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1. Executive Summary

As always, 2023 was a busy year for the teams in HS&W and our colleagues in OH&W.

There were some departures, with Stella Matimba, Business Continuity Adviser, in May, moving on to a new role outside the sector and Alan Watson, Fire Officer, moving to a promoted role at the University of Strathclyde in December. We are grateful for their time and expertise whilst with us and wish them every success in their new roles. We welcomed Liridona Jahdaut into the post of BC Adviser in August.

SEPS and RPS experienced the usual diverse range of requests for advice, one of the more unusual being one regarding the installation of a fuel system for powering experimental self-combusting rocket engines! Another was a request for advice and support from the Biological Safety Adviser (BSA) in relation to the handling of samples from stranded marine animals (as part of a Government contract concerning the Scottish Marine Animal Stranding Scheme) which required Level 4 containment facilities and protocols.

It is usual for HSW to have a mixture of planned and responsive work, and the latter can sometimes impact on the former, due to the urgency or volume of the work involved. One example was the need for an urgent response to the emergence in September of national concerns over reinforced aerated autoclaved concrete (RAAC) in public buildings. This required a series of surveys to be conducted by Estates colleagues and specialist consultants and the Head of SEPS developed a risk assessment process to assist in quantifying risk, determining the safety of the small number of affected areas, and prioritising any follow-up measures to ensure the ongoing monitoring and maintenance of these spaces. Fortunately, any impact on operational activities was minimal.

Issues in gas manifold system statutory examinations highlighted in March led to an intensive piece of work by the Chemical Safety Adviser (CSA) and Head of SEPS to improve the accuracy of the University's records of these systems and wider pressures systems along with levels of compliance with relevant statutory examination and testing regimes.

Overseas business and study travel remains one of the University's higher risk areas and enquiries on travel included that around proposed trips to Peru, Iraq, Ethiopia, Mongolia and South Africa. The Head of SEPS also supported the UofG Insurance team to establish a comprehensive picture of the range and types of student placement activities, at the request of our liability insurance underwriters.

The demands on the BSA's time continue to increase markedly. This is due to a number of contributory factors: HSE's enhanced inspection regime, in the wake of the Pandemic, continues apace with a need for the BSA to provide considerable support to those Schools engaging in research work with high-risk biological agents. This included considerable input to and collation of material developed to satisfy the Improvement Notice served in December

2022 for completion by October 2023; HSE's review of their Approved List of Biological Agents during 2023 led to a number of agents being re-classified into higher-risk categories, requiring enhanced containment facilities which were not necessarily immediately available, leading to considerable request for input from the BSA; the marked increase in interdisciplinary collaborations between those in non-biological disciplines, such as chemistry and engineering, with colleagues in biosciences has increased the demand for biosafety support, advice and training.

The CSA also had a very busy and varied year. The before mentioned survey of pressure systems and gas manifolds also led to a full review and update of associated guidance, as part of a wider review and update of all the guidance material on the Chemical Safety web pages to ensure they were fully up to date and appropriately accessible. The CSA contributed to several chemical disposal assessments and processes necessary to ensure obsolete chemicals are not retained inappropriately. There were 80 reports of incidents, near-misses and dangerous occurrences involving chemicals and the CSA responded to many of these in person. Some notable ones involved: unplanned nitrogen release in a basement area, investigations to reassure a contractor who believed they may have been exposed to a harmful substance during roof work, ejections of a brass gas cylinder regulator under pressure and unsafe, unauthorised, modifications made by a spinout company working in a laboratory on UofG premises. This latter led to the development of a memorandum of understanding between UofG and spinout companies by the CSA.

Having had a period of smooth running of the clinical waste contract, we once again encountered issues with overdue invoices, to the value of around £25K, which threatened service continuity. This would have impacted on several areas but particularly on Biological Services due to lack of space to store accumulated waste. The Safety and Environment Adviser (SEA) and Head of SEPS worked hard to interrogate financial systems to find the cause of order number discrepancies, established to be due to administrative failures by both University units and the contractor, and get the overdue payments resolved. Work continues to prevent recurrence with SEPS playing a major role on behalf of the affected units in order to maintain service. The SEA also assisted the Cleaning and Waste Adviser to deliver a successful pilot recycling trial for polystyrene waste, and, with other SEPS colleagues, supported the Department for Transport's security inspection of the UofG arrangements for the transport of high consequence dangerous materials, resulting in a "compliant" rating.

The work of the Fire Safety team was impacted significantly, during 2023, by the change of the University's property insurer, which resulted in the new insurer conducting extensive inspections and follow up meetings, requiring considerable in-person support as well as presentation of a significant volume of documentation. Responding to their findings and queries, with colleagues from Estates, extended this exercise over a period of months; an increase in demand for in-person training, particularly Fire Warden training - most likely due to the introduction of hybrid working and the need for more appointed persons. A high volume of new build activity required a particularly high input from the Fire Officers in terms of "soft landings" advice and support for new-build handovers, with the risk assessment conducted for the newly commissioned ARC, handover support and risk assessment for the Clarice Pears and handover support for the new Adam Smith Business School. Support for the campus development programme by Fire Officers and other specialist advisers is key in minimising the need for expensive, disruptive post-commissioning work. A key success for fire safety this year was the continuing decrease in unwanted fire alarm activations from 311 the previous year to 238 and a resultant fall in the need for Scottish Fire and Rescue Service attendance from 29% to 23%.

The Radiation Protection Service had input to several major projects. The RPA calculated and supplied detailed shielding requirements for a new proposed PET imaging facility at the Beatson Institute, worked with the Health Physicist to determine shielding weak spots around

the new Linear Accelerator at the SAH and collaborated with the installer to provide shielding requirements for the proposed CT scanner for the Weipers Equine Centre. In addition, the radiation dosimetry service contract was reviewed, re-tendered and awarded.

A phenomenal volume of training was delivered by the members of HSW, comprising 163 courses (149 delivered in person, 14 online) with 6,984 attendees (6974 staff and students and 10 external attendees). The range of courses continues to grow, with new courses including an IOSH Managing Safely refresher 1-day course, a new format of online induction, specialist course first aid course for oxygen/ cyanide and radiation safety refresher course.

The Occupational Health & Wellbeing team, OHW, saw some staff movement with the arrival and early departure of one OH Adviser, the recruitment of their replacement, Norma Stewart, and the recruitment of an OH Screening Nurse, Nicola Stewart. In a move to improve cost-effectiveness of screening clinic services and offer a development opportunity an Administrator, Lisa Johnston, was trained as a phlebotomist and now fulfills that role one day a week. This year, the Seasonal Influenza vaccine was made available to staff with 178 vaccines being delivered by the end December. The Head of OHW made a successful investment bid for funding to support implementation of a fully digitalised OH management system which will progress during 2024. The Head of OHU also presented at the Safety Coordinators' development day in October, organized by SEPS, which generated useful discussion and information around potential health surveillance requirements.

Wellbeing initiatives this year included health promotion sessions with four groups of staff within the University. A successful bid to the Ferguson Bequest resulted in a £9K allocation towards menopause and men's mental health support events. A visit by the NHS Blood Transfusion Service to Garscube generated 46 donors. 95 employees completed the Mental Health First Aid course and 148 of the 504 registered MHFAs completed a survey exploring their experience as MHFAs.

The departure of the previous Business Continuity Adviser and period for recruitment caused a slight pause in BC activities but there has been good progress, nonetheless. The PWC audit (2022) actions continued to be completed with a new BC SharePoint site and hub coming online during 2023. The Strategic Business Impact Analysis (BIA) was approved at the end of the year and will form the basis for local BIAs. Approaches were made to Schools and Services for BC Coordinator nominations, with some early responses prior to the December break. Liridona Jahdaut, BC Adviser from August 2023, has made progress in familiarisation with her new work environment and sector through a series of meetings with internal stakeholders and attendance at regional and national network events. Attending a local disaster recovery exercise organised by ITS provided good background knowledge and material for the planned UofG cyber threat exercise planned for March 2024.

Finally, two residential away day events for HSW staff in May and October proved extremely productive, allowing dedicated time for the more strategic planning processes and preparation for some operational activities as well as the opportunity to celebrate some significant long-service markers for several team members.

2. Key developments and activities

Administrative changes

Staff changes within HSW included the departure of Business Continuity Adviser, Stella Matimba and the recruitment of Liridona Jahdaut to fill the role in August 2023.

Alan Watson left the SEPS fire team after 7 years in November to take up the vacant post at the University of Strathclyde and we thank him for his contribution to maintaining fire safety standards here at the University of Glasgow, wish him every success in his new role and look forward to opportunities to collaborate in future.

Billy Russell, our Senior Fire Safety Advisor, was elected to the chair of the Scottish University Fire Officers (USHA) group in October and as well as leading the Scottish group will liaise with the national UK group on all fire safety related matters.

HSW contribution continued toward Estates-led development of a suitable file structure to hold building records within the SharePoint system. Although HSW have some relevant content, such as fire risk assessments, most information held by the team is not buildings information and so would not reside within this structure at its current point of development.

The formation of a new main entrance to the Kelvin Building will remove the current RPS offices and some lab space in 2024. Discussions have taken place over the course of the year on how the RPS team, and its equipment, can be accommodated. Plans include relocation of lab facilities to areas within the Kelvin Building and reconfiguration of the SEPS offices within the Isabella Elder building to provide shared space. It is expected that the move will take place early in 2024.

SEPS website was redeveloped during the year with a new tile-based landing page and now shares a common style with the HSW and RPS webpages. The SEPS site was regularly reviewed and updated over the latter part of the year using 'Site Improve' software to update broken weblinks and improve accessibility. SEPS site is one of the larger websites in the University and review and updating of content remains an ongoing but important task for the HSW and SEPS team.

General safety

Ongoing general safety advice requests via the SEPS inbox cover a very extensive range of topics. Some of the more typical ones this year have included water ingress, mould issues, welfare provision, food safety, display screen equipment, portable appliance testing (PAT), expectant mother risk assessment, general risk assessment, adverse chemical reactions, glove compatibility, travel advice and management systems. Amongst these there are more specialist or unusual topics as diverse in nature as ever. The breadth of enquiries expanded yet again this year and included a request for safety advice on the installation of a fuel system for powering experimental self-combusting rocket engines which are constructed and tested by one research team at a facility in Machrihanish.

Incident investigation continues to be an important part of SEPS role from which lessons can be learnt and improvements identified. Every incident report received by SEPS is reviewed by the Head of Service and assigned to a specialist adviser for further review and, if necessary, investigation. The aim of this is to identify both the immediate and underlying causes of an incident so that these can be addressed. The outcome of individual incidents reports cannot reasonably be catalogued in an annual report of this type and so are not discussed in detail. However, they are reported on a quarterly basis to the HSW Committee, and some summary data is provided within Section 6.

SEPS contributed to completion of various applications, questionnaires and surveys associated with bids for research funding and duty of care activities on the part of funding providers. These included contribution to the JOSCAR submission, to facilitate access by the University to research contracts within the aerospace, security and defense sectors.

SEPS continued to respond to incoming Subject Access Requests and Freedom of Information requests which are routinely used by claimants and their legal representatives as part of the civil claims process following accidents. During 2023, several of these related to historical claims, including noise and asbestos. In one case involving asbestos, the matter related to a period of employment during the late 1960s. Although SEPS retain records of any specific asbestos exposure incidents on a long-term basis (typically 40 years), information from that era is no longer held.

Triggered by issues with gas manifold system examinations uncovered in March, (see Chemical Safety section) considerable work was undertaken by SEPS through the middle part of the year to improve overall compliance with statutory examination of the full range of pressure plant items held by Schools. Lists of overdue equipment were prepared and circulated to Schools on a repeated basis over several months and vigorous support provided to each unit to help them identify and deal with outstanding items. In many cases, items were found to have been scrapped, but not removed from the inspection programme, whilst other items were able to be confirmed as still being held, but out of use on a semi-permanent or long-term basis. By December 2023 the list of School items was reduced to just over 20 notionally overdue items almost all of which are known to be currently out of use. This exercise has served as a useful training programme for local staff who are now much more aware of the requirements for statutory examination of pressure systems and their role in it. Where examinations are required, these are now being set up effectively by local staff. This can involve coordinating joint attendance by maintenance contractors, engineering surveyors and others as well as arranging system downtime and so can be administratively demanding.

SEPS also assisted with ensuring statutory examination of lifting equipment. This included identifying new equipment within our new JMS and ASBS buildings which will require regular examination, and support to the UofG team running the Scottish Marine Animal Stranding Scheme (SMASS), based near Inverness, to access examination services for their lifting equipment.

Transfer of the University's framework maintenance contract from one service provider to another, in April 2023, led to some initial uncertainty about the range of assets the new provider would be responsible for maintaining and resulted in labelling of some items falling under School and College responsibility as Estates plant. SEPS were involved in helping to disentangle and clarify the various responsibilities, in particular in relation to some type of extract ventilation equipment and specialist items such as microbiological safety cabinets, recirculating fume cupboards and compressed gas systems.

SEPS continues to engage with third-party partner organisations, subsidiary companies and spin-off companies associated with the University. This included agreement to provide temporary safety support to the Beatson CRC team during a void period in their own arrangements, clarification and agreement on support arrangements for UofG Commercial Ltd., and clarification of safety arrangements for various science/engineering/biological spin-off/partner companies based within our labs. The Chemical Safety Adviser (CSA) prepared a guidance document specifically setting out the nature of these arrangements as part of our efforts to co-ordinate our safety activities with these firms, as we are legally obliged to do. This document joins the existing NHS joint agreement which seeks to define safety arrangements between UofG and the NHS.

SEPS staff support and attend various safety-relevant working groups including, the newly formed LGBTQ Safety Working Group. This has only met a couple of times so far but would consider work-related issues affecting LGBTQ staff or students. This might include, for example, travel to countries where cultural norms could put LGBTQ staff or students at greater risk.

SEPS Safety and Environmental Adviser (SEA), in his Dangerous Goods Safety Adviser role, dealt with numerous requests for advice on consignment of dangerous goods across the University. Further to this a great deal of work was required in preparation for the Department for Transport inspection at the Centre for Virus Research, (reported in Section 7). In conjunction with the Biological Safety Advisor a Road Transport Security Plan was produced and shared across SEPS, CVR and Security. The plan was also challenged and tested by impersonating a suspicious caller canvassing for information, which was not released.

Defibrillator locations across campus were identified and, working in conjunction with IT teams, added to the “Near Me” section of the UofG Life app. First aid support was further enhanced by work in conjunction with security to develop a SafeZone-based paging system to help locate any first aiders near to any incident so that they might be asked to attend. This system is operated by Security and helps alleviate the challenges of hybrid working arrangements, where many first aiders will not be on campus every day.

A demonstration of risk assessment safety software was arranged covering general risks. Our experience has been that general risk assessment systems tend to be more suitable for common risks such as construction, manufacturing or general work environments but less suitable for the more specialist activities encountered in many lab and research environments. More bespoke risk assessment, created by the application of appropriate professional judgement, is usually a more flexible and, if well done, better option.

RAAC concrete

Concerns arose in September 2023 over the possible presence of reinforced aerated autoclaved concrete (RAAC) within public buildings, the initial focus being on school premises and then, by extension, on HE premises. The University responded by implementing an immediate in-house survey of all buildings, on a prioritised basis, to identify any locations in which the presence of RAAC could be confirmed. In parallel with this a specialist structural engineer was commissioned to examine our building stock and to provide more detailed reports. Four locations where RAAC was present were identified: Wolfson Hall (5 buildings), SUERC (single storey), Acre Road Observatory (single storey) and an unoccupied structure supporting air handling plant adjacent to the McCall building. Wolfson Hall was found to have a RAAC roof structure which was in good condition and conventional reinforced concrete intermediate floors. The top floor was unoccupied over the summer and was kept out of use to allow completion of inspections. As a result, closure of the premises was not required. The area has now been returned to normal use and is subject to a periodic re-inspection regime. In the other three locations, temporary propping of areas where localised RAAC panel damage or deterioration was identified was required pending provision of more permanent additional support. Regular reinspection of all RAAC panels in accordance with structural engineer recommendations will be carried out under an Estates-managed plan to ensure that it remains in a safe condition.

Travel

HSW trialled two travel risk management systems which include travel risk assessment elements. Much of the wider risk management function of these systems was found to already be provided by our Security team and by SafeZone, leaving the risk assessment element as the main interest to us. We found that one system had a well-developed risk assessment template but that this would still have required very substantial customisation to align with UofG procedures. Budgetary constraints prevent further exploration of the system at this stage, but an in-house digitisation of our existing risk assessment template may provide a low cost and fully UofG owned enhancement to the current form-based system and so merits further exploration.

SEPS were consulted on travel risk assessment procedures for proposed trips to several overseas locations where special hazards were anticipated including Peru, Iraq, Ethiopia, Mongolia and South Africa. During 2024 it is proposed to audit elements of the travel system beginning with identifiable trips to higher risk destinations where there are FCDO warnings in place and to review risk assessment availability and quality for these. This will require consultation with the Finance insurance team about the travel data available that may allow such monitoring.

In response to enquiries from our liability insurance underwriters, our insurance broker requested information about the nature and extent of student placement activity organised or authorised by the University. During the March to June period, SEPS conducted a survey of key academic units to provide information which was supplied via our Finance team to help answer these questions.

Biological safety

The Biological Safety Adviser (BSA) provided specialist safety advice across the Colleges, Schools and Services as work progressed or was planned throughout the year. CMVLS and CoSE are a major focus for biological safety. However, biological related activities extend across the University, often in unexpected areas. General safety advice as well as specialist biological support was given to management units involved in teaching, research and support activities throughout the year and provision of extensive advice was also required for building works, including laboratory refurbishments and new facilities. Specialist technical and legislative advice is required, in particular for biological containment areas during planning, commissioning and operation of all facilities.

Work with pathogens and animal models across the organisation continues to grow. SEPS has continued to support this and to update the University Pathogens and Toxins register as new work commences. Research success and expansion in biological work has raised the level of biological safety and security risk across the organisation and. In response, the enforcing authority, the Health and Safety Executive (HSE), now conduct enhanced and more frequent inspections to ensure robust external oversight of these activities. This has resulted in an increased workload for our BSA for the past 18 months, supporting front-line academics and area managers in managing this work, and in preparing for our regular HSE inspections. In the post-Covid era, it is understandable that enforcing authorities are keen to ensure the highest standards and a visible and robust regulator engagement.

There has been a marked increase in interdisciplinary collaborations that involve biological material, encouraged by the co-location of chemists, engineers and biologists in areas such as the Advanced Research Centre (ARC). Significant professional support can be required where personnel have no biological safety background or dedicated biosafety-competent personnel within their discipline.

The BSA routinely reviews all reported incidents with a biosafety element and investigated many of these, including one event that was potentially reportable to HSE involving a Level 3 agent. Other non-biological incidents are similarly reviewed and investigated within the School and units where the BSA is the primary HSW contact. The HSW team continue to meet and work with the POD occupational health team to agree suitable safety practices and advice both for general application and in relation to specific cases, where appropriate.

SMASS, mentioned earlier, is a dedicated research and reporting scheme for certain marine creatures that is currently operated by a UofG team under Government contract. Although a small unit it has required substantial biosafety input this year following the detection of animal pathogens requiring Containment Level 4 facilities in biological materials recovered and held

at the University. This required the material to be appropriately secured before transfer, after appropriate consultation with HSE, to a suitable containment facility elsewhere in the UK. SMASS future work will require careful risk assessment and an agreed approach to the foreseeable and changing biological risk within the marine animal populations being studied.

Other areas of support during the year included regular attendance at the School of Infection and Immunity's Health and Safety Committee meetings, support on the importation processes and documentation for receiving pathogens and specimens into the UK from EU and non-EU countries and advice throughout the year to the four CMVLS Genetic Modification Safety Committees (GMSCs) to ensure appropriate approvals were in place for work with genetically modified organisms. Although a matter for CMVLS to resolve, two staff with lead roles in their GM management wish to step down from their positions imminently and suitable experienced replacements will be needed to fill these roles and ensure continuity of appropriate and legally required GM permission processes. As a co-opted member of the NHS Greater Glasgow & Clyde GMSC, the BSA also continued to contribute to the review of GM risk assessments for work in NHS clinical trials.

Following the December 2022 HSE inspection, an Improvement (enforcement) Notice was issued along with a number of required actions. These were addressed to the satisfaction of HSE by the specified completion dates of March and Oct 2023. A further planned HSE inspection was conducted by HSE in March 2023 of our Containment Level 3 (CL3) facilities. This inspection was more successful with no response required nor points raised by the inspector who, having gained greater awareness of the University systems in place, was more positive on that occasion. Preparation and follow-up for these inspections was extremely time-consuming and demanding of the BSA's skill, time and personal resilience. This included preparation of a Biosafety Management Arrangements document to fit within the overall health and safety management structure of the Schools and Services and a Biosafety Policy Statement and Guidelines for the Design, Operation and Management of CL3 areas. Further ongoing HSE inspections are scheduled on an ongoing basis during 2024 and, we presume, beyond.

One CMVLS response to HSE requirements was the creation of a new CMVLS Biosafety Manager post which will provide a local management function and oversight of day-to-day operations. The BSA gave input to the requirements, job description and recruitment process of this post with an appointment successfully made by CMVLS in November 2023. Although primarily an operational function, the role-holder will work in conjunction with the BSA in respect of some institutional governance functions of the HSW team such as inspection and audit.

Chemical safety

2023 was another busy year during which the CSA was called upon to provide advice and support on a range of topics to colleagues across the organisation as well as responding to ad hoc requests for assistance. This included development and updating of policy and guidance materials including preparation of a Memorandum of Understanding for spinout companies (typically lab-based units) working in or renting facilities owned by the University. The aim of this was to make clear their responsibilities and what support they might expect from the University with respect to health and safety. (see 'Notable Incidents' below)

The CSA also worked with the CMVLC Dean of Research to refine a proposal for the introduction of a research passport focusing on basic skills, health and safety, ethics and research culture with a view to supporting new academics in the UK to build the portfolio of skills required to ensure they and their research groups work effectively, safely and ethically.

Technical written guidance was extended and reviewed with the addition of a technical guidance note on the design of compressed gas cylinder storage areas for use by the Estates

Project Team to help ensure that cylinder storage areas in new buildings and facilities were designed with safety in mind. Other guidance on compressed gas use was also reviewed as part of work carried out on statutory examination of compressed gas pressure systems. A full review of the chemical safety section of the SEPS website was also completed, ensuring that all documents and links were up to date and written in accordance with the University accessibility requirements. First aid and emergency response guidance associated with the use of hydrofluoric acid was updated to reflect current guidance and circulated to key users of this hazardous substance.

Practical support was provided to many units and, in particular, to the School of Chemistry during the refurbishment project of laboratory C5-12 (Skabara Laboratory), ensuring that the project was delivered safely and problems were tackled as they arose. The laboratory is now occupied with research being undertaken. The CSA also attended the monthly meetings of the School of Chemistry health and safety committee, providing updates on accident investigations and training as well giving general advice to the committee, which is chaired by the Head of School.

Other practical support included a review of safe working practices and storage for the use of cyanide salts, with several research groups, to ensure that those working with this class of chemicals clearly understood the risks and the required safety procedures. The CSA continued to help Schools identify hazardous legacy chemicals in their workspaces to ensure that obsolete chemicals are safely removed from campus. Examples this year included six bottles of cyanide salts (around 3kg) left behind by a retired member of academic staff, a rusty compressed gas cylinder found in an external store and a stock of chromic acid waste which was found during a laboratory clear-out. A programme of inspections and education to ensure that safety valves and other pressure systems associated with specialist gas supply manifolds receive correct maintenance and statutory inspection was also carried out. This included work with local safety coordinators and managers to develop a guidance note outlining clearly the legal inspection requirements associated with pressure systems, LEV and lifting equipment.

The University hazardous areas register data was also updated early in the year, in conjunction with Schools and certain Services. Although currently made available to Security, for the purposes of informed management of incidents on campus, it is hoped that this information may eventually be held in such a way to enable controlled access to a wider group of partner stakeholders, like the emergency services. The feasibility of a reporting tool hosted within the UofG Life app was explored to initial development stage in the year in conjunction with IT and Security. However, this development was paused as it was identified that a proposed Estates asset management system may provide a more flexible and robust location for this data.

As always, our legally required annual data return to the UK Government, as part of our duties under the International Chemical Weapons Convention, was compiled and submitted.

Ongoing support and advice to the project team was provided during the design phase of the proposed Keystone research and teaching building, covering general safety and chemical safety in particular.

Over the course of 2023 the CSA has been responsible for the investigation of 80 incidents, near-misses and dangerous occurrences mostly involving staff and students. The number of incidents reported by the teaching labs in the School of Chemistry was once again high but appears to be returning to normal following the restricted teaching experience caused by the COVID-19 pandemic and the consequent apparent reduced level of student lab skills. The range of incidents was wide and, although mainly involving lab activity, an event involving overseas diving activity also fell to the CSA to investigate.

Notable incidents included:

- A major release of liquid nitrogen in a basement storage facility of the Sir Graham Davies Building. During the incident the low oxygen alarm system was overridden inappropriately but fortunately this was identified very quickly. A fault in a pipework connection was the cause of the incident and procedures were updated to prevent reoccurrence.
- A suspected release of ammonia gas from a gas supply pipe in the JWNC was investigated, highlighting a potential issue of corrosion due to chloride compounds in the air combined with a local microclimate due to the positioning of pipework close to a warm air outlet. The investigation confirmed that no gas release had occurred but, as a result, improved inspection and maintenance procedures were implemented for all similar pipework.
- A contractor working on the roof of the Davidson Building reportedly felt unwell. A detailed investigation demonstrated that no chemicals or fume hoods were in use at the time and that no chemical exposure had occurred.
- A brass regulator was ejected under high pressure when improperly connected to a 300bar BOC EVOC argon cylinder. The incident happened due to operator error but no one was injured. To reduce the risk of similar incidents in the future, additional compressed gas safety courses have been planned and a visual guide to safe cylinder use produced. The CSA has been working with BOC to try and drive further improvements and has proposed design changes of the regulator to make the next generation of cylinder regulators safer to use.
- A spinout company working on University premises was found to have made an unsafe modification to the laboratory extraction system, resulting in a release of harmful vapours into the laboratory. The modifications were identified and removed and the company representatives reminded of the need to follow established safe working practices in the laboratory.

Environmental and specialist waste issues

2023 posed some major challenges in the running and operation of the clinical waste contract. As a result of overdue invoices totaling approximately £25,000, no new uplift sites were accepted for a period. This affected Biological Services who had to find space and store large volumes of waste until the issue was rectified. This situation was investigated in depth by SEPS and was found to be due to discrepancies between School and Service order numbers and the numbers used by the contractor on their invoices which resulted in invoice payments failing. This was due to administrative failures on the part of both University units and the contractor.

Over the course of two months a great deal of time and effort was expended by SEPS staff to discover the cause of the finance system issues. Once these had been identified we worked with local staff and the waste contractor's accounts team to ensure that overdue invoices were paid. Further work was carried out in September to ensure that new annual standing orders were put in place by each unit and that the contractor had an accurate record of these numbers. Although this should occur via Agresso, SEPS are now operating a supplement direct notification at year end to minimise the risk of payment failures. So far, there have been no further issues. Note that SEPS are not the direct customer for these waste uplifts but have worked to resolve these issues as part of our wider University support function.

SEPA were notified of an incident at Cochno Farm wherein a post van ran over a cattle slurry pipe resulting in mechanical damage to the pipe and a small discharge of slurry to the local burn. Physical barriers will, in future be used to either side of the pipe. SEPA noted the incident but were content with the actions taken in response.

Permission was required from the Scottish Environmental Protection Agency (SEPA) prior to beginning silt removal works on the old mill pond to allow this to serve as a fire-fighting water source. The application was progressed at the planning stage and the works were completed in November. Measures to allow a fish route were required as a condition of this permission and this was facilitated by the subcontractor.

Chemical waste collections ran smoothly throughout the year but required constant coordination with Security as certain areas require a cordon to allow the contractor to work safely. As each collection is approximately 10 tonnes, a large lorry is required for this uplift, which is unable to fit through the normal designated exits from campus. Further disruption was caused by the World Cycling Championships in August which required a great deal of coordination between lab users, Security and all three hazardous waste contractors to ensure that waste uplifts could continue to be done around the restrictions.

Some minor incidents occurred during the chemical waste collections, typically due to waste containers being improperly sealed or labelled. In response to this a more robust waste management and labelling system was developed by SEPS staff, working with the contractor, and this is now being rolled out across the University. These incidents also prompted preparation of a safety alert on chemical waste containers. The incidents were also proved useful as illustrative examples in training sessions.

A project was undertaken, led by the Cleaning and Waste Advisor in Estates, to implement polystyrene recycling. The SEA aided in planning and coordination of a pilot project to investigate if such recycling was a viable avenue. Recycling arrangements were established across two sites on the main campus and one at the Garscube campus. Between these the contractor collected 600kg of polystyrene which was diverted from landfill and reprocessed.

During October SEPS were consulted by representatives of Police Scotland who wished to discuss the legal and practical considerations around disposal of controlled substances and, in particular, the availability of any suitable disposal routes within Scotland. Requests from external partners for opinion and advice regarding specialist waste disposal were received including from Beatson CRC, the University of St Andrews and the University of Cambridge.

Internally, advice and input into the design and operation of the proposed Keystone building was given. Coordination of the F-gas register and provision of data to the Sustainability Team continued in 2023 and input was also given on the deposit returns scheme prior to that being shelved by the Scottish Government.

Waste queries and general environmental advice requests arrive to the SEPS mailbox consistently and frequently and advice given during 2023 has covered various topics where waste disposal has been required. This included disposal of bulk biological samples on microscope slides, bulk expired hand sanitiser, a scanning electron microscope, x-ray film, mercury blood pressure monitors, gas regulators, anatomical clinical models, nitrogen generator, various gels, film negatives, HEPA filters and glycol disposal following an air con leak. In addition, the Lighthouse Lab was decommissioned and requests were made for advice on bulk disposal of their electrical equipment and chemical stocks.

The SEA was also asked to speak at a World Environment Day event in June and delivered a talk on lab plastics recycling and practical ways to reduce waste output.

Fire Safety

Following a change to the University's property insurer to a new provider, a significant amount of time was allocated by the Senior Fire Safety Advisor to facilitate the new provider's

familiarisation with the estate, including the preparation of documentation for the pre-inspection process. The inspection process itself involved physical inspections of the following buildings - the Gilbert Scott Building, James Watt Buildings (North, South and Nano Centre), Library, Joseph Black Building, Mazumdar Shaw ARC, Energy Centre, and the James McCune Smith.

A series of further meetings over several months were held to implement the recommendations from the insurers, including some policy and procedural amendments. One area of negotiation where SEPS achieved a positive outcome was in the application of 'hot work' permits for certain works where the original insurer requirement was extremely inflexible and onerous and beyond the norms of UK Fire Protection Association guidance. Application of the original advice in full would have had a very significant impact on construction and maintenance work including potential delay to major projects. SEPS were able to present the FPA guidance as a reasonable risk-based alternative and this was accepted. Although we can vary the level of protection applied we are, quite correctly, required to implement the most rigorous hot work and fire watch standards where risks are high, such as within heritage buildings.

A significantly increased demand for face-to-face training, particularly the Fire Warden course, has continued through 2023. We suspect that this is due to increased hybrid working and the appointment of additional staff by Schools and Services to cover the working week. We have also seen a similar demand for our more specialist fire safety courses aimed at those with specific fire safety roles such as Fire Safety Coordinators. Overall, 32 face-to-face courses were delivered to meet this demand. In addition, training in how to operate fire alarm panels and in the use of portable fire-fighting equipment was also provided on a targeted basis to staff and to postgraduate research chemistry students.

Following internal changes within the Estates Department and their commitment to take on the regular weekly testing of the fire alarm systems, it was necessary to undertake a review of our fire safety arrangements and policy. This was updated to clarify the new roles and to introduce the change of name from Area Fire Officer to Fire Safety Coordinator. The new policy document was issued in January 2023, and further amended in September 2023 to take account of some changes to the Fire Alarm & Isolation Procedure and Permitting.

SEPS continues to support Personnel Evacuation Escape Plans (PEEPs), policy and procedures with guidance and support to students and staff, where this is required to ensure that the appropriate evacuation measures are in place. In conjunction with Disability Services, amended arrangements for providing assisted evacuation to those who require such assistance was published in January 2023.

A new policy was developed and published, following consultation via HSWC, setting out the position of the University regarding the increased use of e-scooters and e-bikes. This was in response to national concerns following several documented incidents of serious and uncontrolled fire spread from the batteries used in these modes of transport and subsequent bans from carriage on public transport.

The fire safety team continues to provide support to all building users across all UofG locations and this has recently included visits to our sites at Cochno Farm and SCENE at Rowardennan.

Fire incidents

No serious fires occurred within University premises in 2023 although a small number of less serious incidents did occur, mostly within our science buildings, involving either electrical

appliances or experiments within laboratories. Several outdoor fires were also recorded at our Garscube campus, mostly during a period of warm and dry weather in the Spring.

All other fire incidents were minor and were mainly dealt with promptly by those on site, with the Scottish Fire and Rescue Service (SFRS) being required for only two incidents, these being the two minor fire incidents within GUU and Sir James Black Building that are listed in Table 6. Other incidents included lab experiments with flammable materials, overheating of electrical equipment and incidents involving cooking which are clearly avoidable by improved operator attention. SFRS did not carry out post-fire audits in relation to these minor incidents but did so for an incident that had occurred in 2022 within the James Watt South building, and for the Sir James Black freezer incident, with advice offered as the only audit outcome.

We received two regulatory inspections in relation to student accommodation HMO licences, (McLay residences and residential accommodation at Scene) but these also resulted in advice only. The fire safety team supported eight SFRS familiarisation visits to our existing buildings and to our new buildings as they were added to the University estate.

Fire alarm activations

The SEPS Fire Safety Advisers continue to put considerable effort into monitoring unwanted fire alarm activations. The internal response process includes support by Security and Facilities staff to assist building occupiers and local Fire Safety Coordinators to identify, address and mitigate impacts of all unwanted fire alarm signals timeously to reduce unnecessary SFRS callouts.

The total number of alarm activations decreased from last year, down from 311 (2022) to 238, with falls recorded for contractor activations, unknown cause activations, and water ingress/steam. (See Table 7 for a breakdown of causes). Considering the University has returned to full working and occupation of all our sites, a reduction in numbers from last year is to be welcomed. Incidents in student accommodation account for 17% of the overall total, which is relatively low given the number of accommodation units we have. We have further identified several non-residential buildings with repeat activations and want to act on these to reduce the number of unwanted fire alarms. Other areas which are highlighted for further investigation and action are the number of alarm faults, cooking and 'occupier activity' events. The high number of activations where Security or occupiers have been unable to determine an obvious cause is also a target area.

With the number of unwanted alarm activations decreasing, attendance by SFRS has also decreased from 2022, down from 29% to 23%. This is a result of changes in call out practice over the past few years, and the change in policy from SFRS not to attend unwanted fire alarm activations within non-residential buildings unless a fire is confirmed. This has been driven largely by the Scottish Government and SFRS and is aimed at reducing both the cost and safety risk from unnecessary attendance at emergency speeds. As a result of these policy changes, we no longer receive automatic attendance at every alarm activation but are expected to confirm a fire, or significant likelihood of a fire before calling SFRS. This does not apply in residential accommodation where automatic attendance is still the norm in most cases. Therefore, of the 55 SFRS attendances 37 were at HMO accommodation which accounts for 67% of the F&RS attendances. Operational incidents internally and externally (9 events) accounted for a further 16.5% with a further 9 activations accounting for the remaining 16.5%. Interestingly, 7 of those came before the 1st of July change of policy date therefore we have called out the SFRS on only two occasions since introduction of the SFRS call challenging policy on 1st July 2023.

Campus development

The extensive campus development programme continues to require significant input from the Fire Safety Advisers, along with input by other specialist advisers, at the design stage to minimise the need for potentially costly and time-consuming alterations once the buildings are commissioned. This is particularly so where designs include fire-engineered solutions, and the fire team has been involved in a significant number of “soft-landings” meetings to support and agree the designs developed for new buildings on the existing campus and on the Western Infirmary site. This professional input is crucially important to ensure that these designs are suitable and that any change, or the conduct of building operations, does not compromise fire safety. Following this process, the Mazumdar Shaw ARC was handed over in 2022 with the Fire Risk Assessment completed in 2023. The Clarice Pears Building (School of Health & Wellbeing) was delivered in early 2023 with the Fire Risk Assessment completed in 2023. The Adam Smith Business School was opened in early autumn of 2023, with the fire risk assessment due for completion in 2024 (following further internal works). During 2024 the development of the Western site is expected to have lesser impact than in previous years as one building (Keystone) remains to be progressed, although this will be a very significant project, including further infrastructure works and will need significant input when work commences.

As new buildings near completion on the Western campus redevelopment, SEPS staff have been involved in a series of operational readiness meetings in preparation for handover of buildings and infrastructure to the University. This has particularly involved the fire team and Head of SEPS and has involved planning for the handover of the Clarice Pears Building, and the Adam Smith Post Graduate Building. This process is separate from specialist advice and support provided during the design and construction phases which typically involves the wider SEPS team and may include review of design material held within the principle contractor’s data system. Post-handover we have supported the local management teams with guidance on lab moves, initial set up and with the development of new safety systems and arrangements.

Major refurbishment activity elsewhere in the estate demands similar levels of advice and support. Work within existing occupied buildings continues, including significant ongoing fire improvements within the Boyd Orr Building (continuing), GUU Fire door refurbishment programme, library cladding replacement programme, (preparation), Kelvin Building new access arrangements (preparation), Gilbert Scott building (Grand stair preparation), with multiple smaller ongoing programs. On such refurbishment projects within existing and operational buildings, ensuring that work doesn’t compromise escape routes or create risk to the occupants is always a primary objective of the fire safety team and is one of our safety-critical tasks.

Fire risk assessment

Sustaining the rate of assessment review is challenging alongside the demands of work associated with new build and refurbishment activity. However, the fire safety team seek to maintain the target pace of assessment, whilst always prioritising our sleeping and HMO risks. Two significant new properties were added to the building list during 2023, the Mazumdar Shaw ARC and the Clarice Pears Building (School of Health and Wellbeing). All this work has involved significant input from the fire safety team. It is expected that having the fire team at reduced strength as we seek to fill the current Fire Officer vacancy will impact on the number of fire risk assessment reviews possible in the early part of 2024.

A breakdown of the fire risk assessments carried out in 2023 is shown below. These include scheduled assessment reviews, and three new building assessments - the Mazumdar Shaw

ARC, Clarice Pears, from the Western development site and Craigton Road stores. The overall number of assessments this year is reduced as last year's totals included many Categories 3 and 4 buildings due to the inclusion of Cochno Farm in the 2022 programme. As the buildings vary in size, and to try to reflect the scale of work involved, the total square meterage of the buildings assessed has also been included. The range of buildings included varies from Victorian terrace to 1960's large teaching/research buildings and new buildings such as the Mazumdar Shaw ARC which is included in this year's work totals.

Table 1

Premise Type	Number
Cat 1 - High Risk	17(13370m ²)
Cat 2 - Med Risk	24 (123,850m ²)
Cat 3 - Low Risk	11 (2200m ²)
Cat 4 – Very low risk	0
Total assessments	52 (139420m²)

Inspection and Audit

Internal auditing

Over the course of the calendar year SEPS have continued to operate our rolling safety management audit programme. An audit system is an integral part of any good safety management system and a requirement in ISO 450001, the international standard for safety management. Although the University has not sought ISO 45001 accreditation, SEPS have sought to apply the standards within ISO 450001 and its predecessors, where it has been reasonably practicable to do so, as a benchmark for good practice.

During 2023 we have undertaken nine management systems audits using the internal auditing system developed by SEPS. Audits are designed to scrutinise the health and safety management systems and arrangements of management units and form a vital part of the SEPS governance role helping units to identify areas for improvement as well as highlighting good practices which can then be shared across the organisation. A team of 4 SEPS staff comprising the Biological, Chemical and General/Environmental advisers and Head of SEPS undertake these audits, normally working within two-person teams. Larger units can take up to a week of working time to complete and so are a demanding part of our workload within the academic year.

- Geographical and Earth Sciences
- School of Cancer Sciences
- Cardiovascular and Metabolic Health
- Small Animal Hospital and Weipers
- College of Arts
- Centre for Virus Research
- School of Health and Wellbeing
- Information Services (part)
- Molecular Biosciences

Progress on implementation with actions arising from these audits is monitored by SEPS on at least a quarterly basis and a summary report is submitted to each HSW Committee.

The in-house audit program seeks to ensure that the key elements of a safety management system are in place within each unit at a level that is proportionate to the risks within the unit. This programme has been in operation for over 10 years and is one strong element of the UofG safety management system that is not always matched by systems within other

institutions, where routine auditing does not always take place. Repeat audits within the cycle now show that our system has been effective in getting the key safety management structures in place and that these are now being developed and enhanced by our major units.

In-house inspections

In addition to our ongoing programme of audits, the SEPS also undertook a series of workplace inspections focusing on laboratory areas. These differ from our audits in that they focus on practical compliance in an area and are based on observation of working practices, general housekeeping and availability of risk assessments, emergency equipment etc.. Where our management audits look at safety management systems from the top down, inspections look at the practical working arrangements that are being achieved.

Inspections were carried out in the following areas. These were mainly laboratory inspections by the CSA. However, the BSA was also involved in a number of inspections within the School of Molecular Biosciences Containment Level 2 (CL2) areas and in CL2 inspections within the ARC. In each case a written report was prepared highlighting areas of good practice and identifying where improvements may be required.

- Mazumdar Shaw Advanced Research Centre (All Areas)
- Davidson Building (3 laboratories and supporting facilities)
- Joseph Black Building (2 laboratories)
- James Watt South (Energy Laboratory)
- New Lister Building (All laboratories and equipment areas)
- Boyd Orr (Level 8 laboratories)
- Rankine Building (Level 8 laboratories)
- Kelvin Centre for Textile Conservation and Technical Art History (Wet laboratory)

Laboratory inspections were undertaken with local technical staff and Safety Coordinators to ensure that results were easily understood and clearly communicated to those with management responsibility for the area. Informal inspections were also carried out of liquid nitrogen dispensing facilities and cylinder storage compounds. This resulted in the identification of a dangerous historic gas cylinder which was subsequently disposed of via the University chemical waste contractor and the development of a proposal to refurbish and improve one of the liquid nitrogen dispensing facilities on campus with a view to modernising and making it safer for users.

The BSA leads our rolling Containment Level 3 (CL3) lab inspection programme across the 7 CL3 laboratories at Gilmorehill and Garscube campuses, with some areas having more than one inspection pre and post HSE intervention. This is a more formal process of inspection and forms part of an HSE-required tiered auditing arrangement. Formalised tracking of actions and verification of completion will be closely monitored in the 2024 inspection programme by the newly appointed CMVLS Biosafety Manager who will liaise with the BSA and work in conjunction with area managers. This inspection system will allow the University to demonstrate an effective oversight of their CL3 laboratory areas and thus meet HSE explicit expectations on this.

External audits and visits

An extensive audit of research activity was undertaken by the Wellcome Foundation during mid-2023. The objective of this internal audit was to assess the design and operating effectiveness of key controls established by the University of Glasgow, to support the achievement of research being carried out to the highest relevant standards and in compliance with grant conditions and policies. One of the key topics was Biosafety. This was very unexpected for the BSA with no pre warning as to the intensive level to which this audit would be undertaken, nor the amount of paperwork, verifications and justifications that would be required from the BSA. This was a large body of work liaising across areas which had not been anticipated and highlights that biosafety is a key topic not only with HSE but with research

funding bodies. The only action in relation to biosafety was to further enhance CL3 laboratory inspection action tracking and ensure that expected delivery dates were assigned where possible. This is being progressed by the CMVLS Biosafety Manager and the BSA in the coming year. The overall audit went extremely well for the University.

We also received enforcing authority inspection visits from HSE's biological safety group and post fire audit visits from SRFS. Details of these are provided within Section 7.

A property survey visit was carried out by our new property insurer. This was supported by SEPS staff, in conjunction with the Insurance and Risk Manager, during the survey and through implementation of the recommendations.

Radiation Protection Safety

Projects

During 2023 there were three major projects requiring the input of the RPA.

A new PET facility is being proposed for the Beatson Institute, Garscube. The RPA was tasked with providing detailed shielding requirements for each of the proposed room designs. The RPA provided the calculations, and this project is ongoing. Started February 2023

The Small Animal Hospital is in the process of installing a new Linear Accelerator. The RPA worked alongside the Health Physicist, Hamish Porter, to determine the weak spots in the current shielding. A number of areas were identified, and the RPS is now carrying out a detailed analysis of these areas to determine if any additional controls need to be applied. This is currently ongoing from October 2023.

The Weipers Equine Centre are proposing to install a new, horse-ready, CT (computed tomography) scanner. The RPA, in conjunction with the installer, provided detailed shielding requirements for different scenarios. October 2023 ongoing.

The radiation dosimetry service contract was reviewed, re-tendered and awarded during 2023. The current provider was successful in securing the contract, allowing for an uninterrupted and consistent service provision.

Incidents

There was 1 incident that required investigation during 2023.

During a demonstration of a mobile X-ray unit to staff/students, the demonstrator accidentally triggered the unit. The beam was pointed down to the floor at the time and the RPA subsequently calculated the maximum exposure to nearby staff/students to have been well within the public exposure recommendations. Protocols, in place, were adequate and the exposure was down to human error. Retraining of the demonstrator was recommended.

Routine radiation safety activities

Contamination Surveys

23 Radiation labs contamination surveys were conducted during 2023, This was up from 19 surveys during 2022. Contamination surveys are part of our license conditions.

Source Audits

There were 25 source audits conducted during 2023. Source audits are part of our license conditions and help keep the University from breaching licence conditions.

Decommissioning

Eight areas were decommissioned during 2023:

- Room 407 Beatson Institute.
- Henry Welcome Building, Rooms 429, 425, 418, 332 and 314, Garscube Estate.
- Room 115 Wolfson Wohl Building, Garscube Estate.
- Room 350, Sir Graeme Davies Building, Gilmorehill.

The necessary paperwork was submitted to SEPA as part of our licence conditions.

Dosimeters

371 whole body dosimeters are issued bi-monthly.

25 whole body dosimeters are issued monthly.

10 eye dosimeters are issued bi-monthly.

10 eye dosimeters are issued monthly.

45 extremity dosimeters are issued bi-monthly.

18 extremity dosimeters are issued monthly.

There was an audit of dosimeter use during 2023 and the findings identified some dosimeters were either out of use or not required for the type of work being conducted. This enabled the reduction of the number of dosimeters in use.

Sealed Sources

Most of the sealed sources are held in the Kelvin Building. As part of our licence conditions these must be swab tested annually for leakage.

176 sealed sources were swab tested in 2022, none failed.

Contamination Monitor Testing

The University has around 155 contamination monitors available for staff, these must be tested annually for compliance with Ionising Radiations Regulations 2017. Of these, 125 were tested, 12 monitors needed repaired (6 in 2022) and 110 needed replacement batteries.

Isotope Deliveries

There were 120 radioactive packages monitored, logged and delivered to users during 2023. This breaks down to:

Gilmorehill Campus - 1484 MBq	1591 MBq in 2022
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Garscube Campus - 109,085 MBq	63,287 MBq in 2022*
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During 2022 there was a world-wide shortage of Tc99m due to reactor maintenance, mainly in France.

Radioactive Waste Disposal

There was 1 solid waste disposals to contractor (Grundon) during 2023, consisting of 1 m3of contaminated laboratory waste with a total activity of 114.26 MBq.

'Dustbin' solid waste disposals are no longer undertaken at Gilmorehill Campus, these continue at the Garscube Campus for radioactive cat litter and horse bedding, and these records are kept on-site, and are available on request.

Liquid radioactive disposals for Gilmorehill during 2023 were 622.5 MBq.

Liquid radioactive disposals for Garscube during 2020 were 0 MBq.

Occupational Health and Wellbeing

2023 continued to prove challenging for the recruitment of clinicians. January 2023 saw the commencement of an Occupational Health Adviser (OHA) & Occupational Health Screening Nurse (OHSN). Unfortunately, the OHA resigned within a short period of time, resulting in further recruitment of a new clinician. The OHSN (Nicola Stewart) completed her probationary period and continues to work within the team. In November 2023, a new OHA (Norma Stewart) joined the team and is due to complete probation in early 2024.

To ensure service delivery continues, the Head of OH has moved towards a multidisciplinary team to support the needs of the University, which opened the opportunity for further training for an administrator to be trained as a phlebotomist, meaning she has a dual role, working one day per week as a phlebotomist. She has successfully completed her training and supervised practice.

In June 2023, an occupational health and wellbeing improvement plan and strategy update was presented to the P&OD executive group.

Seasonal Influenza vaccines were offered to staff who did not meet the criteria to receive the vaccine via the NHS programme. In 2023 early communication yielded 146 staff interested in receiving the vaccine. Sharing of information with colleagues resulted in additional requests to receive the vaccine. Some staff members who expressed an interest either received the vaccine externally or chose not to attend. A total of 230 vaccines were procured, with 178 being administered by end of Dec 2023. Further communications will be shared to encourage more staff to attend to receive the vaccine.

An investment bid was submitted to support the digitalisation of occupational health records and documentation and to move away from the use of paper-based systems. The bid has been approved to progress in 2024 and, to support the proposition, detailed OH systems requirement criteria have been developed.

This has assisted the Head of OH&W in prioritising the standardisation of occupational health processes.

Health Surveillance

The head of OH presented on the importance of health surveillance at the Safety Coordinators' development day in October, organised by SEPS. This has generated much discussion and helped to capture more areas where health surveillance may be required. OH is working with areas to develop a managed service for health surveillance, which will be implemented in 2024. This includes, where possible, a visit by members of the OH team to understand the potential risks.

Health surveillance clinical assessments continue in the ongoing programme.

New equipment (audiometer & spirometer) has been procured, enabling clinics to be scheduled external to the Occupational Health Unit, with sessions already positively received at the Garscube Campus.

SEQOHS

The SEQOSH standards were reviewed and revised in 2023, to prevent a duplication of audits. By agreement with the auditing body, the audit was deferred until early 2024.

Student Electives

The school of medicine has re-commenced elective programmes for both incoming students to the University & NHS and outgoing elective placements. In 2023 a total of 126 reviews were conducted.

Student Health

2023 saw a significant increase in the number of students screened on entry to undergraduate studies within the schools of Medicine, Dentistry and Nursing. There was a small number of students who were reviewed for commencing veterinary studies.

In September 2023, on commencement of the new academic year, 640 students attended clinical screening sessions on commencement of undergraduate studies. The screening clinics are conducted in-house, supported by sessional nurses and phlebotomists. To improve the cost efficiency of clinics, we have been able to conduct the sessions without the support of a nursing agency.

With an increased number of students, there is an associated increase in the number of referrals to Occupational Health for fitness to practice reviews.

Wellbeing

The EAP programme provided to the University by Health Assured continues, with no real areas of concern.

To continue to promote wellbeing, opportunities have arisen with Financial Services, School of Engineering, Glasgow Women in Computing Science, and the Respect Advisors' Network.

The Ferguson Bequest allocated £9000 for activities scheduled for 2023/2024. It is expected that this money will fund events specific to menopause and men's mental health.

The NHS offered places on suicide prevention talks for University staff to attend and this information was circulated for nominees. Available are 3 different levels of training/talks depending on role and responsibilities.

Peer support cafés for prostate cancer awareness and Long COVID were delivered to support initial events.

The NHS blood donation mobile unit attended Garscube campus, encouraging staff and students to give blood. A total of 46 donors attended, improving the lives of 138 patients. 25 donors offered their first donation.

A total of 95 employees completed the Mental Health First Aid course during the year.

The Director of HSW, in collaboration with OHUW, delivered a survey to the 488 registered MHFAs to establish trends and experiences in activity. 148 (30%) responded and the results will be analysed and presented to the Mental Health Group in 2024.

Business Continuity

The departure of Stella Matimba, and subsequent recruitment process to recruit her successor, Liridona Jahdaut, led to a 4-month vacancy period. However, much was achieved despite this.

Stella, working on the recommendations of the PWC audit, developed a BC Management dashboard for later use to monitor BCM progress as well as act as a records database for BIAs and plans. Liridona has progressed this, developing a Sharepoint site which will, in time, act as the document repository.

A draft exercise programme was developed, which Liridona is modifying and implementing with a major cyber exercise planned for March 2024. In preparation for this, Liridona attended an exercise for ITS looking at their own systems and processes in December 2023.

Stella's draft Strategic Business Impact Analysis was subject to consultation in the early part of 2023 and feedback from participants was taken on by Liridona who has finalised the draft which was approved by the BC Resilience Board members at the end of the year.

Stella developed a training template which Liridona is customising now to reflect the final BIA template and invitations to Schools and Services to nominate BC Coordinators were issued in December 2023.

Liridona has also been working on familiarising herself with the University, meeting with key stakeholders and attending relevant events, including a development day for the College of Arts and Humanities, at which she presented on BC planning, the SEPS-run Chemical Emergency Response training and the Estates Risk Register review workshop. In addition, Liridona completed the 5-day BCI certificate course in early December.

3. Collaboration and co-operation with external bodies

External Representation

Regular collaboration with other Scottish universities continued through periodic sector meetings with colleagues working in general safety and in fire safety at other Scottish HE institutions. SEPS staff attended the two primary safety group meetings held during the year and our fire safety section hosted the Scottish Universities Fire Safety Advisers group meeting, within the ARC, in June 2023, providing a good opportunity to showcase our new building and the fire safety strategies applied within it. SEPS contributed the University statistics as usual to the national HESA data gathering exercise and received access to benchmarking data collated by the Scottish Universities Safety Advisers' Group (SUSAG) for Scottish data and by the University Safety and Health Association (USHA), for the UK-wide data.

SEPS continues to support the University's corporate memberships USHA, and the Environmental Association for Universities and Colleges (EAUC).

The SEA was asked to speak at a World Environment Day event in June and delivered a talk on lab plastics recycling and practical ways to reduce waste output.

The BSA is a member of the ISTR Executive Committee and UK Biosafety Steering Group and attended meetings throughout the year. As part of the Events Steering Group for ISTR she helped facilitate the organisation of the ISTR 2-day Autumn Symposium. The BSA has given advice and supported development of CL3 inspection programmes at various UK Universities.

The CSA has continued to represent the University of Glasgow on the University Chemical Safety Forum (UCSF) as a member of the organising committee responsible for planning and running UCSF events (e.g. online and face-to-face conferences). UCSF is a body dedicated to improving the standard of chemical safety applied across the higher education sector.

He has also continued in his role as a member the UK Nanosafety Group (UKNSG) who have responsibility for publishing the UK Nanosafety Guide which aims to improve the understanding of health and safety issues associated with nanomaterials and how these can be controlled. The group has spent the year working on the 3rd edition of the guidance document which is due to be published in early 2024.

The CSA organised and hosted an internal development day and networking event for safety coordinators and other UofG staff with health and safety responsibilities, held in November 2023. The conference was attended by around sixty staff who heard from internal and external speakers who covered a range of topics relevant to health and safety. The feedback from conference delegates was very positive and the intention is to run another similar session again in 2024.

4. Training provision and staff development

Training provision

SEPS Specialist Advisers delivered a full programme of specialist health and safety training courses to staff and students from across the organisation with most courses delivered in a face-to-face classroom or lecture theatre setting. To improve the accessibility of SEPS training courses and reduce the need for colleagues to travel, this year some training sessions were delivered at SUERC and on the Garscube Campus.

The long-standing Moodle e-induction used as an introduction to safety in the University for many years was replaced mid-year by a video-based presentation. As this is still Moodle hosted, completion verification remains subject to the limitations of that system.

SEPS training has, for some time, been recorded with the People XD system. This system has a facility to send automated reminders when recompletion of a course is due. Use of this has been activated for some mandatory refresher training. Due to continued issues with reliable and accurate transfer of course data from Moodle into People XD we have not yet activated the notification system for Moodle-hosted courses.

Training records for staff within Moodle can be viewed by the individual and their line manager. Composite data for a School or service can also be viewed using the Insight tool that is available within the People XD Manager Dashboard to authorised managers. Authorisation for access to this is provided by POD and is available to School Heads of Professional Service who may, in turn, request further POD authorisation for other College or School staff who have a need to see this data. Senior managers have observed to SEPS that although the Insight training reports provide details of who has completed various types of training, for mandatory courses, they'd find a report showing who had NOT completed training within their unit a useful system output. This was flagged to POD and it is reported that this will be available early in 2024.

This year, for the first time, we began to deliver the Institute of Occupational Safety and Health (IOSH) Managing Safely Refresher Course to allow colleagues who have previously passed the Managing Safely course to refresh their skills and build confidence in applying health and safety knowledge in the workplace. This course was well received, and the intention is to continue to deliver it in 2024. SEPS now hold licences for IOSH Managing Safely and the corresponding MS refresher course and the Working Safely course. Our licence for Directing Safely was not renewed as this course has not been run recently, the course noted below being a more likely future provision. Both the BSA and CSA are lead trainers for our IOSH course provision and deliver all of these between them in addition to their specialist duties.

In April, HSW hosted a USHA-delivered pilot of their new '*Health and Safety for Senior*

Managers in HE' course which is aimed at equipping senior staff with enhanced health and safety management skills within the HE context.

Once again, the University's employer liability insurer offered several free courses as part of the insurance contract with the firm. In this case we made use of three courses delivered virtually, covering risk assessment, inspection and incident investigation.

The biosafety and GM training delivered by the BSA has been well received again this year with good attendance and high demand throughout the year. Our experience is that in-person training enables better interaction/exchange with attendees and useful insight into the biological activities and processes taking place across the areas. Some training was specific to certain areas such as bespoke group training for Biological Services personnel and staff within the Graham Kerr Building and, more widely, within the School of Biodiversity One Health and Veterinary Medicine.

The CSA developed and ran two courses aimed at those running research teams to provide them with a grounding in safety management in such a setting. This is an innovative and much required course that has been well received by delegates. The aim of this course is to equip those in management roles with the skills they require to manage safety in these roles and is an area of training that merits further expansion.

In addition to our formal training courses, the CSA also contributed to the health and safety inductions provided to new postgraduate students in the Schools of Chemistry, Infection and Immunity and Cardiovascular and Metabolic Health as well as designing and recording a video health and safety induction presentation for staff and students wishing to work in the James Watt Nanofabrication Centre.

The fire safety team continues to provide a variety of fire safety courses to support both staff and students in fire safety awareness and to support our commitment to fire safety with increased demand for courses continuing during 2023. Our online fire training module became due for renewal early in the year and after exploration of the market we opted to continue our current provision for a further term, although it is likely that this will cease to be available by the next renewal.

SEPS First Aid and Manual Handling training contract entered its fourth and final year in March 2023 and has since been re-tendered via standard procurement processes and a new contract awarded commencing in March 2024.

The hazardous and chemical waste courses were overhauled at the start of the year to include more incidences of local incidents and response taken. Two ad hoc sessions for CMVLS were also administered after the need was identified following a series of waste incidents. The sessions get consistently positive feedback and delegates are canvassed for their opinions on the waste contractors and any issues are fed back to them.

The table overleaf shows the delivery of formal courses and training achieved across HSW during 2023.

Courses and training delivered 2023.

Table 2

Subject	Courses instances	No. Attendees
Induction		
Introduction to Safety at UofG – Moodle e-induction quiz (operational until May 2023)	online	518 staff
Introduction to Safety at UofG (from May 2023, data as reported in Insight)	online	1274 staff
IOSH Accredited courses		
IOSH Working Safely course (1 day)	3	29 staff
IOSH Managing Safely course (4 day)	4	42 staff
IOSH Managing Safely Refresher course (1 day) New	1	13 staff
General and specialist safety courses		
Biological Safety and GM (1/2 day)	9	146 staff/students
School of Chemistry PGR Induction (1.5 hours)	1	50 students
Infection and Immunity PGR Induction (1.5 hours)	1	20 students
Textile Conservation MSc Induction	1	12 students
COSHH and Chemical Safety (3.5 hours)	5	50 staff/students
Chemical Emergencies (2 hours)	6	81 staff/students
Advanced Chemical Emergencies (1 day)	1	13 staff
Compressed Gas Safety (1 day)	2	31 staff/students
Cryogenic Refresher (2 hours)	9	148 staff/students
Safety in Research Groups (1 day)	2	17 staff
Safe Work at Height (1 hour)	1	22 staff/students
Chemical Waste (1 hour)	2	22 staff
Hazardous Waste (includes chem and biological) (2 hours)	7	68 staff
Zurich provided – Inspection systems (3 hours virtual)	1	13 staff
Zurich provided – Risk assessment (3 hours virtual)	1	17 staff
Zurich provided – Incident investigation (3 hours virtual)	1	12 staff
Manual Handling (1/2 day – external trainer)	13	107 staff
Working Safety with Computers (from July 2023) (Full staff completions only as reported in Insight – many additional part-completions)		
Completion of training and assessment element	online	304 staff
Homeworking		
Completion of training and assessment element	online	1006
First Aid Courses		
First aid 3-day certificated course	15	155 staff
First aid external 3-day certificated course	15	26 staff
First-aid 2-day refresher course	6	58 staff
First-aid external refresher course	9	16 staff
Oxygen/cyanide specialist first aid course	1	7 staff
Mental Health Courses		
Mental Health First-aid 2-day course	10	95 staff
Fire Safety Courses		
Fire Safety Coordinator (1/2 day)	9	97 staff/students
Fire Warden (2 hours)	23	246 staff/students
Fire panel testing demonstrations (1 hour)	1	5 staff

Use of portable fire-fighting equipment (New)	3	27 (25 PG students+2 staff)
Fire safety nursing students years 2 and 3 (1 hour)	3	119 students
Staff fire safety awareness training (online Moodle) (Completion total as reported by Insight, excluding an apparent mass export error on 21 st July 2023. Data quality continues to be an issue with the Moodle/Core interface for this course.)	online	1772 staff
Radiation Safety		
Radiation Safety (Attended)	online	104*
Radiation Safety Examination (passed/ attempted)	online	62/62
Radiation Safety Refresher	online	5
X-Ray Safety Course	online	122
X-Ray Safety Examination	online	76/76
X-Ray Refresher Course	online	2
Laser Safety Course	online	112
Laser Safety Examination (passed/ attempted)	online	91/91
Laser Refresher Course	online	1
Totals	163	6984

* figure includes 10 employees of Clydebank Veterinary Group

HSW staff development

The University of Glasgow hosted the USHA Scottish Fire Officers meeting in April 2023, showcasing the Mazumdar Shaw ARC Building. This event involved contributions from UofG staff Billy Russell and Jim McIvor on campus development and on engineering fire safety improvements into the ARC laboratories, and from Jim Saunders of the Scottish Fire and Rescue Service who shared a video presentation on Lithium-Ion Batteries and emerging risks. This was the first face-to-face meeting following the Covid restrictions and was well attended and well received by all delegates. Delegates were predominantly Scottish Universities Fire Safety Advisers but, as a local event, also included members of the SEPS safety team.

SEPS Biological Safety Adviser attended a 5-day course run by HSE on the safe operation of Containment Level 3 facilities and a further 1-day course on the Design, Construction, Commissioning and Validation of Containment Level 3 labs, held at the University of Warwick. These provide highly specialised technical knowledge, and it is important that the University considers succession planning arrangements where there is a need for such focused information and knowledge. The BSA has also supported the Institute of Safety in Technology and Research, attending executive committee and steering group meetings.

SEPS CSA, Phil Rodger, spent much of 2023 working towards becoming an IOSH Chartered Health and Safety Professional and succeeded in this goal in August allowing him to use the post-nominal CMIOSH. Further to this he has also attended the USHA Finance for Safety Professionals Course to build his understanding of financial systems in the higher education sector. During the past five years Phil has gained both an NVQ Level 6 qualification in occupational health and safety and IOSH Chartered status and we recognise that this has been achieved through a great deal of personal motivation and very significant hard work on top of his day-to-day duties.

The Director of HSW, Head of SEPS and Senior Fire Safety Adviser attended two Contractor Safety Forums organised by Estates in February and October.

During the year, David McLean and Alex Shearer obtained a City and Guilds 2377-77 qualification in "Electrical equipment maintenance and testing". The intention of this was to

provide a formal qualification in electrical safety to support SEPS work in inspection and incident investigation and help us to provide guidance on portable appliance testing regimes.

Alex Shearer attended a combined IOSH and IEMA seminar on the management of major incidents and also undertook Purchasing Officer training. The latter was required to allow him access to Agresso so that we could view information relating to the clinical waste disposal contract. Alex also completed an IOSH approved 'train the trainer' qualification, allowing him to become registered as an approved trainer subject to payment of the requisite IOSH professional membership subscription.

Alex Shearer is currently the only member of the SEPS team (and perhaps the University) who holds a Dangerous Goods Safety Adviser qualification. This is due for renewal in June 2024 we aim to support him in renewing this.

Members of the administrative team attended training in the use of the new Purchasing Card system, Information Security and Amazon Account Business Registration training and manual handling training.

Professional staff participated in national events relevant to the HE-sector in general, including Universities Safety and Health Association (USHA) and Institution of Safety in Technology and Research (ISTR) conferences and seminars and Scottish Universities Safety Advisers' Group bi-annual meetings. Specialist staff also participated in various specialist events associated with these and other groups, including the USHA Scottish Universities Fire Group event previously mentioned.

Team members attended the Estate run asbestos demonstration held within St Andrews Building.

The safety adviser team continues to follow a professional body CPD programme under the auspices of the Institution of Occupational Safety and Health (IOSH).

The Radiation Protection Adviser completed an Open University course on Health Physics within the Medical Sector.

The Radiation Protection Officer undertook a webinar training course on Radiation Protection and attended the virtual Society of Radiological Protection annual conference.

The Business Continuity Adviser completed the Business Continuity Adviser 5-day Certificate course.

5. Other Operational Activities

Table 3

Activity	Description	2023	2022	
Occupational Health				
Bloods	All bloods, including undergraduate screening, elective students	2396	1963	
DNA	Includes staff, students and postgraduate students who did not attend scheduled appointments	267	325	
Management Referral	New	New referrals	472	448
	Returned	Returned to the referring manager due to insufficient/incomplete information supplied	6	
	Declined	Guidance offered to referring manager & HR, as an OH referral will add no benefit to supporting the employee and business	8	
	Reviews	Follow up review – variable clinical rationale	191	204
Health Surveillance	All health surveillance appointments for health surveillance screening. This includes appointments referred to the OHP for further evaluation. The data is per person not individual HS assessment completed.	256	372	
Undergraduate Medical student electives	Incoming to University	14	0	
	Outgoing from University	112	0	
UG MVLS student Fitness to Practice referrals	students referred to occupational health and on commencement of study consult with occupational health to determine fitness and highlight recommended adjustments	260	225	
Research Passports	Processed by occupational health to conduct research in NHS. There has been a significant increase in the number of research passport requests.	54	38	
Immunisations	All staff, students, post graduate and elective students, reserachers, including seasonal influenza programme	2357	1753	

Activity	Description	2023	2022
Radiation Protection			
Ionising Radiation	Registration of new workers	85 out of a total of 504 registered workers	69 out of 512
	Registration of classified radiation workers	0	0
	Issue of personnel dosimeters total. From this year figure represents those issued bi-monthly, including (in brackets) some issued monthly:	426	634
	Whole body dosimeters	371 (25)	512
	Eye dosimeters	10 (10)	44
	Extremity dosimeters	45 (18)	78
	Radiation contamination monitors testing (12 required repairs, 110 batteries replaced)	125	187
	Swab tests of sealed sources (all passed)	176	176
	X-ray surveys (include electron microscopes and dedicated X-ray units)	0	0
Radioactive Substances	Contamination Surveys	23	19
	Source audits	25	31
	De-commissions Beatson (1 room) Henry Welcome bldg. (5 rooms) Wolfson Wohl bldg. (1 room) Sir Graeme Davies bldg. (1 room)	8	1
	Isotope Order Management	120	90
	Contractor disposals of solid waste	1 114.26 MBq	1
	Liquid waste disposal - Gilmorehill	622.5 MBq	1945.25
	Liquid waste disposal - Garscube	0 MBq	145.3
Non-Ionising Radiation	Laser surveys	0	0

Table 4 Summary of incidents reported in 2023.

2023	Animals	Electricity	Explosion	Fall/Level	Fall/Stair	Fall/Height	Fire*	Handling	Glass/Sharps	Hand Tools	Hot/Cold	Machinery	Spill/Release	Sport	Strike Against	Struck by	Traffic	Other	Medical	Occ. Disease	Violence	Totals
Staff	25	4	1	21	6			1	27		5		11		18	9				2	2	132
UG Students	8			5	2				25		1		11		3	2			2	14	1	74
PG Students	1								10		1		14	1	1					1		29
Visitors/other				1	2				1				1		1							6
Total minor and over 3-day	34	4	1	27	10			1	63		7		37	1	23	11			2	17	3	241
RIDDOR reportable incidents				2	2							1				3				2	1	11
TOTAL work-related injuries	34	4	1	29	12			1	63		7	1	37	1	23	14			2	19	4	252
Work related injuries by year																						
2022	33			19	11			7	66		5		33		23	23		1	4			226
2021	26			20	7	1		5	46		5	1	42		19	20			-	4		196
2020	20	1		18	3			8	52		5		27	2	8	13	2	1	-	3	1	164
2019	38			36	14	1		11	62		9	1	36	2	19	25	3		-	3	1	261
2018	35	3		37	16			12	92		9	1	35	1	17	19	1	1	-	6	2	266

Other incidents - 2023																						
DO / Near Miss	1	1		1	1		8	2	8			3	31		1	14	1	3			1	76
Not work-related	1			4	1	1			2		1			8	2	1	1		25			47
Contractors						1			1				1			2	2					7

*Fire category covers incidents involving injury from fire only.

Incident frequency rates	STAFF rate (H/count basis 10.1k)	RIDDOR (11) NON RIDDOR (131)	1.1 per 1000 13.07 per 1000	Comparator National Rates Universities Health and Safety Association 2021-22 (Headcount basis)	0.71 per 1000 13.14 per 1000
	STUDENT rate (H/count basis 35.5k)	RIDDOR (0) NON RIDDOR (103)	Zero in year 2.90 per 1000		0.05 per 1000 2.00 per 1000

Table 5: RIDDOR incidents reported to enforcing authority in 2023 by reporting criteria.

Description of incident	Category	Totals
“Major” Injuries (RIDDOR defined)		
Closed heavy door on hand sustaining a fractured bone in the wrist. (Struck by)	Staff	4
Tripped on a required item of equipment located in work area sustaining a fractured bone in the foot. (Fall on level)	Staff	
Fell on stairs sustaining fracture to lower leg. (Fall on stairs)	Staff	
Fractured heel stepping heavily down an unseen level change within a building. (Fall on level)	Staff	
Over 7-day incidents (RIDDOR defined)		
Fell on stairs while using a vacuum cleaner. (Fall on stairs)	Staff	5
Member of Security staff assaulted, including knife threat, while attempting to prevent a bike theft. (Violence)	Staff	
Struck on leg by buffing machine resulting in soft tissue leg injury. (Machinery)	Staff	
Sustained injury to toe whilst using trolley. (Struck by)	Staff	
Struck by stone while operating grass cutting equipment. (Struck by)	Staff	
Student/public to hospital for treatment		
None in year	none	0
Reportable dangerous occurrence		
No reportable dangerous occurrences recorded.	n/a	0
Reportable occupational disease		
Cryptosporidium infection likely to be associated with veterinary care of a foal. (Occ Disease)	Staff	2
Carpal tunnel symptoms with potential linked occupational cause. (Occ Disease)	Staff	
TOTAL RIDDOR REPORTABLE INCIDENTS		11

Table 6: Fire incidents 2023

Building	Probable Cause
Major fires (significant damage beyond part of building immediately affected)	<ul style="list-style-type: none"> • No incidents in 2023
Minor fires (localised fire or minor incident only)	<ul style="list-style-type: none"> • Sir James Black Building compressor unit failed in minus 80 freezer causing smoke and activation of the fire alarm system, and attendance of the SFRS. No damage other than to the compressor with a replacement required. The building was empty at the time. • Glasgow University Union – Overheating of kitchen heating unit. • Davidson Building – Failure of lithium battery. Confined within storage case.
Other (Near Miss)	<ul style="list-style-type: none"> • Drynoch Place store - External rubbish (not belonging to the University) set on fire caused smoke ingress to the building and activation of fire detection. • Joseph Black Building - Solvent vapour from flammable solvent (hexane) ignited when a heat gun was inappropriately used to dry out apparatus. • Rankine Building – small electrical fire caused by fault within an electrical capacitor in a drying oven.
External	<ul style="list-style-type: none"> • 13 external fires were recorded throughout the year consisting of small street furniture items (bins etc.) and grass and vegetation fires within or adjacent to the Garscube Estate

Table 7: Fire alarm incidents and activations 2019 – 2023

	2019	2020	2021	2022	2023
Genuine incidents					
Major fire	0	0	1	1	0
Minor fire	10	3	9	5	3
External fire	3	0	5	12	13
Near miss	3	0	1	4	3
TOTAL GENUINE	16	3	16	22	19
Unwanted activations					
Accidental activation (good intent)	1	3	6	1	7
Alarm faults	15	8	32	22	21
Contractor activity/building work	33	18	23	41	28
Cooking	22	7	33	35	33
Deliberate/malicious	2	2	2	9	7
Occupant activity (other than cooking)	30	14	34	37	32
Water ingress/damp/steam	13	12	11	21	13
Unknown cause (unable to be determined)	41	26	77	97	74
Dust	4	10	3	7	4
Accidental activations	-	-	-	19	0
TOTAL UNWANTED	161	100	221	289	219
TOTAL ALL INCIDENTS	177	103	237	311	238
Of which activations in residential properties: -					
	31	14	79	76	40

Table 8: Detail of Unwanted Alarm Activations for 2019 - 2023

Year	No of Incidents	Fire Service attendances	As a % of Total Incidents	Attendance for Fire Incidents (no of incidents)	Attendance for non-fire Incidents (no of incidents)	Attendance for Residential (no of incidents)
2023	238	55	23%	9	46	37
2022	311	89	29%	6	11	76
2021	237	98	41%	8	11	78
2020	104	26	24%	1	17	8
2019	176	48	27%	8	40	23

7. Enforcing authority contact, visits and interventions.

Home Office

Our routine annual chemical weapons declaration was requested by the Home Office in December 2021 and a request issued to relevant units to provide the required data. The legally required return was submitted by SEPS in January 2022. A further request was received in December 2023 for our current year data, and this will be submitted in January 2024.

Health and Safety Executive (HSE)

The HSE Microbiology and Biotechnology Unit undertook an 'intervention' remotely by Teams on 22nd March 2023, covering Maintenance Management Systems and Audits and Inspections for the University CMVLS Containment Level 3 laboratories. We provided requested paperwork to HSE in advance of the meeting. No formal actions or requirements were set by HSE.

HSE Specialist Diving Inspector, Ross Nielson, visited the University in June 2023 to discuss the nature and extent of staff and student diving activity carried out under the control of the University. SEPS' understanding is that no diving is currently carried out involving any dive teams for which the University of Glasgow is the legally appointed Dive Contractor and that no staff are currently diving in the course of their work. No diving is required as part of any student teaching programme or research activity. Students do have the opportunity to participate in extra-curricular expeditions and trips which may involve voluntary leisure diving typically run by commercial centres based overseas. HSE concluded that we currently should retain registration as a Diving Contractor although we do not have any activity, at present, that is subject to UK Diving at Work Regulations.

Department for Transport (DfT)

The Department for Transport undertook a planned security inspection of University arrangements for transport of high consequence dangerous materials. This involved a 5 hour visit to the Centre for Virus Research and included detailed questions about process and procedures followed by a short physical inspection. This inspection had been postponed from March 2022. The outcome was favourable with the unit formally rated as compliant.

Scottish Fire and Rescue Service (SFRS)

Routine contact has continued over 2023, with routine HMO inspections at McLay Residences and SCENE at Rowardennan. Post-fire audit visits included a follow-up from the lift incident (from 2022) in the James Watt South Building and to a freezer incident within the Sir James Black Building. (see Table 6) Neither incident was due to any maintenance deficiencies and no enforcement action was taken in relation to any fire incident.

For familiarisation and operational purposes, SFRS visited eight of our buildings including the new Mazumdar Shaw ARC building and the new Adam Smith Business School (for access) requirements before opening. The remaining buildings visited are well established within the Gilmorehill campus and were routine familiarisation revisits for SFRS staff.

Police Scotland

Informal discussion took place between SEPS staff and Police Scotland about our respective arrangements for destruction of Controlled Drugs. This included joint investigation of the

possibility of using Baldovie Incinerator, Dundee as a potential disposal option. However, current licensing arrangements do not appear to permit this.

Police Scotland Counter Terrorism Security Adviser (CTSA)

CTSAs visited both Gilmorehill and Garscube with the BSA for our annual security inspections in the associated key areas for Home Office specified security regulated materials. No concerns were noted. A CTSA also made visits to inspect and to facilitate new proposed work at additional locations across the University requiring substantial input.

Scottish Environmental Protection Agency (SEPA)

A minor spillage of cattle slurry occurred at Cochno during spreading operations using an umbilical piped spreading system operated by a contractor. This occurred because of physical damage to a distribution pipe caused by a delivery vehicle attempting to cross the pipe run within the farmyard area. The pipe is approximately 200mm in diameter and this action was not foreseen as a likely driver action prior to the event. This resulted in leakage of slurry to the farm roadway for a short time before it was discovered. The incident was reported to SEPA who investigated but opted to take no further action as no environmental damage had resulted. Physical barriers will be used to both sides of the pipe in future to prevent damage.

Following appointment of the new maintenance contractor, the task of silt removal from the Mill Pond at Cochno, to allow this to serve as an effective fire-fighting water source, was allocated to them. SEPS investigated the legal permissions needed for this work, concluding that it was possible under a simple formal Notification application prior to the works. This was duly obtained and the works carried out. This included refurbishment of the sluice gate allowing regular flushing to minimise future silt build up.

9. Major activities and key objectives for 2024

The following represent some examples of new activity or projects planned for 2024. These are mainly one-off actions or projects and do not include routine activities such as inspection and audit, investigatory or advisory work and training.

SEPS

- Manage move of RPS from current office and lab accommodation.
- Fill SEPS vacant fire officer post
- Manage replacement of Heads of Service roles (or restructure) within SEPS and RPS following retirement of both heads of unit to ensure ongoing management and technical adviser functions continue to be available in these areas.
- Ensure the (legally required) appointment of a qualified and appropriately registered Radiation Protection Adviser.
- Continue to manage HSE's biosafety focus inspections as a high priority, providing pre-inspection advice, and on-site support and carrying out post inspection follow-up as required.
- Support change and improvement in oversight of biosafety management within CMVLS
- Further explore, with colleagues from IT, the possibility of digitizing the existing travel risk assessment documentation
- Develop auditing programme for monitoring of international travel risk profile

- Support planning and design processes for the Keystone Building in terms of building fire design and in operational lab space designs.
- Review and update COSHH/Chemical safety training course content and format.
- Continue delivery of robust safety audit programme
- Deliver a comprehensive programme of safety training that is accessible and relevant to University employees and, in targeted areas, to research students
- Ensure renewal of DGSA safety qualification
- Ensure continued delivery of an acceptable level of fire safety training and fire risk assessment review, noting the constraints caused by post vacancy in this area.

RPS

- Recruitment of a suitable RPA/RWA to replace retiring incumbent.
- Finalise moving of RPS staff and facilities to Isabella Elder Building. Should be completed by the end of February 2024.
- Complete dose assessment of SAH linear accelerator, this is a 4-month long assessment, using dosimeters to determine if any additional shielding will be required for public areas. Should be completed end of April 2024.
- Complete RPA requirements for Weipers Equine Centre CT scanner project. This will include a Critical Examination (CE) report after installation is complete. Scanner project has not started the building phase yet and a time/date on this cannot be specified.

Business Continuity

- Implementation of new strategic Business Impact Analysis (BIA)
- Support review of School and Service BIAs and BC Plans through the BC Coordinators
- Delivery of combined ER/ BC Exercise on a cyber security scenario
- Training of newly nominated School and Service BC Coordinators.
- Launch of new BC Hub for gradually increased access.

Occupational Health

- Standardisation of internal occupational health processes and documentation.
- Working to identify all areas that require statutory health surveillance and develop a managed service.
- Progress with the transfer from a paper-based system to a digital department.