorganisms Hazard Assessment table;
- 0 out of 3 in the Blood & Tissue Hazard Assessments table;
- 4 out of 82 in the Genetically Modified (GM) Microorganisms Risk Assessment table;
- 0 out of 6 in the Manual Handling Assessments table;
- 28 out of 113 in the SOP table (procedures rather than assessments).

Note: the Display Screen Equipment (DSE) Workstation Assessments do not require independent approval and there are no GM Animal Assessments in the database at present.

A realistic target for the coming 12 months would be to ensure all current assessments/procedures are checked and approved, barring Chemical Hazard Assessments. Compiling a Chemical Hazard Assessment mainly consists of copying and pasting information from the manufacturer's safety data sheet file into the relevant database record, thereby minimising scope for error. Even so, some form of quality control has to be in place. A reasonable proposal would be to check and approve at least two assessments from each different assessor (we have 38 assessors registered at the moment) to confirm that they are competent. Thereafter, one assessment will be selected at random each week to ensure standards are being maintained.

On JBC Floor 1 a different approach has been adopted and it does not involve the Risk Assessment Databases. Ian Gilbert's Group were already familiar with a system that relied on each individual researcher carrying out risk assessments for their own experiments and

recording them in their lab books. The H&S Working Group (H&SWG) had no objection to a similar system being adopted on JBC 1 if it encouraged the research staff to do risk assessments. After various meetings and drafts a template was agreed on and this is now supplied to the research staff in label form for pasting into their lab book whenever a new risk assessment is required. Supervisors are charged with checking the quality of their group's assessments at regular intervals. It should be noted that staff based in this area take a very positive and proactive approach to H&S and their Division provides a shining example of how top rate, highly productive research can go hand-in-hand with excellent H&S standards.

Note: Julie Frearson's Group has still to be approached. It is envisaged that this group will use the Risk Assessments Databases rather than the system described above. This Group's assessments must be completed as a matter of priority and before the end of 2008.

## **8. Publish the Risk Assessment Database System to the web.**

The Risk Assessment Databases were converted and opened up for web access in February 2008. Unfortunately, there are features particular to the web interface that the end users perceive to be more of a hindrance than a help. Discussions with CLS Computing have made it clear that licensing costs prevent us from reverting back to each user directly accessing the databases via the FileMaker client and, of the available alternatives, FileMaker's Instant Web Publishing capability offers the best solution at the present time. Addressing the end users' concerns must then come down to improving the performance of the system we currently have. This can be achieved by a combination of end user training, considered database design changes and improving performance on the server side.

In addition to performance issues, several users feel that the Databases are difficult to find. A direct link to the Databases now exists on the home page of the CLS H&S web site, which suggests that the real issue is the H&S web site being difficult to find. At present, a link exists on the official College web site under Home | Research | Resources | Grant Info. The H&S web site does not contain any Grant Info, hence, it would be more appropriate to have the H&S link coming directly under Resources. The College web administrator will have to be consulted and give authorisation for this change. Once agreed, an email will be issued to all personnel every month highlighting a feature on the H&S web site and providing a constant reminder of the URL. Note: new starts have been shown the CLS H&S web site and given the URL upon induction since 2005.

One senior staff member enquired about the possibility of accessing the database without the inconvenience of entering a username and password. Even if this were technically possible, it would not be desirable. A button has been added to the Databases that allows personnel to register their name against an assessment to signify that they have read and understood it. This is designed to eliminate the need for signed hard copies and relies on the system being able to capture individual usernames. This is also the case for a related, equally useful function that identifies recently modified assessments and notifies all registrants of the change via email. Any change in the access method would disable these functions.

The web interface transition has created one major problem that must be dealt with as a matter of priority. Individuals can only access FileMaker Web Published Databases once they have been added to the desired access group. Up until now the H&S Information Officer has been adding usernames one by one to the various access groups but this process is very time consuming and, as a result, the majority of personnel do not yet have access. It is legal requirement for all employees to have access to the risk assessments relating to their work activities, therefore, this problem must be rectified as soon as possible. CLS Computing has identified a mechanism for adding batches of usernames to

the access groups en masse but the groups relating to the Risk Assessment Databases have still to be populated. This must be carried out as soon as possible and before the end of October 2008. Once all current personnel have access the H&S Information Officer will ensure all new starts are added to the relevant access group as soon as their Basic H&S Training Checklist is received.

**9. Complete the roll out of generic stress risk assessment and conduct a survey to assess the efficacy of Stress policy/procedures.**

Generic stress risk assessments were posted on the CLS H&S web site in June 2007 and all personnel informed by email. New recruits are made aware of the CLS policy on work related stress and the generic risk assessment relevant to them during their induction with the CLS Human Resources Officer. Work related stress is also covered on the Basic H&S Training Checklist. Stress risk assessments will be reviewed by CLS Human Resources and CLS H&S every two years.

The HSE Well Being at Work survey was carried out in CLS in March 2008. Summary results are shown in Appendix B. The survey will be repeated every two years. The long term aim is to improve our scores until the HSE “suggested longer term targets” are achieved. Human Resources will take the lead on developing policies and procedures to meet this end.

**10. Devise a plan for effective implementation of DSE policy/procedures that gives priority to identifying, registering and ensuring assessments are carried out for official DSE Users.**

The initial strategy relied on a team of trained assessors completing DSE Workstation Risk Assessments for DSE Users in their designated area. This strategy failed because, in most areas, other tasks take higher priority and Assessors do not have sufficient time remaining to carry out the necessary assessments. The H&SWG discussed the problem and agreed that H&SWG members should carry out all DSE assessments in CLS, focussing on personnel at greatest risk of DSE related injury/ill health, i.e. those spending most of their working day at a computer (referred to as Official DSE Users).

To date we have:

- 45 DSE assessments logged in the Risk Assessment Database;
- 38 hardcopy assessments to be entered into the Database;
- 8 assessments pending.

Although the new approach has led to a significant increase in the number of assessments being completed, many Official DSE Users based in the research labs are still being overlooked. To address this, Lab Managers will be reminded to (1) inform the H&SWG of all existing Official DSE Users in their area of responsibility and (2) ensure new recruits that qualify as Official DSE Users are flagged up upon induction via their Basic H&S Training Checklist.

**11. Have all manual handling tasks undertaken by Stores' staff fully risk assessed.**

No progress has been made on this primarily due to lack of time on the part of the H&SWG members. This target will be carried over and must be achieved by the end of 2008.

### 3 New Targets for 2008/2009

1. Safety inspections are a vital component of an effective H&S management system. The H&SWG are charged with planning, organising and conducting internal safety inspections within CLS. Several inspections have been carried out over the past few years, with 4 being completed in 2008 so far, but the timing has been sporadic and the approach inconsistent. To rectify this the following targets must be met:
  - at least one general safety inspection to be carried out each month;
  - inspection report to be issued within 2 weeks of the inspection date;
  - follow-up visit to be conducted within 3 months of the inspection date to check that remedial actions have been implemented.

In addition to this, each year, one inspection that focuses on a specific topic (e.g. cryogenics, tissue culture, compressed gas cylinders) will be carried out. Experts from outwith the H&SWG will be drafted in to assist as required.

2. A vast amount of time and effort has been invested over the past 8 years in ensuring all genetic modification work within CLS is thoroughly risk assessed and, when necessary, HSE approved. Annual review of all existing GM risk assessments, microorganism and animal, is essential to ensure new GM work is being covered and standards are being maintained. Almost two years have elapsed since the last review, therefore, it is imperative that a review is conducted by the end of 2008 and annually thereafter.
3. During the refurbishment of the MSI building several items of equipment were disposed of in error including a Wallac1409 scintillation counter containing a 0.3MBq Europium-152 sealed source. This contravened the terms of our Authorisation to dispose of radioactive waste, as granted by the Scottish Environment Protection Agency (SEPA), and resulted in an Enforcement Notice being served on the University. Within the Enforcement Notice our local SEPA Inspector has laid down the actions the University must take to prevent another breach. Failure to comply with an Enforcement Notice is an offence under the Radioactive Substances Act 1993 and renders the offender liable to a fine, imprisonment or both.

Safety Services personnel were quick to act and have done everything they can to ensure the stipulated corrective action is implemented. CLS Radiation Protection Supervisors have received training and are putting the new procedures into practice. However, it has become clear that CLS has some work to do in order to demonstrate full compliance with Safety Services' newly drafted policy on Refurbishments (see Appendix C). Local procedures need to be drafted and agreed between the key personnel in CLS before the end of 2008 and then, given the gravity of the situation, the College Secretary must take an active role in ensuring compliance.

4. The H&SWG members regularly hear staff say that they would like to have more First Aiders in their area and receive enquiries from personnel who would like to become First Aiders. Occupational Health has to provide First Aid training for the entire University and can only offer a limited number of places to CLS to ensure minimum requirements are satisfied. To meet local demand the H&S Co-ordinator has successfully completed a course to become a qualified First Aid Trainer and is planning to train 10 new First Aiders over the coming 12 month period.
5. If the measures in section 2.8 relating to the H&S web site have the desired effect, many more staff will be accessing the web site on a regular basis. Good design, readability, easy navigation and fast, effective searching will become increasingly important to ensure personnel are encouraged to use the site. At present, the site does not meet the criteria and a major overhaul is required. The H&S Information Officer has already discussed this with CLS Computing and been offered assistance. The aim is to have the revamp completed within 6 months.



## 4 Summary of All Targets for 2008/2009

1. H&S Information Officer to arrange a meeting with senior managers to discuss the applicability of the POPIMAR H&S management model to CLS by the end of 2008.
2. Achieve >95% attendance at the H&S Induction Seminar and >75% attendance upon first and second invites.
3. Have all H&S Quiz sheets checked and returned, with errors corrected, within 2 weeks of completion.
4. Ensure >95% of new recruits complete a Basic H&S Training Checklist within one week of starting work and maintain the current overall completion rate.
5. Develop an on-line training package for liquid nitrogen users by the end of 2008.
6. Ensure all assessments/procedures in the Risk Assessment Databases are checked and approved barring Chemical Hazard Assessments, which will be approved at the frequency specified in section 2.7.
7. Get risk assessments in place for the Frearson Group by the end of 2008.
8. Revamp and relocate the CLS H&S web site in conjunction with CLS Computing/Web Admin within 6 months.
9. Remind all personnel of the CLS H&S web site URL via monthly emails highlighting new information and features.
10. Ensure all personnel have read-only access to the Risk Assessments Databases by the end of October 2008.
11. Give all new recruits access to the Risk Assessment Databases as soon as their Basic H&S Training Checklists are received.
12. Conduct a review of all stress risk assessments in 2009.
13. Ensure DSE assessments are carried out for Official DSE Users based in the research labs.
14. Have all manual handling tasks undertaken by Stores' staff fully risk assessed by the end of 2008.
15. Conduct one general safety inspection every month, ensure the report is issued within two weeks and carry out a follow up visit within 3 months.
16. Carry out a topic specific safety inspection once a year.
17. Review all current GM risk assessments by the end of 2008.
18. Draft, and get key personnel signed up to, local procedures on lab refurbishment before the end of 2008.
19. Train 10 new First Aiders.

## Appendix A

# College of Life Sciences Health & Safety Induction Quiz

*Please complete this questionnaire and hand it in at the end of the H&S Induction Seminar. All the answers are given throughout the course of the seminar. Feel free to ask questions if you require clarification on any point. Please write legibly. Thank you.*

---

**Name (please print):** .....

**Group/Unit/Team:** .....

**Date:** .....

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- 1) State the year of the Health & Safety at Work Act.
- 2) In Section 7 of the Act who is the duty of care placed on?
- 3) What is the first thing you should do upon finding a fire?
- 4) What is the first thing you should do upon hearing the fire alarm?
- 5) What is the University's internal emergency phone number?
- 6) State the location of the Fire Assembly Point you would normally use.
- 7) When may you re-enter the building after a fire alarm?
- 8) Identify an occurrence that would cause the fire alarms to sound in MSI, WTB and JBC simultaneously
- 9) Identify one type of fire extinguisher found in your workplace.
- 10) What colour of jackets do Fire Wardens wear?
- 11) What colour is a Door Release break-glass?
- 12) Name one place where you can find a list of First Aiders.
- 13) Name a hazard associated with the use of microwave ovens?
- 14) What does MSD stand for?
- 15) Identify one attribute that a good DSE Workstation should have.
- 16) What is the first thing you should do when bringing in electrical equipment from home?
- 17) Identify a safeguard that should be applied when Lone Working.
- 18) Where would you dispose of unwanted catalogues?
- 19) Name one paper item that should not go into the Paper Recycling Bin.
- 20) Identify one basic security measure.
- 21) What are the key steps in the risk assessment process?
- 22) How do you get a username and password for the CLS web published FileMaker Databases?

- 23) Name the two formats available for general risk assessments?
- 24) Where would you find risk assessments for Genetically Modified Microorganisms (GMM)?
- 25) Who is responsible for producing GMM assessments for your group?
- 26) What does S.O.P. stand for?
- 27) Where can you view the latest CLS H&S news and developments?
- 28) What's the primary purpose of the "Lessons to be Learned" page on the CLS H&S Web Site?
- 29) Who is the Biological Safety Adviser for your Division?

**For Lab Personnel Only:**

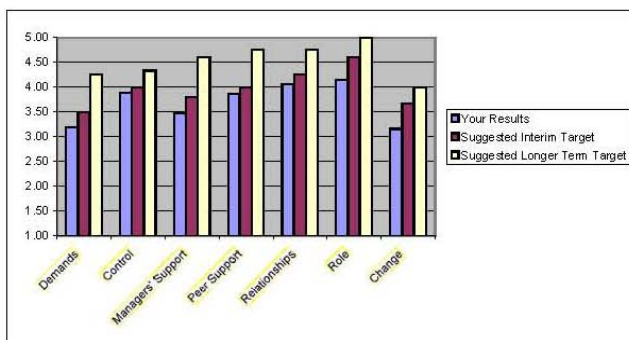
- 30) What does G.L.P. stand for?
- 31) How far away must you be from a CLS building before you can smoke?
- 32) What should you do in the event of a major spill of a hazardous substance?
- 33) Identify one instance when hand washing is required.
- 34) What does P.P.E. stand for?
- 35) When would safety glasses be required?
- 36) Which type of disposable glove is recommended for use in CLS labs?
- 37) What's the highest Containment Level applied in CLS?
- 38) How should you dispose of true sharps?
- 39) Identify one measure you can take to minimise the risk of fire in the lab.
- 40) Name one type of LEV found in the lab.
- 41) Name one hazard/risk and one control associated with the use of compressed gas cylinders.
- 42) Identify one hazard/risk and one control associated with the use of Liquid Nitrogen.

# Appendix B

## HSE Indicator Tool - Question by Question

The results are grouped by stressor, and the average score is shown for each question associated with that stressor

Stressor	Question	Average	Question	Average	Key
Demands	3 Different groups at work demand things from me that are hard to combine	3.31	5 I am subject to personal harassment in the form of unkind words or behaviour	4.43	<p><b>Green:</b> Doing very well - need to maintain performance. Represents those at, above or close to the 80th percentile<sup>1</sup></p> <p><b>Light Blue:</b> Good, but need for improvement. Represents those better than average but not at, above or close to the 80th percentile<sup>1</sup></p> <p><b>Yellow:</b> Clear need for improvement. Represents those likely to be below average but not at, below or close to the 20th percentile<sup>1</sup></p> <p><b>Red:</b> Urgent action needed. Represents those at, below or close to the 20th percentile<sup>1</sup></p>
	6 I have unachievable deadlines	3.74	14 There is friction or anger between colleagues	3.69	
	9 I have to work very intensively	2.16	21 I am subject to bullying at work	4.62 *	
	12 I have to neglect some tasks because I have too much to do	3.06	34 Relationships at work are strained	3.52	
	16 I am unable to take sufficient breaks	3.53	<b>Overall</b> ~ 26 (11.4%) of the staff who responded report that they are always, often or sometimes bullied.	4.07	
	18 I am pressured to work long hours	3.55			
	20 I have to work very fast	2.64			
	22 I have unrealistic time pressures	3.59			
	<b>Overall</b>	3.20			
	Control	2 I can decide when to take a break	4.19	1 I am clear what is expected of me at work	
10 I have a say in my own work speed		3.81	4 I know how to go about getting my job done	4.38	
15 I have a choice in deciding how I do my work		4.07	11 I am clear what my duties and responsibilities are	4.23	
19 I have a choice in deciding what I do at work		3.50	13 I am clear about the goals and objectives for my department	3.87	
25 I have some say over the way I work		4.10	17 I understand how my work fits into the overall aim of the organisation	4.04	
30 My working time can be flexible		3.68	<b>Overall</b>	4.14	
<b>Overall</b>	3.89				
Managers' Support	8 I am given supportive feedback on the work I do	3.22	26 I have sufficient opportunities to question managers about change at work	3.42	<p><b>Change</b></p>
	23 I can rely on my line manager to help me out with a work problem	3.69	28 Staff are always consulted about change at work	2.92	
	29 I can talk to my line manager about something that has upset or annoyed me about work	3.66	32 When changes are made at work, I am clear how they will work out in practice	3.15	
	33 I am supported through emotionally demanding work	3.24	<b>Overall</b>	3.16	
	35 My line manager encourages me at work	3.57			
<b>Overall</b>	3.48				
Peer Support	7 If work gets difficult, my colleagues will help me	3.72			<p><b>Figure: Comparison of Results with Targets</b></p> <p>Legend: Your Results (Blue), Suggested Interim Target (Red), Suggested Longer Term Target (Green)</p>
	24 I get help and support I need from colleagues	3.95			
	27 I receive the respect at work I deserve from my colleagues	3.76			
	31 My colleagues are willing to listen to my work-related problems	4.00			
<b>Overall</b>	3.87				



<sup>1</sup> Compared with results from 'Psychosocial Working Conditions in Britain in 2004' (see the HSE MS Analysis Tool User Manual for more information and for caveats regarding interpretation of results)



## Appendix C

### Safety Policy Arrangement 36-2008 Refurbishments

#### **Policy Statement**

The University of Dundee recognises that there must be effective communication between the many parties involved in a refurbishment to ensure that health and safety risks to people are reduced as far as is reasonably practicable.

#### **Arrangements**

Heads of School/Directorate must ensure that all equipment, materials and waste are removed from areas to be refurbished before handover to E&B Project Managers. Either E&B staff, or a recognised Removal Firm, must be used to remove equipment and materials to be retained into secure storage. Heads of School/Unit must ensure these staff receive adequate information and instruction, and they must also ensure they are adequately supervised.

In laboratories, workshops and other areas where hazardous substances were used they must ensure:

- Drains and sinks are flushed with water
- Surfaces and fixed equipment (e.g. microbiological safety cabinets) are decontaminated
- Information is provided to E&B Project Manager on remaining risks (e.g. fume cupboards and ductwork, chemical spills) that may become relevant during the 'strip out'

In addition, in laboratories that used radioactive materials (i.e. open and sealed sources) they must ensure the decommissioning procedures issued by Safety Services are completed.

E&B Project Managers must inform all relevant parties of the start date of the refurbishment e.g. ICS, Room Bookings, Cleaning Services, in order for them to remove their equipment in a timely manner. They must confirm as far as possible that Head of School / Directorate have carried out their duties before they hand over the area to the Main Contractor, while ensuring that all fittings and fixtures that are to be reused or retained are removed prior to handover to the Main Contractor. They must also provide information regarding service isolations, asbestos, and remaining risks to the Main Contractor using the site handover form attached.

At City Campus Head of Safety Services will ensure chemical, clinical and radiological wastes are disposed of by authorised routes.

At City Campus Head of Estates will ensure other wastes are disposed of by authorised routes.

At Ninewells and Kirkcaldy Campuses wastes are disposed of by NHS Tayside.

All parties detailed above must fulfil their duties in accord with the University Environment Policy.

#### **Forms**

1. Handover of area for refurbishment from School to E&B
2. Handover of area for refurbishment from E&B to Contractor
3. Decommissioning a laboratory for radioactive materials

## Handover of area for refurbishment from School to E&B

School/Directorate:

Building:

Room/Location:

### *I have personally checked that:*

- All equipment and materials to be retained have been removed
- All wastes have been removed

Where hazardous substances have been used I confirm that:

- Drains and sinks have been flushed with water
- Accessible surfaces have been decontaminated (e.g. wiped and then washed down with water and detergent, or wiped with disinfectant)
- Fixed equipment has been decontaminated (e.g. microbiological safety fumigated with formaldehyde)
- Radioactive materials removed, and decommissioning certificate issued by Safety Services

The Contractor must be informed of the following remaining risks:

Signature of Head of School Nominee:

Print name:

Date:

### *I have visually checked the area and confirm that:*

- All materials and equipment have been removed
- All valuable fittings and fixtures have been removed
- Everything that remains should be 'stripped out' for disposal by Main Contractor

I accepted the area from the School on (date).

Signature of Project Manager

Name:

Date:

Copy to be held by School  
Original to be held by E&B

## University of Dundee Site/Building Handover Form

Handover of University Site/Building – to be Completed by Project Manager & Site Agent						
Project Manager:			Project Title:			
Campus:			Building:			
Department:		Floor:		Room/Location:		
Name of Project Manager:			Name of Site Agent:			
Tick box as appropriate:			Services have been isolated according to details discussed at the Pre Start meeting.			
Services	Yes	No	N/A	Remarks	Name & Signature	
Electrical (IT, cctv, DBs, Fire, Telephone wiring, TV)						
Hot & Cold Water (Certification, Isolation, Connection)						
Drains (Clear of hazardous substances)						
Gas (Natural, Lab, Air Con)						
Mechanical (Heating, Ventilation, Air Con, pressure systems)						
Specialist Items (Liquid Nitrogen, Mercury etc)						
Other Items (Specify) i.e. waste						
Handover Checklist						
Item					Yes	No
1. Copy of drawings highlighting service isolations handed to contractor.						
2. All personal and University materials and equipment have been removed from site/area.						
3. All reasonable steps have been taken to ensure that the isolation work detailed above has been completed.						
4. Are all live and isolated services clearly identified and marked?						
5. Site Agent to assume that any unidentified services are live, and take appropriate safety precautions.						
Safety Notes:						
1. If any of the handover checklist answers is no, handover of site cannot take place.						
2. Site Agent to assume that any unidentified services are live, and take appropriate safety precautions.						
3. Site Agent to provide details of isolations, live services and (where applicable) asbestos to all sub-contractors						
4. Site Agent is now responsible for the site once this document is signed.						
Handover Completion Certificate						
Project Manager Name:			Signature:		Date:	Time:
Site Agent Name:			Signature:		Date:	Time:
Company Name:						

**Original form should be retained in Construction H&S Site File by Site Agent.  
Copy of Form to be forwarded to CDM Coordinator and copy retained by the Project Manager.**

**RADIOACTIVE AREA DECOMMISSIONING DECLARATION**

Department/School: _____	Area: _____
RPS: _____	Tel No: _____
I wish to confirm that this area has been decommissioned by the existing personnel as required	
Signature: _____	Date: _____
I confirm that this area has now been fully decommissioned	
RPA: _____	Date: _____

**FINAL DECONTAMINATION RECORD**

RPS

Location	Nuclides Used	Monitoring Method	Counts above BG	Comment

RPA

Location	Nuclides Used	Monitoring Method	Counts above BG	Comment



## **Procedures for Decommissioning Radioactive Areas**

### **A) Existing Personnel**

1. Remove all radioactive materials and waste. This includes registered and unregistered ('exempt') sealed sources contained within equipment. For stocks which are to be transferred to different buildings/institutions, the RPA should be consulted. For waste which can not be disposed of by the standard routes, the RPA should be consulted. Where contractors are involved in laboratory clearances they should be closely supervised when source-containing equipment is to be moved
2. Decontaminate areas where radioactive materials were used. This should include designated sinks, fume cupboards, benches and apparatus. Less obvious places such the fronts of benches and certain floor areas should checked, particularly where solvent/water marks have been left
3. Remove all radioactive labels from decontaminated apparatus but **LEAVE LABELS IN AREAS, ON SINKS ETC TO FACILITATE FINAL CHECKING BY THE RPA WHERE FITTINGS ARE TO BE REMOVED**
4. Sign the declaration form and user's final decontamination record

### **B) Radiation Protection Adviser**

1. Monitor/decontaminate exposed areas where fittings are removed eg backs of benches and sinks, inside pipes
2. Sign declaration form and RPA's final decontamination record
3. Remove remaining labels