

University Health & Safety Arrangements : Chapter 23



Interface between Estates and Facilities, and building occupiers

Key word(s) :	Responsibility for equipment and installations; Equipment, plant, machinery,
Target audience :	Estates and Facilities personnel; school safety advisors and others in schools responsible for ensuring equipment is maintained in a safe condition and satisfies legal obligations re statutory inspections, etc.

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Introduction

1. Many health and safety hazards are related to buildings and equipment, where the boundaries of responsibility between those responsible may not be understood or discussed, or may be assumed but not accepted by all parties. For the purposes of this chapter, equipment has a wide meaning and encompasses plant, machinery, storage tanks, and equipment installed as part of a building (eg fume cupboards).
2. Estates and Facilities have undertaken an extensive survey of equipment and placed yellow tags on items they have identified as their responsibility. If equipment has a yellow tag, it means it is on the Estates and Facilities database and subject to formal arrangements for planned preventative maintenance (PPM).¹
3. However, assumptions must not be made and in cases of doubt, a decision must be taken by agreement with all parties involved, and responsibility allocated and

¹ Safety Services will work with building occupiers to tag equipment they are responsible for, which may be located in restricted areas such as plant rooms.

recorded. There are some general rules for specific items and these are described in the sections below. The Senior Manager for the occupier(s) and the Director of Estates and Facilities are ultimately responsible for reaching agreement. Safety Services personnel may be able to advise. Equipment that does not have a yellow tag may fall into one of the following categories :

- a) Estates and Facilities believe that the equipment belongs to, and therefore should be maintained by, the occupier
 - b) The equipment has been installed since the survey
 - c) The survey did not access the room in which the equipment is located or otherwise failed to assess responsibility for the equipment.
4. Location of equipment in plant rooms or risers may suggest it is Estates and Facilities responsibility but is not a definitive guide. There are many examples of occupiers using secure space for equipment such as air receivers. Where occupiers wish to site new equipment in these restricted access areas, they must seek the express permission of Estates and Facilities.
 5. During thorough examination of lifting equipment and pressure systems, and where equipment is found by engineers to be "owned" by schools rather than Estates and Facilities, such equipment will be tagged to differentiate it from Estates' owned equipment.
 6. Generally speaking, procurement of the building, facility or equipment is not a good indicator of who is responsible for maintaining it. For example, a bulk storage tank of compressed gas may be procured as part of a major refurbishment project managed by Estates and Facilities, but if it is used in conjunction with the commissioning school's research or equipment, it will be "owned" by the school and the school will be fully responsible for its safe maintenance and compliance with legal requirements.
 7. The implications for maintenance should be identified as part of the design and procurement process, and any maintenance commitments falling to occupiers should be discussed with them at the earliest opportunity. The detail of any PPM for safety-critical equipment must include tests of functionality (eg it is insufficient for PPMs for primary and stand-by extraction to only check that each is operational; the PPM must check that automatic switching between the two actually occurs).²
 8. When Estates and Facilities project managers (PM) hand over new or refurbished facilities to occupiers, they will specify which equipment will go on Estates and Facilities PPM schedules and equipment for which the occupiers needs to arrange maintenance and compliance with legal requirements. Relevant sections of the health and safety file will be provided by the PM to the occupiers.

² These principles will be incorporated into Estates and Facilities procedure relating to the Construction (Design & Management Regulations).

	Alarms	<p>planned preventative maintenance but Estates and Facilities MSU arrange to carry it out, and keep appropriate records.</p> <p>See entry for monitoring equipment</p>
B	(Micro)biological safety and containment cabinets & facilities	<p>Estates and Facilities have agreed planned preventive maintenance schedules for facilities such as containment level 3 laboratories which are heavily and critically reliant on building ventilation systems, and for the building ventilation and management systems that they rely upon.</p> <p>Occupiers will however have responsibility for maintaining and testing the performance of cabinets that are used in research and teaching, including class I, II or III cabinets and glove boxes, including the replacement of HEPA filters. These may be within CL2 or 3 suites of laboratories, where the general ventilation is the responsibility of Estates and Facilities.</p> <p>Estates and Facilities AND occupiers usually have a joint responsibility for ensuring that the PPMs are suitable and include tests for safety-critical controls</p>
C	Compressors, air receivers Clinical Waste	<p>Estates and Facilities are responsible for equipment supplying building services such as heating and compressed air supply up to the point of connection to occupier's equipment.</p> <p>Estates and Facilities liaise with Schools to agree timetables for shutdowns for maintenance activities affecting school equipment, and also advise Schools of any breakdown of infrastructure.</p> <p>Occupiers using compressed air lines, or installing compressors and receivers directly serving research or teaching equipment are responsible for that equipment, whether or not it is installed in a riser or plant room controlled by Estates and Facilities. Arrangements for access will need to be agreed, and permits to work may be required. See also P for pressure systems and the need to comply with the Pressure Systems Safety Regulations.</p> <p>Estates and Facilities are responsible for managing the collection contract including deployment and collection of waste receptacles.</p>

	<p data-bbox="277 427 456 454">Contractors</p> <p data-bbox="277 1043 440 1115">Cooling equipment</p>	<p data-bbox="563 192 1401 376">Occupiers are responsible for classifying the waste streams correctly, placing the waste in the correct receptacles and co-operating with reasonable requests for co-operation with Estates and Facilities and contractors during routine collection and audits.</p> <p data-bbox="563 427 1382 725">Estates and Facilities are responsible for liaising with occupiers when they arrange for contractors and in-house maintenance teams to visit, for providing relevant safety information and for carrying out induction. This will generally be in accordance with their CDM Procedure (for all project work). NB. Entry to be amended with details of protocols currently in draft or being piloted.</p> <p data-bbox="563 777 1374 996">Occupiers also bring contractors onto site, for example to service or repair specialist equipment. In these circumstances, they are responsible for informing the contractor of relevant safety arrangements such as emergency evacuations, accident procedures and reporting, first aid availability, etc.</p> <p data-bbox="563 1048 1398 1261">Estates and Facilities will be responsible for maintaining all cooling equipment that forms part of the building infrastructure that has been specifically designed to provide cooling to areas that generate 'excessive heat' such as computer clusters, IT banks or air conditioning systems that form part of the overall building infrastructure.</p> <p data-bbox="563 1312 1345 1451">Occupiers are responsible for process cooling equipment such as local air conditioning, integrated cooling for experimental purposes or any school process relating to comfort or for maintaining / controlling air temperatures.</p> <p data-bbox="563 1496 1390 1821">Prior to any installation of process / personal cooling equipment, advice and authorisation from Estates and Facilities must be sought. This is due to the complexity of some installations; associated pipework may need to pass through risers, plant rooms or false ceilings whilst chillers or external condensers are generally mounted on roofs or external faces of buildings. Additionally, installations will need to be compliant with University policies and procedures such as the University Carbon Management plan.</p> <p data-bbox="563 1865 1345 2007">In some instances, the management for ensuring regular servicing, maintenance and remedial works of occupiers' cooling equipment can be agreed in advance with Estates and Facilities. Estates and Facilities will arrange, and fund,</p>
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		<p>the annual service to be carried out and keep appropriate records. This process will also enable issues such as access to roofs or risers to be dealt with directly by Estates and Facilities. Costs associated with call outs, breakdowns, repairs and eventual replacement will be facilitated by Estates and Facilities and will be recharged back to the occupier.</p>
D	Drains (taking hazardous waste, radioactive waste)	<p>Estates and Facilities will on occasion need to access drains marked as suitable for disposal of low level liquid radioactive wastes and other waste streams.</p> <p>Occupiers must co-operate with Estates and Facilities in providing information, testing or otherwise making checks about the safety of opening up drains which they use.</p>
E	Electrical equipment	<p>Estates and Facilities are responsible for the provision, safe maintenance and regular testing of the main electrical supply and infrastructure. Testing is carried out on a rolling 5 year programme.</p> <p>Occupiers are responsible for maintaining all electrical equipment – fixed, transportable and portable - used or owned by them (rule of thumb – if it has a plug top, it is “portable”). It should be inspected, tested and maintained at regular intervals in accordance with the Electricity at Work Regulations and the IEE Code of Practice for In-Service Inspection & Testing of Electrical Equipment.</p> <p>For clarification, this includes larger pieces of equipment or experimental rigs that are part of their research or teaching equipment up to the point of local isolation (eg a wall mounted isolation switch). Visual inspection and any testing should be carried out by a competent person (either in-house or contracted out) for all such equipment at intervals determined by the competent person.</p> <p>For non-portable electrical equipment which is hard-wired or three-phase, occupiers are responsible for liaising with Estates and Facilities to organise the testing. It will often be convenient to include this with the 5 year programme of testing carried out (or arranged) by Estates and Facilities where isolation and down-time may be necessary.</p> <p>(Guidance on whether someone is competent to carry out electrical work is available from Estates and Facilities.)</p>

L	Lifting equipment	<p>Estates and Facilities are responsible for cranes, I beams, slings, and other items of lifting equipment provided for the building as a whole or to serve building systems. These will be tagged with a yellow tag which is used to track compliance with statutory inspection and examination requirements.</p> <p>Occupiers are responsible for maintenance of lifting equipment used in connection with their research and teaching, which may comprise large overhead cranes (eg MACE), I beams over loading bays (eg Morton, Chemistry), and numerous small items of shackles and slings (eg MACE).</p> <p>Occupiers are also responsible for ensuring the competent person's examinations are carried out in accordance with the Lifting Operations and Lifting Equipment Regulations (LOLER), via the University insurance providers (currently through Allianz and free of recharge to the University occupier).</p>
	Local exhaust ventilation (see also fume cupboards)	<p>Estates and Facilities are responsible for structurally embedded sections of LEV such as flues and fans.</p> <p>Occupiers are responsible for the maintenance and testing/examination of free standing LEV or items such as Nederman flexible extraction which is provided specifically to serve research processes as a measure to control occupational exposure to hazardous substances.</p>
M	Mothballed buildings	<p>Estates and Facilities are responsible for mothballed buildings, once occupiers have vacated the premises. This includes security, maintenance of any protective arrangements such as fire detection and alarm, draining down water systems, etc</p>
	Magnahelic differential pressure gauges	<p>Estates and Facilities may install these as part of a laboratory refurbishment if required by the occupiers but are not generally responsible for their maintenance. Most gauges are not connected to the building management system. If they are connected to the BMS, Estates may include them on their PPMs.</p> <p>Occupiers are responsible for routine monitoring of magnahelic gauges and their maintenance, and for initiating action(s) if they indicate pressure differentials of concern. In higher risk areas, an adverse measurement may alarm the BMS.</p>

	Monitoring systems	<p>Estates and Facilities are responsible for monitoring systems to protect buildings (eg smoke detection, fire alarms, CCTV), and for more localised monitoring systems within areas under their control (eg plant rooms).</p> <p>Occupiers are responsible for the provision, maintenance and testing of monitoring systems required as a result of risk assessments for their own activities. This will include oxygen deficiency alarms, toxic gas alarms, etc.</p>
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O	Oxygen depletion monitors	See entry for Monitoring systems
P	Pressure systems and vessels	<p>Estates and Facilities are responsible for PPMs and safe operation of pressures systems and vessels providing building services such as heating, ventilation, etc, and including compliance with the Pressure Safety Systems Regulations.</p> <p>Occupiers are responsible for safe use, maintenance and compliance with the Pressure Systems Safety Regulations for all pressure systems and vessels used in conjunction with their activities, including bulk storage of CO₂, liquid nitrogen, etc. (Competent person's examinations are via the University insurance providers, currently through Allianz and free of recharge to the University occupier.)</p>
R	Restricted areas (roofs, risers, plant rooms)	<p>Estates and Facilities are in the process of locking off such areas, and setting up arrangements with permit to access or work.</p> <p>Occupiers who have equipment in such areas must liaise with Estates and Facilities and comply with any conditions on permits to access or work.</p>
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V	Ventilation	<p>Estates and Facilities are generally responsible for building ventilation systems, including air supply and extraction for laboratories and workshops.</p> <p>Occupiers are responsible for testing biological safety cabinets and fume cupboards within higher biological containment facilities (CL3) or clean rooms, and for PPMs including the replacement of HEPA filters.</p> <p>See also entry at B for (Micro)biological safety cabinets.</p>

W	Water supply & testing	<p>Estates and Facilities are generally responsible for potable and services water supply systems and management of Legionella risk arising from supplied water, including showers and outlets in the Residences.</p> <p>Occupiers are responsible for any research or teaching specific water storage facility (eg sediment and wave tanks, constant temperature water baths, safety showers) and for managing the risk of Legionella arising from such facilities. If occupiers have provided showers for personal use, they will need to liaise with Estates and Facilities about tap temperature testing and any other arrangements specified in the legionella risk assessments.</p> <p>In Halls of Residence, DSE staff may assist Estates and Facilities in monitoring tap water temperatures and report back to Estates and Facilities.</p>
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