

Defining the Health and Safety Responsibilities between

The School of Engineering, Physics department and the Nanofabrication RTP

February 2025

Document Control			
Version number	Date issued	Author	Update information
v1 24 02 25	24/02/2025	Caroline Farren, M Prokešová	Initial Issue
Owner: Monika Prokešová		Approved by: Engineering H&S Committee	
Source location: M:\SFOCH 2006\Management System\02 Develop and Implement Controls\04 SOPs and COPs (B5)\04 Departmental SOPs\04 RTP – Responsibility agreements		Approval date: 06/03/2025	
Published location: SoE H&S web		Review date: October 2025	

Contents

1	Parties to the Agreement	4
2	Objectives	4
3	Documentation.....	4
4	Duration and Renewal	4
4.1	Duration:	4
4.2	Costing associated with the service.	4
5	Scope.....	4
6	Areas	5
7	Terms & Conditions	5
8	Personnel.....	5
9	Contractors	6
9.1	Estates / Insurance Services Contractors	6
9.2	Engineering Department Contractors.....	7
9.3	RTP Contractors.....	7
10	Suitability of the Space to Conduct Work	7
11	Hazard Information & Lab Noticeboards.....	7
12	Hazardous Materials	7
13	Laboratory Equipment.....	8
13.1	Access Equipment / Ladders.....	9
13.2	Statutory Testing	10
13.2.1	Lifting Equipment and Pressure Systems	10
13.2.2	Local Exhaust Ventilation.....	11
13.2.3	Statutory Consumables.....	11
13.3	Electrical Safety.....	12
13.3.1	Fixed Wiring	12
13.3.2	Portable Appliance Testing	12
13.4	Gas Delivery (from Bulk Storage), Detection and Monitoring	12
13.4.1	Gas Delivery Systems (part of infrastructure)	12
13.4.2	Gas, smoke or flame detection systems (part of infrastructure)	13
13.4.3	Portable Detection Devices.....	13
14	Legionella/Water Quality Management.....	13
15	Additions/ Deletions & Amendments to the Schedule	14
16	Cross-Charging Arrangements	14
17	Management Information.....	14
18	Key Personnel.....	14

19	Review Period.....	14
20	Dispute Resolution.....	15
	Appendix 1 - Schedule Summary - Responsibilities between the Department and RTP.....	16
	Appendix 2 – Key Contact Details for the Department and RTP.....	23

1 Parties to the Agreement

This document serves to clarify health and safety responsibilities principally between the School of Engineering Department (SoE/"the Department") and the Nanofabrication Research Technology Platform ("the RTP") at the University of Warwick. The Physics department takes the role of "the host department" for spaces located in the Physics building but used by Nanofabrication RTP.

2 Objectives

- a) The objective of this document is to formalise the roles and responsibilities of both the Departments and the RTP at the University of Warwick in relation to health and safety and statutory compliance.
- b) This document should be used as the benchmark for any review meetings if required and if necessary, to be used to formalise modifications to the provisions of the service(s) offered by the Departments.
- c) Neither the Departments nor RTP shall make any unilateral amendments to this document without joint consultation and agreement.

3 Documentation

This document is formed from the following health and safety related documentation:

- a) The University Health and Safety Policy and the latest version of the 'Leadership & Management of Health and Safety at the University of Warwick' document available from the webpage [Health and Safety Policy \(warwick.ac.uk\)](https://warwick.ac.uk/healthandsafety)
- b) School of Engineering [Health and Safety Policy & Arrangements](#)
- c) Physics department [Health and Safety Policies & Arrangements](#)
- d) Research Technology Platform [Health and Safety Policy & Arrangements](#)

4 Duration and Renewal

4.1 Duration

This document shall take effect from March 2025 as a basis prior to initial approval by Departments and RTP representative(s), then will remain in force formally from the date of approval for as long as there remains a relationship between the Departments and RTP. This document will be revisited by the Departments and RTP on initial 6-month intervals to ensure it is fit for the purpose, with update and approval when necessary.

4.2 Costing associated with the service

The Department and RTP will budget for the activities that they are responsible for, as set out within this document.

Should there be any additional service required that has not been budgeted for that arises outside the scope of this document, then both parties must agree who will deliver that service and agree how it will be paid for before the service is put in place. Any ongoing provisions should be reflected in a revision to this document.

5 Scope

This is an agreement which defines the health and safety responsibilities between the School of Engineering Department, the Physics department where applicable, and the Nanofabrication RTP as set out in this document and in the Schedule Summary in Appendix 1. It should be noted that all relevant University policies and codes of practice will still apply.

6 Areas

The spaces currently occupied/used by the RTP include laboratories and office area as listed below:

- 01.030.000.097 – D0.32 (Science City Smaller Clean room)
- 01.030.000.095 – D0.32 (Science City Large Clean room)
- 01.030.000.096 – D0.32 (Gowning lobby A)
- 01.030.000.093 – D0.32 (Gowning lobby B)
- 01.030.000.091 – D0.32 (Service corridor A)
- 01.030.000.098 – D0.32 (Service corridor B)
- 01.030.000.086 – D0.32 (Service corridor C)
- 01.032.L01.026 – D0.32 Mezzanine (RTP Manager office) - 3 desks
- 01.032.000.011A – F0.02 (Laboratory) - only for storage of chemicals until storage issue in the Clean room would be resolved.
- 01.042.L04.079 – P5.41a (Metrology Clean room)
- 01.042.L04.081 – P5.41 (Gowning lobby)
- 01.030.000.E01 - Bulk storage tank (liquid nitrogen)
- 01.034.000.001A - Gas bottle storage (shared with Engineering department)

Should any additional spaces become allocated to the RTP or be shared between RTP and the School of Engineering, this document shall be reviewed to ensure that roles and responsibilities are again clarified.

7 Terms & Conditions

The University terms and conditions will prevail at all times.

8 Personnel

All RTP Group members who reside in the School of Engineering must attend an induction and complete the mandatory training, as required by all Engineering staff and students. The RTP Manager will make arrangements with the Department to ensure that this takes place prior to commencement of any work. Laboratory access will not be granted until this has been completed.

RTP personnel must be provided with access to the health and safety arrangements relevant to the Department. This information is primarily available from the department's [Health and Safety at the School of Engineering](#) webpages. All those who work in the RTP space must abide by the rules set out by the Department.

All RTP staff must be trained and/or experienced to carry out their work, or be under the supervision of a trained person, so that the RTP work activities do not pose a risk to other lab users, School of Engineering staff/students, Estates staff, or to contractors who may need to enter the space in order to carry out work on behalf of either the Department or by Estates.

The RTP Manager will be responsible for providing updated information regarding any changes to personnel. Those leaving the University must follow the [HR leavers process](#) and any local

processes that have been defined within the RTP and/or the Department. It will be the responsibility of the RTP Manager to ensure that any hazardous materials or equipment are effectively handed over to other 'responsible personnel' within the RTP prior to leaving, that is in the physical sense and also the electronic records are updated where applicable.

All RTP staff and their visitors must keep their identity badges on their person at all times.

The RTP Manager shall ensure that work activity risk assessments are written down for any work that poses a significant risk, and that there are sufficient arrangements in place for managing both normal and abnormal situations, including emergencies that could arise associated with their work.

The Department First Aid arrangements and the latest list of trained first aiders can be found on the [Qualified First Aid Staff by Building/Department](#) webpages. However, considering the high hazard nature of some RTP activities (e. g. work with HF) the RTP Manager must ensure sufficient coverage for the specialised First aid by RTP staff as per high hazard activity risk assessment. The cost of this specialised training will be covered by RTP.

All staff associated with RTP must be trained to understand the local emergency arrangements related to their own respective space(s) and own activities, and more generally related to the Department or site where they work. The responsibility of ensuring that all RTP staff have received such training will be the responsibility of the RTP Manager.

Should RTP staff need to work in alternative work locations, the responsibility for ensuring that RTP staff receive a local induction will fall to the RTP Manager.

9 Contractors

All departments of the University must follow the [University Contractor Policy](#) at all times. More information is contained on the [contractor webpages](#), including the required minimum insurance level required.

The appointing department will be responsible for ensuring that relevant health and safety information is passed on to the contractor to permit them to produce their own site-specific risk assessments and method statements relevant to the work that they are being tasked to do.

The responsibility for maintaining documentation relating to the engagement of contractors will remain with the respective appointing person.

The contractor will always remain the responsibility of the appointing department. Every contracted personnel must receive an appropriate induction. Where a contractor is working in another location, occupied by others, then a further local induction may be required (this would be particularly relevant to the more hazardous spaces) and arrangements to facilitate that must be made by the appointing department. The appointing department will be responsible for ensuring that appropriate site-specific risk assessments and method statements are in place which cover the work activities required. Should a [permit](#) be required the appointing department will be responsible for ensuring that these are acquired and agreed with Estates prior to works commencing.

Below is an outline of where responsibilities lie when contractors are engaged by one department but may be required to carry out work in another.

9.1 Estates / Insurance Services Contractors

The Estates and Procurement & Insurance Services departments have their own arrangements for appointing contractors and follow their own procurement processes. Where there is known work to take place within the School of Engineering, which includes a space occupied by an RTP, the RTP Manager will be notified via the School of Engineering in so far as is reasonably practicable.

9.2 Engineering Department Contractors

The School of Engineering has its own H&S validation process in place. When the School of Engineering appointed contractor is required to access a space occupied by an RTP, the Department will make suitable arrangements with the RTP Manager for the work to be completed at a time when there is least impact in so far as is practicable.

9.3 RTP Contractors

The RTP will carry out their own H&S validation process to deem any contractor competent that they need to bring onto university premises. This will need to include other checks that are required, such as insurance cover. All documentation must be held locally to demonstrate that the University policy has been followed. The RTP Manager will also be responsible for ensuring that the relevant document demonstrating H&S validation has been conducted is uploaded to the OPeRA e-procurement system when placing a requisition for use of that contractor. The requisition missing these documents will be rejected by Top-tiering team. Should the contractor need to access other space(s) occupied by the Department, liaison by the RTP Manager will be made with the Department prior to the works, so that suitable access can be arranged.

10 Suitability of the Space to Conduct Work

The RTP Manager will be responsible for ensuring that the space(s) allocated to them within a host department is/are suitable for the type of work to be conducted. Any modifications required will be at the cost of the RTP and at the discretion of others as required under relevant University policies and procedures.

11 Hazard Information & Lab Noticeboards

The RTP Manager, as a 'space owner' will be responsible for completion of their own [lab noticeboard](#) for the spaces that they work out of and for updating the [Quemis Hazard Management System](#) (or Estates specific system) with hazard information that accurately reflects what is being stored, used, handled, etc. in each space that they occupy. As a minimum, this information shall be checked annually and updated upon a significant change. Lab Noticeboards must be both displayed on entrance doors to any hazard space and also uploaded to the Hazard Management System/Estates system to permit remote access by Community Safety if required in an emergency. Any emergency arrangements relevant to the space can also be uploaded to this system if required.

RTP Managers (or their nominated representatives) who require access to the Hazard Management System/Estates specific system shall request access via [Health and Safety Services](#) 'Ask for Advice'.

12 Hazardous Materials

The RTP Manager is responsible for ensuring that they approve any materials brought into their space(s), whether that be via the OPeRA e-procurement system, or via other means, and that the materials are delivered in a safe condition, with all relevant warning signage and packaging as required under several pieces of health and safety statute in so far as is reasonably practicable.

The Department will provide support in relation to elements of the workflow involved in the ordering of materials (Top Tier) and for consolidating orders via the OPeRA system and in relation to the temporary storage of materials being purchased or acquired by the RTP if delivered directly to the Engineering Stores.

The School of Engineering will temporarily store chemicals and materials coming into the department on behalf of the RTP, but it will be the RTP's responsibility to ensure that anything requiring specific storage requirements is discussed and agreed with the Stores staff prior to its

arrival. A good level of communication must be maintained between Engineering stores and RTP personnel ordering hazardous materials. Engineering stores staff would inform RTP staff (ordering personnel) about incoming delivery as soon as it is practicable. Chemicals and other hazardous materials ordered by RTP must be promptly collected from Engineering stores.

Once within the RTP space(s) it will be the RTP Manager's responsibility to ensure that the materials are stored safely and if required, securely, and that relevant information is collated into a chemical inventory (LabCup). With the introduction of LabCup the RTP Manager will also be responsible for ensuring that their hazardous materials are barcoded and stored as per the laboratory arrangements set up within this system. The inventory will need to be updated as chemicals come in and out of space and complemented by an annual stock check.

The RTP Manager will follow the same procedures for introducing a chemical to the space as applicable to the Department. This will include ensuring that there are suitable storage facilities, that the materials can be used safely, that the relevant engineering controls are in place and that there is already a waste stream available to them. The waste stream is one that will be managed via the Department, therefore relevant checks must be made by the RTP Manager prior to their introduction, that the material(s) being introduced to the space can be safely handled and disposed of via Engineering Stores and the Technical Services team in the Department. Without the waste stream in place, the material(s) must not be introduced. Where a material has unknown characteristics, it is necessary to have a discussion with the Department before introduction of this material. Where this leads to inability to dispose of materials by the processes above, RTP must organise and cover the full cost of disposal.

Should special first aid arrangements be required for the management of any hazardous material introduced, it shall be the responsibility of the RTP Manager to ensure that this is in place prior to acquisition. Should the Department not have the required First Aid skills, the RTP Manager will be responsible for ensuring that they have the acquired skills and equipment required to manage the risks, as per any other risk introduced by their work (for instance the spill kit).

Any hazardous materials introduced will be the responsibility of the RTP Manager to manage and oversee, to ensure that the health and safety of those working with that material is not compromised. In a similar way if the material introduced through the work of the RTP could damage or contaminate equipment or the space allocated to the RTP, any remediation will be at the cost of the RTP.

All hazardous materials used will be subject to risk assessment as per any other work activity. Should the Department share a space allocated to the RTP, the RTP Manager will have the right to refuse to permit hazardous materials to be used, handled, or stored within a space which has not been subject to risk assessment and deemed safe.

The RTP Manager will be responsible for ensuring that sufficient arrangements are in place for what would be considered 'normal' operations as well as emergency arrangements in connection with the work that takes place within their own space(s). Emergency arrangements could include (but is not limited to) gas detection and alarms, arrangements for evacuation and/or emergency shutdown, first aid and spillage management for example and any associated training required for staff and others using the space as appropriate. Any emergency arrangements that could impact wider than just the RTP space shall be fed into the local emergency management arrangements for the building.

13 Laboratory Equipment

The Department will provide support in relation to elements of the workflow (where required) in the OPeRA e-procurement system during the ordering of laboratory equipment and consumables and their delivery to the Engineering Stores that have been purchased by the RTP prior to their collection.

A good level of communication must be maintained between Engineering stores and RTP personnel ordering any equipment and other materials. Engineering stores staff would inform RTP staff (ordering personnel) about incoming delivery as soon as it is practicable. Large equipment must be promptly collected from 'Goods in' space. The department will not accept any responsibility for any loss or damage of equipment pending collection. Any specific requirements for storage of laboratory equipment must be communicated between Engineering stores and those ordering items in advance. Any deliveries outside the goods in normal operating times or deliveries that the Department did not receive adequate notice of delivery will risk being turned away. In these instances, the Department will not be liable for any associated charge for redelivery. The RTP Manager will be responsible for managing laboratory equipment within their demise and for ensuring that all items subject to [statutory testing](#) are appropriately asset tagged by direct liaison with the Estates Information & Systems team (<mailto:EstatesCompliance@warwick.ac.uk>).

Equipment owned by the School of Engineering is tagged – ESxxxxxxx.

Equipment owned by RTP is tagged – PFxxxxxxx.

The RTP Manager will be responsible for maintaining their own asset lists and for informing Estates of any equipment that needs to be subject to a statutory examination and test, using the registration form available from: [Statutory Inspection Records \(warwick.ac.uk\)](#). This form shall also be used by the RTP Manager to relocate or remove items from the statutory testing register. The RTP Manager shall notify the Department (the Departmental Point of Contact) whenever a new type of statutory asset has been registered to ensure that the Department engages with the RTP when Estates are planning to carry out routine statutory examination and testing of those items that are relevant to their operations, including local exhaust ventilation systems, pressure systems, lifting equipment and bulk storage/lab gases. The Departmental Contact list is routinely updated and can be found as a link from this page: [Statutory Inspection \(warwick.ac.uk\)](#).

Routine statutory examinations and testing carried out across the Department via Estates and Insurance Services will most often require coordination between the Department and RTP. Under these circumstances, the Department will endeavour to make suitable arrangements with the RTP for this work to be carried out at a time that is reasonable for both parties. If equipment requires urgent attention, then the responsibility will be for the RTP Manager to make suitable arrangements directly with the responsible team in Estates.

The RTP Manager will be responsible for ensuring that their laboratory equipment remains safe for use and for taking out of use any equipment that is not deemed safe. Maintenance and calibration decisions of laboratory equipment owned directly by the RTP will be the responsibility of the RTP.

There will need to be clear arrangements to ensure that the responsibility for the management and maintenance of 'joint' or 'shared' equipment is in place prior to it being put into use. Where necessary a joint asset list should be drawn up and added as an Appendix to this Service Level Agreement.

The RTP Manager will be responsible for removing any asset that previously was subject to a statutory test upon that item being disposed of or for relocating assets to other spaces by updating the statutory record available from: [Statutory Inspection report form \(warwick.ac.uk\)](#) (SIRF). Removal of any such item must be evidenced – the photograph of asset destroyed or otherwise rendered not useable or email notification about completed docket must be attached to SIRF if asset was removed/collected by Estates.

Asset tagging for other reasons (financial or grant requirement) will be the responsibility of RTP.

13.1 [Access Equipment / Ladders](#)

The RTP Manager will be responsible for recording any access equipment required for their own RTP and for undertaking periodic checks. Where there are several ladders and

steps owned by the RTP then maintaining a register would be recommended. Suitable type inspection tags are available (as indicated on the [Health and Safety Services Working at Height](#) webpages). Items that fail their check will be quarantined by the RTP Manager until the item is repaired or replaced. If it is an RTP asset, then the RTP will be responsible for any repair or replacement costs.

13.2 Statutory Testing

13.2.1 Lifting Equipment and Pressure Systems

This relates specifically to lifting equipment and pressure systems which are currently examined and tested through the University's Insurance company (via Procurement and Insurance Services). This contractor will only examine and test items which have been reported and logged via the Statutory Testing Register.

The RTP Manager will be responsible for the management of their own items that are subject to statutory examination and test and will be responsible for ensuring that these items are added and removed to/from the Statutory Testing Register. Items will be registered with the RTP.

The University Insurance Engineer will provide dates in advance for their service visits to both the Department and the RTP Manager. It will be the responsibility of the respective owners of any relevant statutory test equipment to ensure that items are made available to the Insurance Engineers during their visit. Efforts shall be made to ensure that the items are where they are supposed to be (as logged onto the Statutory Testing Register) in advance.

The Insurance Engineer will carry out the necessary examinations and tests upon arrival and will report any piece of statutory equipment that has failed its statutory test to a member of RTP staff prior to leaving the building wherever possible. This is so that the item can be taken out of use as soon as possible. Should this be reported to the Department, then efforts will be made by the Department to inform the RTP Manager (or their nominated deputy) as early as possible so that the equipment can be isolated/quarantined by the RTP. Failed items as well as those that have passed will also be reported in the CRIMSON system.

CRIMSON (which is the current name of the system used to store this type of statutory testing data) is only accessible via 'departmental points of contact' which are generally representatives from within the Technical Services teams across the Science, Engineering and Medical Faculty (SEM) Departments. The RTP Manager (and a nominated representative) shall be trained in the use of this system, and their names will be added to the 'departmental points of contact' list. Once trained, access to the CRIMSON system will be made available, which will provide the RTP Manager with access to their own equipment data, including certificates and written schemes. This system can provide notifications to the RTP Manager of any item of equipment that was not found, or which passed or failed its statutory test. The RTP Manager would be responsible for responding to any issues via this system. To arrange training, the RTP Manager shall email EstatesCompliance@warwick.ac.uk.

The RTP Manager will be the person responsible for taking equipment out of service that has failed a statutory test or is considered unsafe, until the item has been repaired and/or re-tested and passed. An item which could not be found during the Insurance Engineer's visit and is found later must be taken out of service until it has been tested and passed. If the RTP Manager is not on site at the time, then efforts must be made within the RTP to engage with others that can take the appropriate action.

13.2.2 Local Exhaust Ventilation

It is the RTP Manager who is responsible for ensuring that any new item of local exhaust ventilation is added to the statutory test register as stated above. This is particularly important for portable items which have not been installed as part of an Estates project. The location of such portable items shall be checked against the Statutory Testing Register in advance of a visit by the LEV engineer and either the records updated, or the items returned to their place of origin in readiness for a thorough examination and test.

LEV thorough examination and tests are carried out by a contractor managed via Estates. This is otherwise known as the LEV statutory test.

All Local Exhaust Ventilation once tested will have a statutory test sticker affixed, denoting whether the fume cupboard or other piece of local exhaust ventilation system has passed or failed its statutory test. It is the RTP Manager's responsibility to ensure that any item that has failed its statutory test is taken out of use and that liaison then takes place with Estates to determine when a repair will be carried out. Failed LEV shall not be used until it has been repaired. The responsibility for this will fall to the RTP Manager.

Reports on statutory tests for LEVs are uploaded to the Estates SharePoint site currently and can be made available from Estates by request.

Where an LEV system is fitted with a recirculating filter, it will be the responsibility of the RTP Manager to ensure that the filters are changed when required.

User Check Record Log is affixed to each fume hood to enable fume hood users to record the pre-user checks each time they use the fume hood (p. 2 from [Fume Cupboard User checks and Logbook](#)). The records of these checks are also stored electronically. Pre-use checks of LEV systems within the space(s) allocated to the RTP will be the responsibility of the RTP Manager. The RTP Manager must ensure that the pre-user checks are completed and that any defects discovered are reported to Estates (and the equipment taken out of use immediately until repair has been made). The RTP Manager will be responsible for ensuring that all lab users who need to use LEV within their space(s) are appropriately trained in their use, their training is recorded, they are aware about the requirements for pre-use checks and for reporting faults.

Once a month the fume hoods should be checked with an anemometer and readings should be recorded on a suitable template. It is the responsibility of the person conducting the monthly check (from RTP staff) to record that these checks have been done, and to notify the RTP Manager (or their designated representative) of any issues arising from these. The failed fume hood or any other LEV must be taken out of use and the '[Out of use](#)' sign must be displayed until equipment is repaired through engagement with Estates. The electronic version of the monthly checks must be made available to the Department on request.

13.2.3 Statutory Consumables

The RTP Manager will be responsible for ensuring that consumables such as regulators, flashback arrestors, flexible hoses and any other consumable used as part of a gas delivery system within their allocated space(s) are replaced at the required scheduled intervals and records are updated on the University online management system via [Statutory inspection report form \(Warwick.ac.uk\)](#). Gas cylinders permitted to be in the laboratory will also be the responsibility of the RTP Manager to manage and to replace them as required. The gas cylinders must be recorded on LabCup.

Fire extinguishers (formal testing, re-charging and/or replacement) are managed via Estates. Should there be a need for an alternative provision other than what is provided, then the RTP Manager will provide a copy of their work activity risk assessment to the Fire Safety Adviser (Health and Safety Services) and if a new extinguisher is approved, shall make suitable arrangements with Estates for the relevant one(s) to be supplied.

13.3 Electrical Safety

13.3.1 Fixed Wiring

Fixed wiring condition surveys are conducted by Estates (contractor), via liaison with the Department. The Department will engage the RTP to advise when the contractor will be conducting the work within their own buildings where the RTP is based, whether that be related to the testing or remedial work that follows.

13.3.2 Portable Appliance Testing

The RTP Manager will be responsible for maintaining their own list of assets that require portable appliance testing and for providing this list to the Department for incorporation into the Department portable appliance testing regime. The Department will engage an Estates approved contractor to conduct portable appliance testing. This is at a cost to the Department. As such, the Department has a right to recoup any costs incurred associated with the RTP assets having been included within their own portable appliance testing programme. The recharge cost will be at the discretion of the Department. The Department can ask RTP to raise a separate Purchase order prior to organising the testing.

The Department will make arrangements for the portable appliance testing to take place as per University Policy ([Electrical Safety](#)) and will advise the RTP when this work will be carried out so that the RTP can plan their work around the specified dates.

The contractor is required to affix a test label to each item upon passing the test. Any failed item within the RTP facility will be the responsibility of the RTP to take it out of use with disposal organised by the RTP via the Helpdesk where necessary. When failed items are reported to the Department, the Department will inform the RTP Manager (or their nominated representative) of those items listed against the RTP space(s) that have failed their test as soon as reasonably practicable.

13.4 Gas Delivery (from Bulk Storage), Detection and Monitoring

13.4.1 Gas Delivery Systems (part of infrastructure)

The ownership of the bulk storage tank behind the D block used by Nanofabrication RTP sits with the RTP. Therefore, the RTP is responsible for maintaining this asset including the related infrastructure inside the building/where the RTP equipment is connected.

A Written Scheme of Examination (WSE) is necessary for pressure systems containing relevant fluids at a pressure equal to or greater than 250 bar litres. Relevant fluids include steam, gases, or any fluid in a state where its pressure and temperature could cause a danger.

The inspection and maintenance of all gas manifolds registered as SoE assets (tagged as ESxxxxxxx) is arranged by the Department. The Department will notify the RTP about the upcoming visit in good time and the RTP will make the gas manifolds they use accessible for the inspection. These pressure systems must be registered on the University online asset management system and access to their associated Written Schemes of Examination can be made available to the Department and the RTP on

request. The Department and RTP must agree on the meeting the cost of inspection and any associated remedial works for gas manifolds used by RTP beforehand if the inspection is organised by the Department or alternatively, the RTP would organise the inspection of gas manifolds they use separately to the Department fully covering the cost of this.

The Estates department is responsible for maintenance of the infrastructure of compressed air systems. The maintenance of these only starts to be the responsibility of RTP when it reaches the point of a local isolation valve and from here to whatever RTP equipment is connected to it.

The responsibility for anything connected to gas delivery systems will fall to the person responsible for the space. In the case of the spaces occupied by the RTP, these will be the RTP Manager's responsibility. Information relating to the delivery systems, whether this be associated with gas or compressed air however can be requested via Estates.

13.4.2 Gas, smoke or flame detection systems (part of infrastructure)

Gas, smoke or flame detection systems that constitute part of the building infrastructure are the responsibility of the Estates department to maintain and for those working in the buildings to check that these remain fully operational and to report faults, when these arise, to the [Estates Service desk](#).

The records of building related systems, including fire detection (smoke/flame) reside with Estates. Access to this information can be obtained by the Department or RTP upon request.

It is the responsibility of the RTP Manager to ensure that any spaces allocated for their use meet the requirements for the work that they wish to carry out. This includes checking that the gases or compressed air are delivered at the right pressure, or that the relevant gas detection or depletion monitoring devices are fitted where required as an output from a work activity risk assessment. Fitted gas detection systems must be recorded on UoW online asset management system. RTP Manager is responsible for arranging a regular inspection of gas monitoring system installed in the Clean Room D0.32 and covering the cost of this and of the remedial work if applicable.

13.4.3 Portable Detection Devices

Any portable devices introduced as a control measure following a risk assessment by the RTP will be the responsibility of the RTP to manage and maintain. A record of these devices must be maintained by the RTP Manager, including details of what they detect, and when they need to be checked, tested, or replaced. Such a record should be made available to anyone else carrying out a work activity risk assessment in the space(s) and for inspection and auditing purposes.

14 Legionella/Water Quality Management

The Estates department is responsible for conducting legionella risk assessments for all university owned buildings. The Department shall ensure that spaces occupied by the RTP are brought to the attention of the Estates department at the time that the risk assessment is being completed. This is to ensure that access can be obtained to the RTP spaces and that any infrequently used outlets within the domain of the RTP can be identified at that time. Note: an infrequently used outlet is one that is not in regular use (i.e., not used at least once per week).

All water outlets at the university are asset-tagged by Estates as EXxxxxxxx. It is the RTP Manager's responsibility to ensure that all outlets have been asset tagged within their

own space(s). Should an asset sticker/tag be missing, the RTP Manager must engage with the [Estates Water Hygiene Manager](#) to make suitable arrangements for a barcode to be affixed. At the time of preparing this document the Water Hygiene Manager is Phil Bowen.

Any requirement to flush an infrequently used outlet in the spaces of the RTP will be the responsibility of the RTP Manager to ensure that they are flushed routinely and that appropriate records are maintained if required as an outcome of the legionella risk assessment.

Temperature checks of water systems will normally be arranged between Estates and the Department. Under these circumstances, the Department shall routinely engage with the RTP Manager to ensure that they are kept informed of any dates when this work will be carried out within their space(s).

Changes in the water usage within the RTP space(s), whether no longer infrequently used, or no longer in use, must be reported directly to the Estates Water Hygiene Manager, so that the water hygiene logbook can be altered to reflect the change. Any requirement to flush an outlet and maintain a record as part of the legionella water hygiene logbook will be the responsibility of the RTP Manager for space(s) that they occupy.

Any infrastructure changes to the water systems in the space(s) must not be carried out without full consultation and agreement of the Estates department and Water Hygiene Manager.

15 Additions/ Deletions & Amendments to the Schedule

Anything added to/deleted from this schedule must be agreed to by both parties. The summary schedule (Appendix 1) must be amended for all additions and/or deletions.

The Technical Services Manager from the Department shall be the person responsible for amending the schedule once agreed and for sending a copy to the RTP Manager.

16 Cross-Charging Arrangements

Should there be a need for cross-charging to be made between the RTP and the Department, then such arrangements will be agreed on and documented at that time.

17 Management Information

There should be no requirement for management information to be shared.

18 Key Personnel

A list of key personnel from both the Department and the RTP, their work contact numbers, and email addresses can be found in Appendix 2.

19 Review Period

A 6-monthly review shall be carried out between the Department and the RTP to monitor whether the responsibilities are sufficiently clear and are being met. Anything new arising during this time should be considered in a new revision of this document.

20 Dispute Resolution

In the event of any dispute between the RTP and the Department, the initial route for resolution will be via the Director of Operations in the Department and the Director of Research Technology and Technical Strategy. Each party will work to reach a mutually acceptable solution.

Appendix 1 - Schedule Summary - Responsibilities between the Department and RTP

Host	School of Engineering	Comments
RTP	Nanofabrication	

Compliance Area

Legionella & Water Quality		
Informing of requirements from LRA (Legionella Risk Assessment)	Estates	Estates need to be informed of spaces occupied by RTP by the Department and information needs to get to those that may have to flush what are considered 'infrequently used' outlets from the Legionella Risk Assessment (LRA).
Flushing of little-used outlets	Shared responsibility. RTP to flush and maintain their own records.	All water outlets located inside spaces used by Nanofabrication RTP are regularly used. The emergency shower outside the D0.32 Clean room will stay on the Department water flushing regime.
Monthly temperature of hot and cold water	Estates	Estates may liaise with Department to arrange. Department to inform RTP. RTP to provide local induction where necessary.
Advising on changes to water usage	RTP	RTP to inform Water Hygiene Manager in Estates of changes to water usage (e.g. usage dropping to less than once a week or outlet now used frequently so no weekly flushing necessary).
Informing Estates of changes required to infrastructure (request to alter the water system)	RTP Estates to conduct work	Changes to be agreed with Estates and Department. Changes to be conducted following relevant university procedures via Estates.

Host	School of Engineering	Comments
RTP	Nanofabrication	

Compliance Area

Asset Tagging		
Asset Tagging of Items subject to Statutory Inspection/Test (pressure equipment, LEV, lifting equipment/accessories)	RTP	RTP to approach Estates/Department for Asset Tags relevant to them (see body of report for details).
Asset Tagging for other reasons (e.g. financial/research grant need)	Shared responsibility.	Depending on who owns the asset.
Adding/removing/relocating items as above to statutory test register	RTP	RTP to utilise online reporting form to add, move or remove items owned by RTP as necessary (see body of report for details)

Materials Acquisitions, Management and Waste		
Purchasing of hazardous materials (and OPeRA workflow)	RTP to check appropriate to order and to financially approve. Department to provide support via workflow built into OPeRA	The OPeRA e-procurement system has a workflow which includes the host department for anything warranting 'top tier' approval. Top-tiering team is involved in consolidating orders and for the management of all orders coming into the building.
Temporary Storage of Materials	Shared responsibility RTP/Department	RTP to ensure storage is suitable for materials coming into the Department/RTP. Department to temporarily store prior to RTP collection. Any specific storage requirements to be agreed between Engineering Stores and RTP before material arrives.
Chemical Inventory Management	RTP will be responsible for managing the inventory for all relevant RTP space(s)	The RTP will be responsible for maintaining their chemical inventory, barcoding and appropriate storage arrangements are in place as/when LabCup is introduced as per any other 'space owner'.

Host	School of Engineering	Comments
RTP	Nanofabrication	

Compliance Area

Waste Collection and Disposal	RTP for provision of relevant H&S information. Department for collection and disposal.	Hazardous waste is managed through the Department. The RTP will be responsible for providing all relevant H&S information to the Department to permit its safe disposal. Department can charge RTP for costs incurred or refuse to dispose material where H&S Information was not provided and/or waste stream is not in place.
Autoclaving	Not applicable	

Statutory consumables

Replacement of Regulators, Flashback Arresters, hoses, etc (upon expiry)	RTP	RTP will manage the inventory of statutory consumables. Cost to replace will fall to the RTP. Estates to be informed of changes to status via Statutory Inspection report form (warwick.ac.uk) .
Adding/Removing/Exchanging of gas cylinders	RTP	RTP will manage the inventory of gas cylinders on LabCup. Cost to replace gas cylinders will fall to RTP.
Adding/Removing Fire Extinguisher	RTP and Estates	Should the RTP work activity risk assessment warrant a change to the fire extinguishers supplied, then this should be discussed with the Fire Safety Adviser (Health and Safety Services) and if approved, arrangements made with Estates.

LEV

LEV use, including pre-use checks and fault reporting	RTP	RTP Manager to be responsible for the training of individuals in the safe use of LEV, how to complete the pre-use checks, and for fault reporting. RTP Manager to also be responsible for ensuring that pre-use checks are being done.
---	-----	--

Host	School of Engineering	Comments
RTP	Nanofabrication	

Compliance Area

LEV monthly checks	RTP	RTP should buy their own anemometer which will be used to conduct monthly checks on fume cupboards used by RTP. The anemometer readings must be recorded and any issues found must be reported to the RTP Manager (or their representative) for RTP's remediation.
Assurance that pre-use and monthly checks are being carried out	RTP	This will be backed up by inspections by Health and Safety Services.
Taking LEV out of use if failed any of the checks/tests ¹	RTP	RTP to be responsible also for any repairs required and for making these arrangements.
Changing/disposal of filters	Not applicable	

Contractors

Contractor H&S validation	RTP for provision of relevant H&S information. Department for Contractor H&S validation/Top-tiering.	The RTP Manager will need to complete the H&S validation process as per the requirements on the Contractor webpages. Department is likely to ask for this information in the OPeRA workflow at the ordering stage which will prevent unvalidated contractors to be used.
Contractor visits (contractors managed via Estates)	Department to inform RTP of intended visits (where notified) RTP to manage access and to make space safe for any contractors requiring access their space(s)	It is highly likely that the Department will be notified of contractor visits for planned preventative maintenance works either conducted by Estates or their contractors. The Department shall engage the RTP to advise when works are likely to be carried out and to negotiate works on the RTPs behalf if necessary.
Supply of local information and review of work RAMS	RTP	To supply H&S related information if requested. Will fall to RTP for their own arranged contractors.

Access Equipment (Ladders/stepladders)

¹ See also Statutory Testing Section

Host	School of Engineering	Comments
RTP	Nanofabrication	

Compliance Area

Adding to register & tagging	RTP/Department	Access equipment used by RTP is added to the Department Access equipment register. RTP to inform department about new access equipment.
Periodic checks, e.g. ladder checks	RTP	The RTP staff will conduct these periodic checks on access equipment owned by RTP and keep the records.
Quarantining of failed items	RTP	RTP is responsible to take failed access equipment out of use and dispose. If RTP asset, then any cost of disposal will fall to the RTP.
Replacement of failed items	RTP	If an RTP asset, then any repair or replacement costs incurred will fall to the RTP.

Portable Appliance Testing

Completion of Portable Appliance Testing, coordination of work with external contractor and arranging access to all areas across the Department and RTP	RTP/Department	The Department will have the right to charge the RTP for items requiring portable appliance testing. Labels will be affixed to items tested by contractor.
Quarantining and seeking repair/replacement of any items that have failed their PAT (and which have a failure sticker applied)	RTP	RTP responsible for the management of their own assets which are subject to PAT, via correct WEEE disposal route with the cost to the RTP.

Statutory Testing and CRIMSON Reporting

Adding items to statutory testing register (pressure systems/vessels, lifting equipment/lifting accessories)	RTP	Any amendments to status and location of statutory asses to go via the RTP to Statutory Inspection report form (warwick.ac.uk)
Statutory testing as above	Estates (LEV) or Insurance Services (Pressure/LOLER) (Contractors)	Statutory testing is carried out by contractors. Estates will likely engage with the Department to arrange the site visits. Department to inform RTP Manager when this work will be conducted.

Host	School of Engineering	Comments
RTP	Nanofabrication	

Compliance Area

Checking records in the CRIMSON system (equipment subject to LOLER/Pressure Regs)	RTP	RTPs to be provided with CRIMSON training which will grant the trained RTP staff access to the records in this system. See body of report for details.
Taking items out of use/quarantining following Insurance contractor inspection (equipment subject to LOLER/Pressure Regs) and updating CRIMSON with the details	RTP	RTP to quarantine relevant items and to report the action(s) taken within the CRIMSON system.
Taking LEV out of use following Estates contractor deeming it having failed its statutory test	RTP	RTP to ensure LEV is not used until such a time that the work to repair the LEV has been carried out.

Servicing/replacement of systems installed to a space

Hard wired/building fixed Oxygen Depletion Monitors - monitoring levels within a space (not stand-alone devices)	Estates/Department	These are maintained by Estates who engage external contractor.
Portable oxygen depletion monitors	RTP as applicable	These would be considered an RTP asset. See body of report for record keeping details.
Other gas detection (portable)	RTP as applicable	These would be considered an RTP asset. See body of report for record keeping details.

First Aid / Emergency Management

First Aiders	RTP/Department	The Department will have a number of First Aiders who would be available to the RTP in an emergency. The RTP shall also have specialised first aid trained staff so far as is reasonably practicable. Community Safety are also First Aiders.
--------------	----------------	---

Host	School of Engineering	Comments
RTP	Nanofabrication	

Compliance Area

First Aid Box and its replenishment	Department/RTP	The replenishment of first aid boxes will fall to a nominated representative within the department who manages the First Aid box. RTP to inform Technical Services Manager that first aid box was used.
Eye wash and other specific provisions. Note that this could also include specific first aid response kits/equipment and associated training.	RTP	Any specific provisions required for supporting an emergency scenario relevant to the RTP will be the RTP's responsibility to install and replace any stocks that are used/past their use by date. RTP is responsible for regular flushing of eye wash stations where installed.
Spill Kit	RTP	The material will be replenished by the RTP by ordering the replacement on OPeRA. If there is anything specific to the RTP, which is required above and beyond what is already available to them, then relevant spill management materials shall be purchased by the RTP and located local to where the spillages could arise and replenished as and when required by the RTP.

Appendix 2 – Key Contact Details for the Department and RTP

Department

Contact Name	Role	Contact Number	Email Address
Adrian Seymour	Technical Services & Facilities Manager (SoE)	024 765 23902	Adrian.Seymour@warwick.ac.uk
Justyna Ballard	Building and Facilities Assistant (SoE)	024 765 73913	J.Ballard.1@warwick.ac.uk
Amy Hamson	Director of Operations (SoE)	024 765 23131	A.Hamson@warwick.ac.uk
Robb Johnston	Technical Services & Facilities Manager (Physics)	024 765 23988	R.I.Johnston@warwick.ac.uk

RTP

Contact Name	Role	Contact Number	Email Address
Oliver Vavasour	RTP Manager		O.Vavasour.1@warwick.ac.uk
Richard Jefferies	Semiconductor Process Engineer, RTP	024 765 73859	Richard.Jefferies@warwick.ac.uk
Ian Hancox	RTP Director	024 761 50380	I.Hancox@warwick.ac.uk
Vishal Shah	Director of Nanofabrication RTP	024 765 75467	Vishal.Shah@warwick.ac.uk