The University Of Sheffield.

HEALTH AND SAFETY COMMITTEE

Report on Health and Safety in The University Of Sheffield
1st January to 31st December 2010

This Annual Report attempts to summarise the current position on health and safety activities performed by Safety Services and the PAT Service up to the end of 2010. I am pleased to report that the current position on health and safety in the University continues to be very positive, with good progress on most fronts and generally with excellent co-operation from departments. 2010 saw a significant reduction in the number of fires and other fire related incident incidents were broadly similar to the low levels reported in 2009. Uptake of fire training also compares well with the excellent result reported last year. The audit programme for higher-risk Departments resumed in January 2010 with audits undertaken in Biological, Engineering and Medical Departments. It is important to recognise that there are many other health and safety initiatives and activities being undertaken by departments across campus which are not reported here but should be acknowledged by the Committee. We believe this report provides the Health and Safety Committee with sufficient information to instil confidence in the state of health and safety in the University and enable the Committee to further its influence over the activities performed at the University. Comparative data has been included where applicable.

Contents

1. Fire Precautions report

1.a Fire Safety Legislation, British Standards and Guidance

There have been no significant legislative changes to fire safety during the course of 2010. Nor have there been any significant fire related British Standards published.

Guidance has been published in support of the use of BS9999 as an alternative route to achieving compliance with Part B of the Building Regulations. Being less prescriptive in nature than the Approved documents, it is hoped that this will allow us greater flexibility when designing new buildings and planning refurbishments.

1.b Risk Assessments.

Fire risk assessments have been conducted or revised for the following buildings during 2010:

- Sykes House
- Usport and S10
- Carrysbrook Court
- 8-14 & 20-30 Endcliffe Crescent
- Oakholme Road properties
- 6a Shearwood Road
- 8 Palmerston Road
- 205 Brookhill
- 24 Hounsfield Road
- LCCC Beighton
- 267 Glossop Road
- 171 Northumberland Road
- Octagon Centre
- Unit 4 Evolution/NAMRC
- 78 Hoyle Street (ELTC)
- Union of Students
- Portobello Centre

Work on the fire risk assessment for the Mappin Building is ongoing. A risk assessment in support of the licence application for Mappin Hall is nearing completion. The design of the new external Means of Escape for the Broad Lane block has progressed but is currently on hold due to the proposed new building on the corner of Newcastle Street; improvements to the means of escape from the Broad Lane Block will now be co-ordinated with this project.

A meeting was held in February 2010 to review the fire risk assessments for the residential buildings maintained by VLL. Re-introduction of a zoned alarm strategy at Crewe Flats to reduce the impact of false alarms on residents has not been completed yet but will be pursued during 2011. The fire risk assessments for all of the Student village buildings were reviewed and audited by SYFRS

1.c Fire Service Inspections

An overview of inspections conducted by the Fire Service in 2010 is given below. Due to our current good reputation with the Fire Service, University buildings tend to inspected less frequently than in previous years. This year's inspections were centred on the residential buildings at the Endcliffe and Ranmoor villages.

Significant contraventions were found at two buildings; the ELTC building on Holye Street required additional fire alarm call points and the LCCC at Beighton required a new fire alarm and emergency lighting system. Both of these issues have since been addressed to the satisfaction of the Fire Service. All other contraventions that were noted were of a minor nature and have since either been rectified to the satisfaction of the Fire Service or an agreed course of action is in hand. There is still a degree of concern over the frequency of fire alarm and emergency lighting testing. Estates Services and Safety Services are continuing to work to bring about the necessary improvements. More detail is given in section 1.g below.

Table 1. Summary of Fire Service Inspections & Visits 2007 - 2010

Inspection type	**2007**	**2008**	**2009**	**2010**
72D familiarisation visit	5	11	15	11
Licence renewal inspection	2	2	3	3
False alarm strategy meeting	12	0	0	0
During use inspection	5	1	3	0
Risk assessment audit	1	24	18	57
Total number visits	**47**	**38**	**39**	**71**

1.d Fire Drills 2010

Fire Drills were conducted at all relevant University buildings during October 2010. At the non-residential buildings the results were consistent with last year's very good performance and no repeats were necessary. The performance at the residential buildings was similar to excellent standards seen in 2009 and only one drill was deemed sufficiently poor to warrant a repeat, which was carried out in December and on this occasion was deemed to be satisfactory. A full report on the fire drills is available on Safety Services web pages.

1.e Maintenance of Fire Fighting Equipment

During 2010 the number of unscheduled visits to service fire fighting equipment that had been maliciously discharged has remained very low. In the residential buildings where fire fighting equipment is maintained by Safety Services there were only 9 unscheduled visits during which 16 extinguishers had to be recharged. A further 21 extinguishers were found to have been discharged during routine service visits. Although any level of interference with safety equipment is unwelcome, the problem is much reduced compared to previous years.

This year's dry and wet riser testing program identified that all of the systems are in an operational condition. A number of minor defects were noted and forwarded to the Department of Estates to deal with on the maintenance programme. The wet riser system at the Arts Tower was not tested as refurbishment work is still in progress.

1.f Fire and Safety Signs in Central Teaching Spaces.
All of the signs have now been installed. Work is currently in progress to assess the additional pool teaching rooms that have come on stream as a result of new buildings and refurbishment projects. Work is currently under way to provide 3D signage depicting the escape routes from those teaching spaces that have more complex means of escape.

Work is currently in progress to provide all buildings with the new format of Health and Safety Law poster. The deadline for the completion of this work is 2014 however we are currently on track to have the work complete by the end of 2012. A paper detailing the timetable for this project will be tabled separately.

1.g Fire Alarm and Emergency Lighting Systems
A number of the fire alarm systems in our buildings are reaching the end of their expected lifespan and difficulties obtaining replacement parts for these systems accounts for a high proportion of the 'system fault' false alarms. These systems have been identified as priorities for allocation of funding from the H&S Capital Projects Budget and Long Term Maintenance programme. Work is currently underway to design a replacement system for the Mappin complex, and the Hadfield/Chemical Engineering building is next on the list followed by The Union of Students'/University house and the outstanding parts of the Western Bank Complex.

A review of buildings where the weekly fire alarm test is undertaken by the occupying Department revealed a compliance level of approximately 80%. The main reason for non-compliance was relocation of departments to different buildings resulting in a need for them to be retrained to test their new system. Work is in progress to train the necessary staff to ensure that all alarms are tested weekly. Safety Services continue to work with the Department of Estates to provide additional resources for weekly fire alarm testing in the larger central campus buildings.

Considerable progress has also been made by the Department of Estates on meeting the testing requirements of the British Standard for emergency lighting systems. The University's policy of installing self-testing emergency lighting systems will help to improve our level of compliance in this area over the coming years.

1.h Emergency Incidents in 2010

2010 saw a slight increase in the total number of incidents recorded, mainly due to incidents requiring attendance by the Ambulance Service, who are often called directly by students at the Residences. The number of fire alarm calls and fire alarm system faults is significantly lower than was the case prior to 2009. The number of "real" fires dropped to an all-time low of 10.

Table 2. Comparative Emergency Incidents Totals 2006 - 2010

	2006	**2007**	**2008**	**2009**	**2010**
Ambulance	105	94	79	94	108
False Alarms - Accidental	69	59	40	20	24
False Alarms - Malicious	11	15	6	3	3
Fire Alarm System Faults	73	52	30	17	22
Fires	19	20	19	20	10
Miscellaneous Incidents	2	4	2	2	2
	279	**244**	**176**	**156**	**169**

A summary of the fires in 2010 is given in APPENDIX 1b. The number of ambulance calls during 2010 (108) rose by 14 compared to the previous year and is around the average for the past 5 years. This rise is within the bounds of normal statistical variation and is not thought to be of concern. Although there will always be some variation in these figures from year to year, the long-term trend for both ambulance and fire calls is downwards.

The total number of false alarms to which the Fire Service was called to attend fell from 40 in 2009 to 35 in 2010. The reduction in unwanted fire calls this year exceeded the 5% target that had previously been agreed with South Yorkshire Fire & Rescue Service.

The majority of fire alarm incidents at the residences are now dealt with via the Residences Monitoring room and so are not shown in the Table 2 above. In addition to the fire incidents dealt with via the Central Campus Control Room, there were a further 323 (274 in 2009) that were dealt with via the Monitoring Room. These break down as follows:

- False Alarm – Accidental, 155 (154 in 2009). The majority of these were cooking related incidents, with steam from escaping from ensuite shower rooms and 'over-zealous 'use of aerosols accounting for most of the remainder.
- False Alarm – Malicious, 76 (40 in2009). Most were due to activation of fire alarm call points or interference with detectors.
- False Alarm – System Faults, 85 (71 in 2009). The biggest single cause is detector faults, but this category also includes incidents where the cause could not be positively identified. The majority of the remainder are caused by faulty detectors.
- Fires, 7 (9 in2009). All but one of these were minor incidents which were dealt with by residents or staff using the fire fighting equipment provided. Again these were mostly cooking related incidents. The exception to this was a deliberate fire at Endcliffe Crescent Flats. Details of which have

recently appeared in the local and national press.

Incidents that are dealt with via the Monitoring Room are referred to the Residential Mentoring team who will advise residents on how to prevent similar occurrences in the future and, where necessary, initiate disciplinary action.

1,i Disabled Evacuation

Evacuation lifts are still not in use, so the focus is still on ensuring that appropriate Personal Emergency Evacuation Plans (PEEPs) are put in place where staff or students work in areas where they are unable to evacuate by their own unaided effort. Where necessary this has included training departmental staff in the use of Evac-chairs' that can be used to assist people who are unable to use the stairs. To avoid the need for assisted evacuation our advice remains that wherever possible disabled staff and students should be accommodated in areas where they can evacuate the building by their own unaided effort.

There are still concerns about the potential for visitors with disabilities which could prevent their safe evacuation not being addressed, and information has been added to the University Home Page for Disabled Visitors asking them to contact the department they wish to visit in advance to enable management to make suitable arrangements.

To further assist departmental staff in anticipating the needs of people with disabilities, Safety Services will be delivering a series of awareness seminars for Departmental Disability Liaison Officers (DLOs) during 2011 which will focus on the PEEPs process and the practicalities of assisting people to leave the building in an emergency.

As part of our strategy for improving access and egress arrangements across the University estate, refuge communication points have been provided in a number of key buildings. Unfortunately the company that provided the current system is no longer able to provide technical support and as such faults occurring with this system cannot always be resolved. In addition to this the "standards" against which system like this are benchmarked have changed, particularly with regard to the need to continually monitor the operability. As a result of these issues a Working Group has been convened to consider the options and recommend a replacement system as a matter of urgency.

1.j Fire safety engineering assessments of new & modified building designs.

The number of engineering drawings requiring a review of fire and other safety provisions remained high during 2010. Although the procedure for approval of designs of new and refurbished buildings is working reasonably well, discussions are underway with the Department of Estates to ensure advice is sought at an appropriate stage of the design process to avoid unnecessary changes to designs and to ensure costs take necessary present

and future safety factors into account, and also that the Value Engineering stage takes the views of all stakeholders into account prior to final decisions being made.

2. Accident & incident statistics - 1st January 2010 - 31st December 2010

2010 saw a reduction of 15% in the number of total accidents reported by the University population compared to the previous 12 month period; the lowest number ever reported in a calendar year. The main reductions were under the headings "Falls", "Obstructions/Collisions" and "Medical illness". The reduction in "Falls" is surprising in view of the snow and icy conditions at the beginning and end of 2010. See Appendices 2a and 2c.

The number of Reportable Accidents recorded (seven "major" injuries and eight accident in which the casualty was unable to carry out their normal work for a 3-day period), is similar to 2009 and is representative of the norm at the University. "Reportable accidents" are those that are required to be reported to the Health & Safety Executive under the *Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995* (RIDDOR). For the total number of Reportable Accidents See Table 3 and Appendix 2b

Table 3. Comparative accident statistics 2006 to 2010

	2006	2007	2008	2009	2010
Total number accidents	508	442	448	502	424
Reportable accidents (major)	6	4	4	2	7
Reportable accidents (3-day)	16	9	1	14	8
Reportable Dangerous occurrences	0	0	0	1	0
Non-reportable Dangerous Occurrences	24	20	24	33	20

APPENDIX 2a lists Type of Accident against the category of staff or student for the period 1st January 2010 to 31st December 2010 and the total number of accidents recorded by Usport for the same period.

APPENDIX 2b lists the Type of Accident for 17 of the larger buildings on campus for the period 1st January 2010 to 31st December 2010. The statistic which again stands out on this table is the number of glass injuries sustained in the Dainton Building, primarily due to the large amount of glassware used by the Department of Chemistry and the fact that the Department has a Glass Workshop where a Technician works full time creating specialised glassware for the department. The number of slips and trips in the Western Bank complex is mainly due to the large number of people who use the building rather than any particular problem area or process.

APPENDIX 2c lists the RIDDOR Reportable Accidents and Dangerous Occurrences, and the Slip, Trip & Fall accidents for the period 1st January 2010 to 31st December 2010. It is noticeable that there has been a significant increase in the number of "reportable" slips trips and falls, several of which

were attributable to the weather conditions at the beginning and end of the year, and which has resulted in the 2010 "Incidence Rate" (accidents per 1000 staff) for "Reportable accidents" for the University of Sheffield being slightly higher than the sector (Table 4) based on statistics for staff only (5,533). The figure in brackets indicates the number of "Reportable" accidents in each category. There was only one "reportable" manual handling injury in 2010.

	UK*	HE sector*	Un. Sheffield
Total reportable accidents	4.73	2.17	2.7 (15)
Slip, trip & fall reportable accidents		0.86	1.8 (10)
Manual handling reportable accidents		0.57	0.18 (1)

* - data from UCEA Health and Safety Report 2010

3. Health and safety training report

APPENDIX 3 summarises the general health and safety, fire and radiation training carried out over the period by Safety Services, Departments doing their own "Out of Hours" training, of which there are currently 7, accounting for 18% of staff undertaking this training during the year.

The demand for first aid and health and safety courses and numbers of people attending those courses has remained stable, despite introducing external training as an option. The numbers undertaking Out of Hours training is very similar to previous years, although the number doing the online training now accounts for 65% of the total trained. Attendances at Radiation Protection lectures and induction courses have remained strong with a slight decrease in the numbers attending courses compared to 2009. No Radiation Awareness courses were run during 2010.

Over 300 people undertook the online "General Health & Safety Induction Training" package for new employees, and at the end of December, 664 people had completed the "DSE user training and assessment"; several others have started but not finished. 38 technicians and Laboratory Managers attended the Biological Safety Officer course; one "Legionella Awareness" course was carried out for ACS staff at the Residences and 71 Laboratory Technicians and Managers from Science and Engineering Departments attended 5 sessions run by Counter Terrorism Security Advisers from South Yorkshire Police on raising awareness of substances which can be utilised to make home-made explosives and providing advice on security of laboratories and substances.

The number of staff and postgraduate students participating in fire training during 2010 held up well compared to the record total for 2009: down just slightly from 4315 in 2009 to 4160 in 2010. The slight fall in numbers this year is thought to be attributable to the reduction of staff numbers resulting from VSS. The web based system was used by 2390 people, another 1736 people attended fire training lectures and 34 people participated in the trial practical fire training course. Unfortunately, as reported in previous years, the proportion of senior staff participating in fire training remains disappointingly

low.

4. Ionising and non-ionising radiations report

2010 saw a slight increase in the number of people registered to work with ionising radiations, although the number of certificates and schemes of work remained similar to 2009. The average number staff issued with monitoring badges fell significantly but the number of people issued with finger rings increased slightly. There are no classified workers at present.

The number of departments working with radiation sources remained at 28. Despite the reduction in work with unsealed sources, overall work with radiation sources has remained reasonably stable. *See APPENDIX 4 for comparative statistical information for the period 2006-2010*

The contract for centrally organised isotopes was awarded mainly to PerkinElmer (NEN), although a German firm, Hartmann Analytical are now moving into this area and may improve competition.

The review of Personnel Doses for 2004-2009 continues the excellent record of protection of radiation workers with minimal personal doses recorded during the year. Data for 2010 is not yet available. A full review can be found in APPENDIX 5.

The year saw an increase of 42 in the number of people registered to work with lasers, and an increase in the number of laser in use. There are now 200 lasers in use in total, of which 54 are Class 4.

Mr Moseley continues to Chair AURPO's Scientific and Technical Committee, and represents AURPO and University interests on the Environment Agency's Small User Liaison Group. He continues to act as validator on the web based AURPO Certificate Course in Radiation Protection arranged through Strathclyde University. The Radiation Protection Technician, Dr Chris Bull, continues to work towards RPA accreditation.

5. Genetic modification report 2010

Eleven proposals were submitted for approval to the Local Genetic Modification Safety Committee (LGMSC), of which ten were Class 1 projects and one Class 2 proposal. All projects were approved by Committee and HSE (Class 2 only).

During the year, Uspace became the primary means of consultation on projects between LGMSC members and GM Project Proposers which has speeded up the approval process for Class 1 projects.

All laboratories undertaking research with biological agents (GM and non-GM) in the Biological Departments and School of Medicine have been inspected

during the year to check their suitability for the work done, as required by legislation. The information has been provided to Departments on the work required, where applicable, to rectify defects. Laboratory inspections in the Engineering and Archaeological Departments will continue into 2011.

A proposal has been submitted to the LGMSC for revised representation and Terms of Reference for the Committee to address the anticipated requirements of the *Biological Agents and Genetically Modified Organisms (Contained use) Regulations* which are expected to come into force later in 2011.

6. Health and safety surveys, audits and inspections

Radiation surveys and inspections were carried out in 34 areas working with radioactive materials and x-rays. All statutory leak tests and monitor calibrations were completed satisfactorily. Monitor testing and calibration for external clients continue with services provided for four Universities, two local firms and SY Fire & Rescue Service. Standards found were generally satisfactory and the Service received good support from DRPSs and DLSOs in all areas.

In response to new legislation on Artificial Optical Radiations, a survey of UV equipment was undertaken throughout the university and warning signs and labels were updated where necessary and advice given to departments on compliance with the new legislation.

The health and safety auditing regime to determine health and safety compliance for Type 1 departments was re-established in 2010 with ten audits being completed during the year. As stated in last year's report, the audits were carried out by a suitably qualified external resource. The following departments were audited: Microbiology & Biotechnology, Biomedical Sciences, Mechanical Engineering, Low Carbon Combustion Centre, Physics & Astronomy, Usport, Animal & Plant Sciences, Estates Services (Legionella), School of Medicine (Cardiovascular Science), Psychology. Generally, health and safety management and standards were found to be satisfactory in all cases.

Audits of Hydrofluoric Acid processes and users was carried out at 7 user departments over the period, these were Geography, Nanoscience, Chemistry, Molecular Biology & Biotechnology, Animal & Plant Sciences, Materials Science & Engineering and Archaeology.

Other visits were made to buildings and departments across campus to inspect laboratory facilities and equipment, perform noise levels measurements, carry out pre-occupation visits to premises, discuss Fire Marshal regimes, to check fire safety and gas storage facilities, discuss means for assisting staff and students with impaired mobility to evacuate buildings safely, and to discuss various other safety problems and to offer advice and

assistance. Representatives from Safety Services are involved in all the Faculty Operations Groups across campus.

Air quality at Jessop West continued to be a concern, with further interventions required by the Staff Occupational Health Unit. Further investigations led to the conclusion that the location of the building, on one of the busiest, and most polluted, roundabouts in Sheffield, is the more likely cause of the problems experienced by staff and meetings are requested with Sheffield City Council Officers to investigate whether actions can be found to minimise the current problems.

Safety Services continues to liaise with relevant enforcing authorities for anti-terrorist activities related to biological organisms, radioactive substances and toxic substances and chemical weapons and precursors.

7. Health and safety policies and information

There have been minor revisions made to the 2009 issue of the Health and Safety Codes of Practice to reflect changes in Department names and advice. As previously reported electronic copies are available for staff and students in PDF format from the University's home page in the "Staff" section.

Safety Services contacted all new undergraduate and postgraduate students by e-mail during October 2010 with the relevant web links to enable them to access the Health and Safety Codes of Practice they should be aware of and comply with during their stay in Sheffield.

A cross-campus Working Group was convened by Dr Malcolm Butler, Director of Faculty Operations, Faculty of Engineering, to review the health and safety responsibilities of the Faculty Pro-Vice Chancellor role. The report from the Group was submitted to UEB in December 2010.

A cross-campus Working Group was set by Safety Services up to develop and implement a revised Policy on the "Management of Contractors" which can be applied to all contracts involving external Contractors and used by all Departments. The Director of Estates and Facilities Management is reviewing the Policy prior to submission to the Health and safety Committee in March 2011.

The monthly "Safetyline" health and safety updates have continued to be produced and placed on the Safety Services web site and the link sent out as an e-mail to departmental contacts.

Significant improvements were made to the Biosafety webpages to provide clear advice and guidance to researchers undertaking work with genetically modified and "wild-type" biological agents.

First aid cover for 20 Degree Ceremonies was provided by first aid volunteers from across the University and whose contribution is warmly appreciated.

8. Specialised waste disposal report

8.a Solvent, oil and chemical wastes

Two collections of solvent and oil wastes were undertaken in 2010 from 9 user departments. Volumes collected were similar to that collected in previous years. Two collections of waste chemicals were also taken for disposal from 11 user departments.

8.b Radioactive waste disposal

Volumes of radioactive waste collected in 2010 were up on 2009 and the total cost of disposal was £10,400 ex VAT, of which all was recovered from hospital and University departments. Costs related to radiation "activity" are being minimised by making full use of the 6-month "decay period".

9. Health and safety investment report

Investment in the University infrastructure to address specific health and safety deficiencies has continued. The principal projects for 2010 were:

1. Commencement of the installation of a new fire alarm and detections system for the Sir Frederick Mappin building. This is a two-year project due to complete in July 2011.
2. The proposed fire escape stairway from the Newcastle Street end of the Broad Lane block of the Sir Frederick Mappin building was postponed as the site compound for the Chesli project occupied the space where the new staircase was to be built. However, a proposal has been made by the Faculty of Engineering for a new building on the corner of Newcastle Street and Broad Lane, which will incorporate a new fire escape serving both the new building and the Newcastle Street end of the Broad Lane block. As such it is intended to carry out sufficient repairs and improvements to the existing staircase to ensure its suitability until the new building is completed, and numbers of students will be limited in the affected part of the building until the additional escape capacity is provided.
3. The Fire alarm system improvements for the Rotunda have been postponed to 2011.
4. Expenditure on asbestos removal from areas of the Chelsi project exceeded the estimates significantly due to far more asbestos being present than had been expected.
5. Asbestos removal was undertaken in lecture theatres in the Hicks building but the project to remove asbestos from underground ducts was not started and will be addressed by the Department of Estates and Facilities Management under a revised project.
6. New fire alarm systems were installed in St George' workshop and the Sirius workshop.
7. Around £30,000 was provided to rectify deficiencies identified by the "Glass Condition Survey" conducted during 2009.

The discovery of residual asbestos contamination of plant rooms and other areas which had previously been "stripped" of asbestos, has resulted in the Director of Estates and Facilities Management commencing a new asbestos survey of the entire estate and new arrangements for sampling and removal. Funds currently held within the Health and Safety Capital budget for asbestos works will be transferred.

10. Legionella control report

The risk assessment programme was completed; all academic buildings and all residential building other than the very small terraced buildings having been fully assessed. As previously reported, the University has been "divided" into five "zones" each zone being risk-assessed by a different contractor enabling the Department of Estates to complete the assessment programme and assess the performance of the four contractors.

Temperature monitoring, sampling and treatment activities have progressed satisfactorily but positive Legionella samples were found at the Arts Tower, Students Union and George Porter Building. All "failures" have been at the "First Action Level" requiring emptying and cleaning of the water tank, chlorination and re-sampling of the water system. All subsequent samples have proved negative for Legionella. Other remedial works identified as a result of temperature non-compliances are carried out as required following investigation into the causes.

The Department of Estates & Facilities Management has continued the programme of cleaning and disinfecting cold water storage tanks in all buildings and the cooling tower at Kroto was replaced during Easter 2010 by an enclosed cooling system.

An external auditor reviewed the Legionella Policy suggesting minor alterations to the basis for prioritising the legionella risks in buildings. Safety Services audited the arrangements for managing legionella and only minor deficiencies noted with recommendations for remedial actions.

One "Legionella Awareness" training session was carried out for fifty Accommodation and Commercial Services staff at the Residences.

The Legionella Steering Control Group met three times during the year to monitor the effectiveness of the measures taken to control Legionella and to identify the long term investment required to eliminate and / or reduce risks. The Group takes the lead role on Legionella matters, e.g. developing and monitoring the Policy and practices, providing guidance and informing relevant personnel about key issues.

11. Compliance with Service Level Agreements

The level of compliance with Service Level Agreements (SLA) continue to be high, both on measurable aspects and on the qualitative aspects as indicated by the "perception" feedback received from departments with the self-audit responses. Returns indicated that of those using the Services, 92% were satisfied with Health and Safety Training, 98% with "Professional Advice and Information Service", and all others indicated 100% satisfaction.

One respondent expressed dissatisfaction with aspects of the "Professional Advice and Information Service" and four with sufficiency and quality of training courses. There were two comments, one about quality of training the other about sufficiency of courses.

Over the past year, it has been evident that the online courses are becoming increasingly popular as an alternative to practical sessions and First Aid courses are being offered with both internal and external trainers.

12. Portable Appliance Testing (PAT) Service report

The PAT Service has now been operating under the new University of Sheffield's Portable Appliance Testing Policy for the past year with no concerns being expressed by departments on the new standards. However, the year did start with the testing programme being around 6 months behind schedule, and an additional PAT Technician was employed on a "fixed-term contract" basis to address the backlog. By July the testing programme was back on schedule. In 2010 the number of departments tested increased from 121 (in 2009) to 143.

During 2010 a survey of 3-phase 415v electrical equipment throughout the University was conducted to determine whether this equipment was being tested, or whether it is falling outside both the PAT testing criteria and the building electrical infrastructure criteria. The survey identified that 3-phase equipment is not being tested and during 2011, PAT Technicians will be trained to undertake testing of 3-phase equipment and start a programme of testing alongside the normal testing of 240v equipment.

Over the past 12 months, the operational, administrative and financial processes of the PAT Service have been reviewed by a small Working Group, comprising senior staff from Departments, Finance and Safety Services, and it is clear that charges for testing equipment will have to increase as the charges levied on departments for testing does not cover the cost of the Service; charges have remained unchanged for 14 years. The review also considered the way departments are charged and moneys collected to identify how to reduce the administration involved to ensure cash-flow covers salary costs, as four technicians are funded from the income. A proposal will be submitted to the Health and Safety Committee in March 2011 recommending "top-slicing" departments using the service based on the number of items tested (averaged over 2 years) multiplied by the "charge per item" cost. Costs for 3-phase equipment testing will be based on hourly or part-hourly rates.

The Service currently operates with one full-time salaried Senior Technician and four full-time contract Technicians. Managerial, secretarial and administrative support is provided by Safety Services staff.

13. Enforcement Agencies audits, inspections, visits and contacts

South Yorkshire Police Counter Terrorist Security Advisers (CTSA) inspected radiation areas in July 2010. Everything was found to be satisfactory. Updated security guidance has been reissued to Departments.

The Health and Safety Executive cancelled a proposed visit to Animal & Plant Sciences facilities at Maxfield Avenue on the basis that there were no activities of concern.

Visits by the Fire Service are listed under section 1.

14. New Legislation and Guidance introduced over the period.

The following, relevant legislation and information came into force during the period: -

The Control of Artificial Optical Radiation at Work Regulations 2010 came into force on 27th April 2010. The Regulations, aim to protect workers from the dangers of hazardous sources of artificial light, some of which – particularly UV radiation and light from lasers – can harm the eyes and skin. Common sources of light in the workplace such as office lights, photocopiers and computers are excluded from the Regulations. The requirements complement the risk assessment provisions of the *Management of Health and Safety at Work Regulations 1999* and cover risk assessment, elimination and reduction of risks, an action plan, information and training, health surveillance and medical examinations. HSE believe the Regulations will affect only a small number of at-risk industries using light sources as part of their work activities and are not already protecting their workers.

New ***Environmental Permitting Regulations*** were issued in April 2010 replacing the Radioactive Substances Act 1993 for radioactive substances use. "Permits' are now required to use unsealed sources instead of "Registration' for holding materials, and a 'Waste Authorisation' to dispose of materials. Separate permits will continue to be required for sealed sources due to security concerns. A smooth transition is expected to the new regime and there is no immediate need to change documentation. A new Exemption Order regime was expected to be implemented with the new *Environmental Permitting Regulations* but this has been delayed, and existing Exemption Orders will be carried over in the new Regulations. The new Exemption Order regime is expected in April 2011 and is not expected to impact on the University's work. The university is now expected to apply 'Best Available Techniques' (BAT) for the use and disposal of radioactive materials. BAT

replaces "Best Practicable Means" (BPM), but for small users (e.g. Universities) this will make no difference to current practices.

In June 2010 the Prime Minister launched a Whitehall-wide review of the application and perception of health and safety legislation and the alleged growth of the "compensation culture". The review is being conducted by Lord Young of Graffham. The "**Young Review"** was issued in October 2010 highlighting the safety burdens faced by small "low-risk" firms (higher-risk workplaces are not considered in this report) and making recommendations to discourage the "compensation culture"; simplify the risk assessment process for low-risk workplaces and schools; raise standards for professional health and safety consultants; enable individuals to challenge decisions by Local Authorities to ban events based of health and safety grounds; consolidation of health and safety regulations and a move to less prescriptive legislation, as was originally intended by the *Health and Safety at Work Act 1974*.

As part of the process of encouraging GP's to evaluate a person's fitness to work rather than stating people should refrain from work when ill, in 6th April the "Fit Note" was introduced to replace the "Sick Note" under the ***Social Security (Medical Evidence) and Statutory Sick Pay (Medical Evidence) (Amendment) Regulations 2010***. The "Fit Note" enables GPs to advise patients if they are "not fit for work" or "may be fit for work taking account of the following advice" and suggesting ways of helping an employee back to work.

The ***Genetically Modified Organisms (Contained Use) (Amendment) Regulations 2010*** came into force on 21st December making three minor changes to the 2000 Regulations to address omissions in those Regulations. These amendments make no significant changes and do not require action by researchers in the University working in this field.

Minor amendments had been expected to the Approved Code of Practice and Guidance on the *Control of Substances Hazardous to Health Regulations 2002* and the *Genetically Modified Organisms (Contained Use) Regulations 2000* but these have been delayed until at least April 2011, awaiting the introduction of the *Biological Agents and Genetically Modified Organisms (Contained Use) Regulations 2011* which are intended to consolidate all work involving biological agents into a single regulatory framework.

The **Environment Agency** will start to use its new civil powers from 4th January 2011 if it is satisfied that an offence has been committed. This will enable the Agency to issue:

a) Compliance and stop notices which require specified steps to be taken to ensure that an offence does not continue or happen again;
b) A restoration notice which would include the requirement to take steps to restore the environment to a position as if no offence had been

committed;

c) An enforcement undertaking which requires an offending party to take corrective actions;
d) Third –party undertakings which would require action for the benefit of a third party affected by the non-compliance;
e) Fixed and variable monetary penalties without the requirement of a full court hearing.

HSE issued **"Asbestos: the Survey Guide**" (HSG264) in 2010 which replaces and expands on the previous guidance document (MDHS 100) for asbestos surveying, sampling and assessment of asbestos-containing materials. It is aimed at people carrying out asbestos surveys and those with specific responsibilities for managing asbestos in non-domestic premises under the Control of Asbestos Regulations 2006. The guidance covers competence and quality assurance and surveys, including: survey planning, carrying out surveys, the survey report and the dutyholder's use of the survey information.

APPENDIX 1a

Emergency Incidents 2010

Class	Description	No. Incidents
Miscellaneous incidents	Gas smell & neutralising tank leak	2
Ambulance	Sporting injury	16
Ambulance	Alcohol / drugs related / violence	10
Ambulance	Natural causes / medical condition	48
Ambulance	Violence	7
Ambulance	Unknown / miscellaneous	10
Ambulance	Accident at work	2
Ambulance	Falls	15
False alarm – good intent	Misinterpretation of sounder	2
False alarms - accidental	Contractors creating heat, dust, smoke	9
False alarms - accidental	Steam from hot water, shower, kettle etc	3
False alarms - accidental	Cooking fumes	3
False alarms - accidental	Aerosol/hairspray used near detector	5
False alarms - accidental	Smoke/fumes/dust from outside	1
False alarms - accidental	Accidental breakage of call point glass	1
False alarms - malicious	Damage/breakage of call point glass	3
Fires	Experiment malfunction	5
Fires	Defective machinery/electrical equipment	4
Fires	Unknown cause	1
Fire alarm system faults	Faulty detector	10
Fire alarm system faults	Water/moisture dripping into detector/system	1
Fire alarm system faults	Unknown causes	11
	Total incidents	**169**

APPENDIX 1b

Fires 2010

Fires are defined as incidents requiring the use of fire fighting equipment or the intervention of the Fire Service, or where material damage is caused to the building or its contents.

Date	Building	Details
20January 2010	Halifax Hall	Smoking microwave – electrical fault
9 January 2010	Dainton	Small Sodium fire
19 February 2010	Dainton	Small fire due to experiment malfunction
2 March 2010	Alfred Denny	Small ethanol fire in petri dish
2 March 2010	Crown Works, Beighton	Short-circuit ignited cabling
8 March 2010	45 Victoria St	Blown main fuse box
25 July 2010	Firth Court	Smell of smoke due to leaking pump
13 September 2010	Tapton Court - adjacent to Ranmoor Annex	Building severely damaged by fire thought to have been started by contactors working on the roof
11 October 2010	Firth Court	Small ethanol fire
8 November 2010	Western Bank	Small solvent fire
	Total Fires	**10**

APPENDIX 2a

Accident Statistics from 1st January 2010 to 31st December 2010

	1: Academic		2: Technical		3: Clerical		4: Ancillary		5: U/G		6: P/G		7: Other		8: Work Ex.		***Total M***	***Total H***	***Grand Total***	***%***
	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H				
A: Animal	1				1	1					1						3	*1*	*4*	*0.94*
B: Burns	2		1		2		2		11		1				3		22	*0*	*22*	*5.19*
C: Cuts	4		11	5	1		6		10	2	5	1	3	1			40	*9*	*49*	*11.56*
D: Dropping				1	3		5		2		1	1					11	*2*	*13*	*3.07*
E: Explosions									1								1	*0*	*1*	*0.24*
F: Falls	4	1	2	1	10	3	23	5	16	21	2	2	5	5			62	*38*	*100*	*23.58*
G: Glass	1	1		1	1		3		8	5	3	6					16	*13*	*29*	*6.84*
H: Handtools		1	1						6				1				8	*1*	*9*	*2.12*
I: Inhalation			3				3					1					6	*1*	*7*	*1.65*
J: Ingestion										5							0	*5*	*5*	*1.18*
K: Spills/Splashes	2		1				1	1	6	6	1	2					11	*9*	*20*	*4.72*
L: Lifting	2		2		1		6	2									11	*2*	*13*	*3.07*
M. Machinery				1													0	*1*	*1*	*0.24*
N: Flying Particles	1		1						1	1							3	*1*	*4*	*0.94*
O: Obstruct/Collide	4		5	1	7	1	13	4	6	2	1	1	3		1		40	*9*	*49*	*11.56*
P: Electric Shocks													2				2	*0*	*2*	*0.47*
Q: Natural	1	1			1			1	9	8	1	1	5	5			17	*16*	*33*	*7.78*
R: Wood Splinters																	0	*0*	*0*	*0*
T: Trapping	1		1		1		11	1		1		1		1			14	*4*	*18*	*4.25*
U: Unclassified				1			1	3	4	2			3	1			8	*7*	*15*	*3.54*
V: Vehicles							1										1	*0*	*1*	*0.24*
Y: Ill health (Work related)							1										1	*0*	***1***	*0.24*
Z: Violence							9	1	6	1	1		7	3			23	*5*	*28*	*6.60*
Total(Type)	**23**	**4**	**28**	**11**	**28**	**5**	**85**	**18**	**86**	**54**	**17**	**16**	**29**	**16**	**4**	**0**	**30**	**124**	**424**	***100***
X: Sports (routine)	5		1						37	25	1	3	19	16			**63**	**44**	**107**	

APPENDIX 2b

Accident statistics for the 15 largest University Buildings in 2010

	Arts Tower	Bartholome house	Crookesmoor	Dainton	Dental School	Elmfield	Geography	Sir Robert Hadfield	Hicks	Information Commons	Jessops West	Management School	Sir Frederick Mappin	Psychology	Royal Hallamshire	University House	Western Bank complex	**TOTALS**
A. Animal										2					2			4
B: Burns				7				1		3							2	13
C: Cuts			1	4	4			1	1	1	1			3	13	2	4	35
D: Dropping				1	1					2	2						2	8
E. Explosion																		0
F: Slips, Trips & Falls	1			1	1	1		1		3			2		2	2	3	17
G: Glass				12				2									2	16
H: Handtools					5			1									1	7
I: Inhalation								1							1		3	5
J: Ingestion																		0
K: Spills/Splashes				6	3					1					2		4	16
L: Lifting																1	3	4
M: Machinery									1									1
N: Flying Particles					1			1										2
O: Obstruct/Collide				2	1			3	1	2	3				4		6	22
P: Electric Shocks								1			1							2
Q: Natural							1		1	2	1			1	2		3	11
R: Wood Splinters																		0
T: Trapping										1	1	1	1		2	2	2	10
U: Unclassified	1			2				3										6
V: Vehicles																	1	1
Y: Ill health (work related)																		
Z: Violence																	3	3
Total(Type)	**2**	**0**	**1**	**35**	**16**	**1**	**1**	**15**	**4**	**17**	**9**	**1**	**3**	**4**	**28**	**7**	**39**	**183**

APPENDIX 2c

RIDDOR Reportable Accidents & Dangerous Occurrences Jan 1st - Dec 31st 2010

Report Category	Incident Date	Status	Accident Description
Major Injury	10/3/10	Secretary	Broken wrist as a result of slipping on recently-cleaned floor
	26/4/10	Post-graduate	Broken arm as a result of running down stairs and falling
	4/5/10	Research assistant	Inhaled fumes whilst mending a pipe
	11/5/10	Cleaning supervisor	Tripped over a curb stone whilst walking between building
	26/5/20	Logistics operative	Broken bone in foot due to trying to free a rubbish cage by kicking it
	6/12/10	Campus warden	Broken wrist due to slipping on ice
	22/12/10	Housekeeping team leader	Slipped on snow and broke her wrist
3-day Accident	14/1/10	Campus warden	Slipped on ice & trapped a nerve in his back
	15/2/10	Technician	Stepped on a temporary floor cover which collapsed, causing damage to his shin
	16/4/10	Building maintenance surveyor	Tripped on some raised paving whilst using a mobile phone, resulting in multiple bruising
	7/6/10	Cleaner	Slipped on a wet floor & jarred her spine
	3/7/10	Portering team leader	Trapped his foot between a reversing can and a step resulting in soft tissue injury
	27/9/10	Driver	Stock cage fell off a tail-lift resulting a bruised right leg
	4/10/10	Shop assistant (Students Union)	Slipped on a leaflet & broke her nose
	29/11/10	Van driver	Slipped whilst barrowing rock salt resulting in multiple bruising
15Dangerous Occurrence	Nil	n/a	Nil
Total number of Reportable Accidents & Dangerous Occurrences = 15			

Slip, Trip & Fall Accident Statistics from Jan 1st 2010 to Dec 31st 2010

Fall Category	Minor	Hospital	Total	%
Falls on same level (misc & unspecified)	2	2	*4*	*4.0*
Falls on same level on/over objects	18	5	*23*	*23.0*
Falling on indoor steps/stairs	8	8	*16*	*16.0*
Falling on outdoor steps/stairs	4	1	*5*	*5.0*
Falling on ice or snow	8	4	*12*	*12.0*
Falling on wet floor (general areas)	3	3	*6*	*6.0*
Falling on wet floor (kitchen & dining ares)	1	0	*1*	*1.0*
All other Falls	18	15	*33*	*33.0*
Total Falls – all categories	**62**	**38**	**100**	***100***

APPENDIX 3

Safety Training course statistics 1st January 2009 to 31st December 2010

COURSE TITLE	No Courses	No. Attended	No. Passed
First Aid at Work (internal)	2	12	12
First Aid at Work (external)*	1	7	7
First Aid at Work (Refresher)	1	3	3
First Aid Trainer	1	3	3
Emergency Fist Aid at Work	6	40	40
Preliminary First Aid	18	139	n/a
HF Use & First Aid	5	25	13 (&4 o/s)
Cyanide Use & First Aid	2	8	4
Accident Action	1	11	n/a
Lecturer's Lifeline	1	11	n/a
Defibrillator training	1	4	4
CPR & "Heartstart"	12	90	n/a
Babyaid	6	30	n/a
Informal First Aid refresher (HSE)	2	13	n/a
Basic Manual Handling	4	28	n/a
Manual Handling Assessor	1	2	n/a
Fire training (lecture)	26	1736	n/a
Fire training (online)	n/a	2390	n/a
Fire training - practical	3	34	n/a
DSE Trainer / Assessor	3	17	n/a
DSE training online		450	400
General Risk Assessment	2	20	n/a
Face-fit testing for face masks	3	16	16
Gas cylinder safety*	2	38	n/a
Visual Inspection	7	33	n/a
Royal Soc.of Health Certificate	1	6	6
Out of Hours (by Safety Ser's)	35	370	228
Out of Hours (by Department)	20*	155*	155
Out of Hours (online)	-	1269	1269
H&S Induction (online)#	-	305	268 passed
Biological Safety Officer	4	31	n/a
Legionella Awareness	1	50	n/a
Project REVISE	5	71	n/a
Unsealed radioactive sources#	6	62	n/a
X-rays	6	33	n/a
Lasers	10	118	n/a
Total	**198**	**7630**	

* Courses run externally to Safety Services
n/a = no formal assessment
= 5 failed, 32 started but not complete

APPENDIX 4

COMPARATIVE STATISTICAL INFORMATION 2006-2010

	2006	2007	2008	2009	2010
Number of user departments	24	24	28	28	28
Registered radiation workers at 31/12/07	455	432	414	325	353
Number registered during the year	33	51	39	39	35
Classified workers	0	0	0	0	0
Certificates and schemes of work at 31/12/07					
- Unsealed	131	138	138	115	118
- Sealed	13	11	11	11	12
- X-rays	45	45	41	42	42
- Neutrons	2	2	2	2	0
Totals	**191**	**196**	**192**	**170**	172
Isotopes ordered and tracked on IsoInventory					
- number of batches	456	355	359	300	259
Body badges					
- average number of staff	265	207	198	191	161
- Total number of Body Badges issued	1060	829	793	766	643
Finger dosimeters issued	380	280	244	292	310
Departmental Surveys	25	20	20	28	34
Number of statutory monitor tests: -					
- In-house tests	125	115	120	128	120
- Outside Test-House	7	4	4	4	6
- Tests for external companies	143	138	177	153	162
Sources leak tested (Statutory Tests only)	55	54	58	57	53
Total Sealed Sources Held at 31/12	130	127	131	142	141
No. of HASS Sources	3	3	3	3	3
Radioactive Substances Act 1993					
- Unsealed Source Registrations	3	2	2	2	2
- Sealed Source Registrations	2	2	2	2	2
- Waste Authorisations	3	2	2	2	2
Totals	**8**	**6**	**6**	**6**	6
New issues/renewals	1	1	0	0	0
Radioactive solid waste removed from Western Bank Store (Husband Building)					
- Volume in Cu metres	14.76	13.12	12.3	12.3	15.6
- Activity in MBq	479	498	491	688	564

APPENDIX 5

REVIEW OF PERSONNEL RADIATION DOSES 2004 - 2009

(2010 data will not be available until mid-2011)

Table 1 - Whole Body Doses

Year	TLDs /OSLs Issued	Depth dose in mSv (Limit 20 mSv)			Skin doses in mSv (Limit 500 mSv)			
		<0.5	0.5 - 1.0	>1.0	<0.5	0.5 - 2.0	>2.0 - 5.0	>5.0
2004	1239	44	0	0	46	2	0	0
2005	1135	29	0	0	34	2	0	0
2006	1060	43	0	0	43	0	0	0
2007	829	32	0	0	36	0	0	0
2008	793	18	0	0	24	0	0	0
2009	766	31	1	0	36	2	0	0

Note:

- In 2009 the highest single recorded depth dose during the year was 0.67 mSv
- The highest single skin dose during the year was 0.65 mSv
- Highest individual depth dose and skin dose for 2009 were from the single badge recorded above (suspect dose from uranium “souvenir”).
- Doses can now be measured down to 0.01mSv but all those measuring less than 0.1 mSv are ignored in the above tables.

Table 2 - Finger Doses (annual dose limit 500 mSv)

Year	Pairs of rings issued	Issues with doses	Doses (mSv)			
			<0.5	0.5 - 2.0	>2.0 - 5.0	>5.0
2004	158	9	6	3	0	0
2005	152	6	3	3	0	0
2006	190	4	4	0	0	0
2007	140	1	0	1	0	0
2008	122	1	1	0	0	0
2009	146	4	3	0	1	0

Note: In 2009 highest individual finger dose was 3.9 mSv (individual used 10 x normal quantity by mistake)