**DIRECTORATE OF ESTATES AND FACILITIES**

**PROCEDURE AND INFORMATION MANUAL**

# EPM HS12 - Permit to Access & Permit to Work

| Permit to Access & Permit to Work - Version Amendment History | | |
|---|---|---|
| Version | Date | Reason for change |
| v0.3 | May 2021 | • New format for procedure in accordance with the University Policy Framework<br>• Update of Estates Unit titles<br>• Guidance in appendices removed and reference made to resources and manuals within the procedure<br>• Introduction of CITB forms for risk assessments and method statements<br>• Inclusion of the permit to work on natural gas systems<br>• Inclusion of the wet work permit and guidance<br>• Updated flowcharts for permit to work and permit to access<br>• Introduction of a hot work and work on fire alarm systems process flowchart<br>• Introduction of templates for assessing competence of authorised persons and capability of specialist contractors<br>• Inclusion of a table identifying skills, knowledge and experience of dutyholders<br>• Introduction of an electrical section with arrangements for accessing HV sub-stations and LV switch rooms<br>• Mandatory requirement to consult with the relevant Fire and Rescue Service when works are required to fire hydrants and / or associated pipework<br>• Mandatory requirement to maintain daily records when capping and uncapping automatic fire detectors<br>• Removal of the requirement for the Facilities Management & Compliance (FMC) Fire Team to complete a fire safety report (to accompany hot work and work on fire alarm systems and detection permit requests) |
| | | |
| | | |
| | | |
| | | |
| | | |

## CONTENTS



## APPENDICES

## 1.0 Introduction and Purpose

1.1 The aim of this procedure is to introduce a safe system of work to control significant risks by the implementation and integration of a permit to work system. The University of Manchester operates a permit to work and / or permit to access for work which is undertaken under the following categories:

- Access into and work within confined spaces
- Access onto and work on roofs
- Access into vacant premises and unallocated space
- Access into and work within plant rooms, switch rooms, boiler rooms, lift motor rooms and service risers
- Excavations
- Work on fire alarm systems and detection
- Electrical isolations (low voltage distribution systems)
- Asbestos works and asbestos contaminated areas
- Hot work (use of naked flames, abrasive cutting, electric arc welding and hot soldering)
- Wet work
- Cold work (cryogenics and working with refrigerants)
- Work on high pressure systems (steam and compressed air)
- Work on natural gas systems

1.2 This procedure is intended to ensure the University of Manchester meets the requirements of the Health and Safety at Work etc. Act 1974 and associated subordinate legislation.

1.3 Section 2 of the Health and Safety at Work etc. Act 1974 requires that employers ensure, so far as is reasonably practicable, the health, safety and welfare of their employees.

1.4 Section 3 of the Health and Safety at Work etc. Act 1974 requires that employers prevent, so far as is reasonably practicable, non-employees from being exposed to risk.

1.5 Section 7 of the Health and Safety at Work etc. Act 1974 requires that employees take reasonable care of themselves and other persons whilst at work.

1.6 The Management of Health and Safety at Work Regulations 1999 identifies an absolute duty to undertake a suitable and sufficient assessment of the risks for all work activities for the purpose of deciding what measures are necessary for safety.

1.7 For work in high risk areas such as those covered by the University of Manchester permit to work procedure, this means identification of the hazards present, assessment of the risks and determining what precautions are to be taken.

1.8 It is the procedure of the University of Manchester that all areas and activities under the control of the Directorate of Estates and Facilities (DOEF) that are deemed to be of significant risk will be controlled by a permit to access and / or permit to work.

## 2.0 Scope and Definitions

2.1 For the purposes of this procedure two types of permit will be authorised:

- A permit to work will apply when work needs to be undertaken which exposes personnel to foreseeable significant risks and / or significant risk of property damage due to for example an escape of water or liquid
- A permit to access will apply when access is required into an Estates controlled area* to carry out works, including short-duration visits such as inspections and surveys

2.2 The permit to work and permit to access apply to work undertaken as described in Section 1.1 of this procedure by University staff, principal contractors, contractors (including specialist contractors appointed by FMC), professional consultants and all other persons. There are limited circumstances where a permit is not required and further guidance is provided in Section 6.8 – *Permit Requirements in an Emergency* and Section 6.9 – *Authorised Persons and Specialist Contractors*.

2.3 This procedure does not apply to construction projects where a principal contractor, as defined by the Construction (Design and Management) Regulations 2015 (CDM 2015) has exclusive possession of an internal or external area. However, this procedure will apply where the principal contractor takes over an internal or external space but interfaces with building users or building services in an adjacent building or area. Further guidance on the application of the University of Manchester's permit procedure when considering demarcation of construction works can be found in Section 6.10 - *Guidance for applying permits where a principal contractor has exclusive possession of an area.*

***** *Estates controlled areas include confined spaces, service risers, plant rooms, boiler rooms, roofs, vacant premises, unallocated spaces and electrical switch rooms.*

## 3.0 Roles and Responsibilities

| Dutyholders (Role) | Summary of Responsibilities |
|---|---|
| **Director of Estates and Facilities** | ➢ It is the responsibility of the Director of Estates and Facilities to ensure that this procedure is implemented, monitored, reviewed and audited at appropriate intervals. |
| **Facilities Management & Compliance (FMC) Teams e.g. Fire Team, Electrical Team, Mechanical Team etc.**<br><br>**Principals of FMC Teams e.g. Principal Fire Officer, Principal Electrical Engineer etc.** | ➢ The Head of Facilities Management & Compliance (FMC) will have overall responsibility for the day-to-day implementation of this procedure including roles and responsibilities of individuals and teams and delegation of duties and tasks. |
| **FMC Maintenance Staff including Maintenance Supervisors & Maintenance Operatives** | ➢ The Head of FMC in consultation with the Estates Safety Office will ensure that this permit procedure is monitored and audited at appropriate intervals.<br><br>➢ FMC teams and FMC maintenance staff to provide advice and additional information (where available) e.g. roof data sheets and information on services.<br><br>➢ The Head of FMC in consultation with the Estates Safety Office to ensure that all contractors on the online permit system have been assessed as competent (including ongoing reviews).<br><br>➢ FMC teams and FMC maintenance staff to carry out isolations of services e.g. electrical supplies, steam systems etc.<br><br>➢ FMC team principals and FMC maintenance supervisors to assess the capability of authorised persons.<br><br>➢ Designated persons in FMC to maintain the *Authorised Persons and Specialist Contractors Register.*<br><br>➢ FMC to administer the online permit to work system.<br><br>➢ FMC to maintain a key / Simons Voss access card register, including a formal signing in and out system. |

| | |
|---|---|
| **Head of Unit (HoU) within Estates and Facilities e.g. Project Group and Faculty Estates Teams (FET)** | ➢ All Heads of Unit (HoU) have the day-to-day operational management ensuring safe working within areas and activities under the control of a permit.<br><br>➢ HoU must ensure that persons at all levels charged with a responsibility under this procedure shall be competent to undertake the task. This includes asessing the capability of authorised persons.<br><br>➢ HoU must ensure that all persons are made fully aware of their safety responsibilities and given the necessary information, instruction and training.<br><br>➢ HoU shall regularly review the *Authorised Persons and Specialist Contractors Register* and ensure that organisations are capable and individuals have the necessary skills, knowledge, experience and attitude.<br><br>➢ HoU must rectify and / or escalate non-performance by persons or organisations in accordance with this procedure. |
| **University Staff, Professional Consultant, Principal Contractor and Contractor (including Specialist Contractors appointed by FMC) who require access into an Estates controlled area and / or undertaking work activities**<br><br>**(Researchers and Tenants will also be required to develop and implement risk assessments when accessing Estates controlled areas)** | ➢ Develop risk assessments and method statements for the activity. Risk assessments need to be concise and task specific so that the FMC permit authoriser can understand the planned work activity.<br><br>➢ Ensure that those who carry out the risk assessment are competent and can recognise the hazards and identify the precautions to be implimented to eliminate or reduce risk to as low as reasonably practicable.<br><br>➢ Where applicable, have in place a robust procedure for procurement and management of capable contractors working across the Estate.<br><br>➢ Have in place a robust procedure for monitoring works ensuring that activities are carried out in accordance with the precautions identified in the risk assessment and method statement.<br><br>➢ Have in place robust arrangements for carrying out works in an emergency. |

| | |
|---|---|
| **Principal Contractor (where there is more than one Contractor appointed to a construction project)** | ➢ Review and evaluate risk assessments and method statements submitted by the contractor using the CITB GA10 pro-forma – See Appendix A of this procedure.<br><br>➢ Plan, manage, monitor and co-ordinate the work activities so that activities are undertaken in accordance with the risk assessment and method statement.<br><br>➢ Engage, inform and instruct individuals so that they understand the hazards, risks and precautions to be taken. |
| **Permit Requestor e.g. Client Representative, Project Manager, FMC Maintenance Supervisor, Professional Consultant etc.** | ➢ Consult with the permit authoriser where clarification is required about the site specific hazards and / or access arrangements prior to requesting a permit.<br><br>➢ Co-ordinate with FMC maintenance staff, contractors, professional consultants, building users and other persons with regard to the works.<br><br>➢ Check the risk assessments and method statements before submitting to the designated FMC permit authoriser and requesting a permit.<br><br>➢ Ensure that a signed risk assessment and method statement evaluation form has been completed by the principal contractor or contractor before requesting the permit from the FMC permit authoriser.<br><br>➢ Ensure that robust Health and Safety arrangements are in place in respect of the activities carried out under the permit.<br><br>➢ Update the permit authoriser in regards to progress and activities so that client assurance visits can be planned (where deemed necessary). |
| **Permit Authoriser – Designated Persons within FMC** | ➢ Review the risk assessments and methods statements to ensure that the necessary precautions have been identified (considering the nature of the task) prior to authorising a permit.<br><br>➢ Provide feedback to the FMC permit requestor if the information supplied is unacceptable and the request is referred back for additional information. |

| | |
|---|---|
| | ➢ Liaise with the FMC permit requestor on the requirements of the permit and precautions to be implemented.<br><br>➢ Carry out client assurance visits (where required) during the work activities.<br><br>➢ Inspect the work area (if deemed necessary) prior to a permit being closed out on the online system. |
| **Authorised Person (AP) e.g. FMC Staff, designated on-call Key Holders** | ➢ Authorised Person (AP) where assessed as possessing the skills, knowledge and experience by their HoU, FMC team principal or FMC maintenance supervisor access Estates controlled areas and / or carry out works without the requirement for a permit.<br><br>➢ In all instances, AP to carry out a dynamic risk assessment when accessing Estates controlled areas and / or carrying out works.<br><br>➢ Carry out emergency access and / or works in accordance with their dynamic risk assessment, training, information and instruction.<br><br>➢ Where requested, provide a verbal site induction and supervision of visitors to Estates controlled areas e.g. plantrooms and roofs. |
| **Estates Safety Office including Project Group Senior CDM Advisor** | ➢ Provide advice and guidance to all dutyholders identified in this procedure.<br><br>➢ Organise training so that dutyholders are competent in carrying out their role and discharging their responsibilities.<br><br>➢ Assist with the assessment of contractors to ensure that they are capable of the planned work activities.<br><br>➢ Carry out client assurance visits and review precautions specified in the permit to work and / or permit to access and accompanying risk assessments and method statement (where required).<br><br>➢ Monitoring and audit of the permit to work procedure against pre-defined standards and identify areas for continual improvement. |

## 4.0 General Principles

4.1 This procedure will be subject to a review period of not less than two years from its publication date. The procedure may be reviewed before this date if necessary by the introduction of new or revised legislation or if a significant failure in the implementation of this procedure results in injury or loss at the University of Manchester.

4.2 This procedure should be read in conjunction with the following University of Manchester policies and procedures:

- Health and Safety Policy and Arrangement Chapters
- EPM HS1 Estates and Facilities Health and Safety Local Arrangements
- EPM HS14 CDM 2015 Procedure
- EPM FM5 Estates Emergency Response Procedure

4.3 The DOEF has also issued guidance to support the request for a permit and the completion and evaluation of risk assessments and method statements for specific risk activities that fall under this permit to work system. The following procedures can be found on the University of Manchester StaffNet at https://www.estates.manchester.ac.uk/services/csu/policies/

- EPM HS16 Electrical Shutdown Procedure
- EPM HS20 Mercury Awareness and Guidance
- EPM HS25 Asbestos Management Plan
- EPM HS37 Fire Alarm Management Policy
- EPM PM6 Code of Practice for Contractors on Campus
- EPM HS17 Gas Safety Management Arrangements

4.4 Further information can be obtained from FMC when planning access into controlled roof areas in the form of roof data sheets.

4.5 In regards to roof work, the permit requestor will be responsible for arranging with the School(s) and School Safety Advisor(s) for any discharges onto the roof e.g. fume cupboards to be made safe. Area owners are responsible for issuing a laboratory clearance certificate including arrangements for making safe fume cupboards prior to works commencing.

4.6 In regards to surveying for contamination or removing contamination e.g. mercury, micro-organisms, radioisotopes, hazardous chemical, oils and clinical material, further advice can be obtained in the first instance from the Estates Safety Office by emailing estatesafety@manchester.ac.uk. The Estates Safety Office will be able to provide contact details for specialist advice in these areas e.g. University Radiation Safety Unit, Safety Services, Occupational Hygienist etc.

4.7 Further guidance can also be obtained from external resources (this is not an exhaustive list):

- Health and Safety Executive - https://www.hse.gov.uk/
- Construction Industry Training Board (CITB) - https://www.citb.co.uk/
- The National Federation of Roofing Contractors – Safe2Torch when using a torch for roofing works https://www.nfrc.co.uk/safe2torch

## 5.0 Monitoring Compliance

### 5.1 General

5.1.1 University staff, principal contractors, contractors (including specialist contractors appointed by FMC), professional consultants and all other persons are responsible for ensuring that the precautions identified in their risk assessments and method statements are implemented and that they have an effective monitoring process in place. Effective monitoring includes:

- Allocating sufficient resources, time and effort to carrying out monitoring in the first place
- Treating health and safety in the same way as other important aspects of the organisation's operations and business
- Carrying out pro-active monitoring in the form of site inspections
- Taking prompt action to rectify any deficiencies found
- Carrying out re-active monitoring in the event of a near miss, accident, ill-health or dangerous occurrence to identify any corrective actions

5.1.2 Depending on the hazard, complexity, and nature of the task, the Estates Safety Office may advise that the client representative instructs a third party to carry out a review of health and safety standards on the project, including safe working practices, and the means by which these standards will be maintained throughout.

5.1.3 University staff, principal contractors, contractors (including specialist contractors appointed by FMC), professional consultants and all other persons who have requested a permit to access and / or permit to work are responsible for providing updates on the progress of works directly to the FMC permit authoriser. This is in order to provide the Estates Safety Office and FMC permit authorisers with accurate information on when works will be taking place on site so that client assurance visits can be planned. As a minimum, permit requestors should provide the FMC permit authoriser with an up to date programme of work, clearly indicating when each activity is due to start on site (date and time) and when it is due to be completed.

5.1.4 The Estates Safety Office and the Project Group Senior CDM Advisor will carry out client assurance visits to review arrangements for:

- The effective discharge of the University's client duties as defined by the CDM 2015 Regulations
- The principal contractor and principal designer to discharge their duties as defined by CDM 2015
- Identifying areas where the Estates Safety Office and the Project Group Senior CDM Advisor can provide further information, guidance and assistance to the project team

5.1.5 In the event of an incident, accident or dangerous occurrence, the Estates Safety Office may deem it necessary to carry out a CDM due diligence review with a representative from each CDM dutyholder to identify corrective actions, areas for improvement and lessons-learnt.

5.1.6 University staff, principal contractors, contractors (including specialist contractors appointed by FMC), professional consultants and all other persons must report any accidents and incidents to the Estates Safety Office by emailing estatesafety@manchester.ac.uk

## 5.2 Non-performance

5.2.1 University staff, principal contractors, contractors (including specialist contractors appointed by FMC), professional consultants and all other persons are responsible for ensuring that a competent person provides suitable and sufficient risk assessments and method statements for their activities. In the event that an organisation consistently fails to provide suitable and sufficient risk assessments, or fails to implement and monitor precautions on site in accordance with their risk assessment, then the permit requestor may escalate this issue to senior management e.g. their Head of Unit or the Estates Safety Office. This may result in the following action(s) being taken:

- The issue of a non-performance certificate to those organisations appointed to a University Framework
- Requirement for senior representatives from the organisation (including their Health and Safety representative) to attend a meeting with a DOEF convened interview panel to identify and agree timescales for corrective actions
- Suspension for a defined time limit from undertaking further works at the University (including suspension or exclusion from a Framework where this applies)

## 5.3 Monitoring, Audit and Review of Procedure

5.3.1 The Head of FMC, with the assistance of the Estates Safety Office, is responsible for developing and implementing an effective monitoring and audit process for this procedure (against pre-defined standards) to ensure continual improvement in this safe system of work at the University of Manchester.

## 6.0 Procedure Content

### 6.1 General

6.1.1 When access is required into an area that is considered to be a significant risk, a permit to access will be required before access can be granted to such an area. All such areas, deemed as a significant risk, will be locked off to prevent unauthorised access (by key or Simons Voss access card). Access to these areas will only be granted to persons once the designated FMC permit authoriser is satisfied that appropriate workplace precautions have been agreed to deal with the health and safety risks associated with each activity undertaken in such spaces.

6.1.2 Authorisation to access such controlled areas will be the responsibility of FMC permit authorisers. Only designated persons from FMC will authorise permits to access and only designated persons within FMC (located on the 4th Floor of Beyer Building) will issue keys and / or Simons Voss access cards.

6.1.3 Access to Estates controlled areas should not be gained without prior authorisation. Unauthorised access is not permitted under any circumstances.

6.1.4 University staff, principal contractors, contractors (including specialist contractors appointed by FMC), professional consultants and all other persons can apply to access controlled areas by the application for a permit to access. The application for a permit to work and permit to access is undertaken using an online process administered by FMC within the DOEF. There are limited exceptions to this:

- It is an emergency incident – see Section 6.8 of this procedure
- The individual is an authorised person that has previously been assessed as possessing the skills, knowledge and experience - see Section 6.9 of this procedure
- The person(s) visit to an Estates controlled area will be supervised by an authorised person who will provide a verbal site induction and facilitate safe access escorting visitors at all times

6.1.5 With regard to the online permit system, it is the responsibility of the Head of FMC and the Estates Safety Office to ensure that:

- Contractors currently listed on the permit system are either a current framework contractor or have undertaken a separate capability assessment in accordance with EPM HS14 *CDM 2015 Procedure*
- Prior to the addition of any new contractors to the online system, a capability assessment of the contractor is undertaken in accordance with EPM HS14 *CDM 2015 Procedure* (including checks of insurances)
- In accordance with the requirements to monitor, audit and review this procedure (see Section 5.3), contractors are periodically assessed to ensure that they are capable in their respective role (and contact details are up-to-date)
- Non-performing contractors are removed from the online permit system

6.1.6 It is the responsibility of FMC administration to ensure that the building list and corresponding building numbers are up to date on the online permit system.

6.1.7 Before requesting a permit to work and / or permit to access, the permit requestor should firstly identify any other works planned or taking place in that particular area. This includes checking the online permit to work system. All works across the Estate must be co-ordinated and communication established between working parties.

6.1.8 University staff, principal contractors, contractors (including specialist contractors appointed by FMC), professional consultants and all other persons must at all times observe health and safety requirements prior to accessing a controlled area, including the wearing of the appropriate Personal Protective Equipment (PPE).

6.1.9 If necessary, and before a permit is requested, the permit requestor should discuss the nature of the task and the arrangements needed to control any inherent risk associated with each activity with one of the designated FMC permit authorisers.

6.1.10 Once the scope of work has been agreed, a permit to access and / or a permit to work can be applied for. The permit requestor should add as much detail into the permit request application as possible so that the person authorising the permit understands the work which is proposed.

6.1.11 The permit requestor should attach a task specific risk assessment to the permit request for the work being proposed which identifies all of the residual risks associated with the activity being undertaken. The risk assessment should identify what the risks associated with the activity are, how they are likely to affect those working in the area, and the precautions which need to be implemented to control each risk and any actions in the event of an emergency. The risk assessment should have an evaluation of the level of residual risk and should be signed by a competent person***** employed by those who intend to undertake the work. **Generic risk assessments will not be accepted for permit requests.**

6.1.12 The permit requestor should attach a method statement or safe system of work to the permit request which details how each of the residual risks associated with the activity will be controlled during the time the proposed work is being undertaken. The method statement should identify what the residual risk is, how the risk could affect those working in the area and a detailed explanation of the safe methods of undertaking the work. **Generic method statements will not be accepted for permit requests.**

6.1.13 CITB forms are included in the appendices of this procedure for assisting in the completion of risk assessments and method statements and must be used (other formats can be used to provide the equivalent level of information):

- Appendix B - CITB GA03 Risk assessment template
- Appendix C - CITB GA08 Method statement template

***A competent person is someone who has sufficient training, skills, experience, knowledge and attitude to be able to identify and evaluate health and safety risks which are inherent with the type of work being undertaken.*

6.1.14 The principal contractor and / or contractor are required to carry out an evaluation of the risk assessments and method statements for the task before submitting this information to the permit requestor. A copy of this evaluation must be attached as a cover sheet to the risk assessment and method statement submission.

6.1.15 An example CITB GA10 *Risk Assessment and Method Statement Evaluation form* can be found in appendix A of this procedure. However, a contractor and / or principal contractor is permitted to use their own evaluation form as long as this provides the equivalent level of information.

6.1.16 With regards to requesting a hot-work permit, the CITB GC07 Hot-Work Permit must be completed and attached as a cover sheet to the risk assessment and method statement for the works. The CITB GC07 Hot-work permit form can be found in appendix D of this procedure. The use of the CITB GC07 Hot-Work Permit form is mandatory for each application for a hot work permit request.

6.1.17 The permit requestor is also required to complete a **check** of the risk assessments and method statements prior to the submission of the permit request. This check includes basic information such as date of works, building information, agreed access and egress, security etc. and that the RAMS evaluation is attached as a cover sheet. This check is not a detailed review of the RAMS by the permit requestor but is to assist in providing all relevant information to avoid rejection of the permit request and therefore potential delays on a project.

6.1.18 Once the permit request, risk assessment, method statement, evaluation form and / or GC07 hot-work permit have been submitted, they will be reviewed and a decision will be made by the FMC permit authoriser within three working days of submission (unless there is a prior agreement in place between permit requester and permit authoriser to reduce this timescale).

6.1.19 It is the permit requestor's responsibility to ensure that there is adequate time for the FMC permit authoriser to assess the information submitted as part of the permit application, including plans, drawings, risk assessments and methods statements.

6.1.20 The FMC permit authoriser will either authorise the permit in which case the work can be undertaken or the permit will be rejected and the work cannot take place until such times the permit is authorised. FMC permit authorisers should work collaboratively with permit requestors in the first instance to resolve any issue(s) to try and avoid rejecting a permit request (where reasonable to do so). Agreed actions and feedback can be provided in the comments box of the online permit.

6.1.21 The University does **not** permit principal contractors or contractors to isolate or re-energise the following services:

- High pressure systems (steam and compressed air)
- Natural gas systems
- Low voltage electrical isolations - systems supplying final distribution boards (or isolations further upstream) – refer to EPM HS16 Electrical Shutdown Procedure for further guidance

(Safe isolation and re-energising of these services is the responsibility of FMC Staff)

6.1.22 Once a permit is authorised, those persons undertaking the work shall agree a suitable date to undertake the work and should present the authorised permit, the risk assessment and method statement (this can be done electronically or paper copy) to the designated person(s) in FMC to obtain a key or Simons Voss access card. Access to these areas will not be granted if the required documentation is not available.

6.1.23 A copy of the permit to work and / or permit to access should be displayed at the work location.

6.1.24 Upon the completion of the workshift, those authorised to undertake the work shall ensure that:

- The work area is left safe, clean and tidy
- All caps or bags have been removed from automatic fire detectors (where applicable)
- Any fire watch has been completed in accordance with the risk assessment and method statement
- All equipment and machinery are left in a safe condition
- There are no leaks of water or liquid from pipework, drainage or mechanical systems

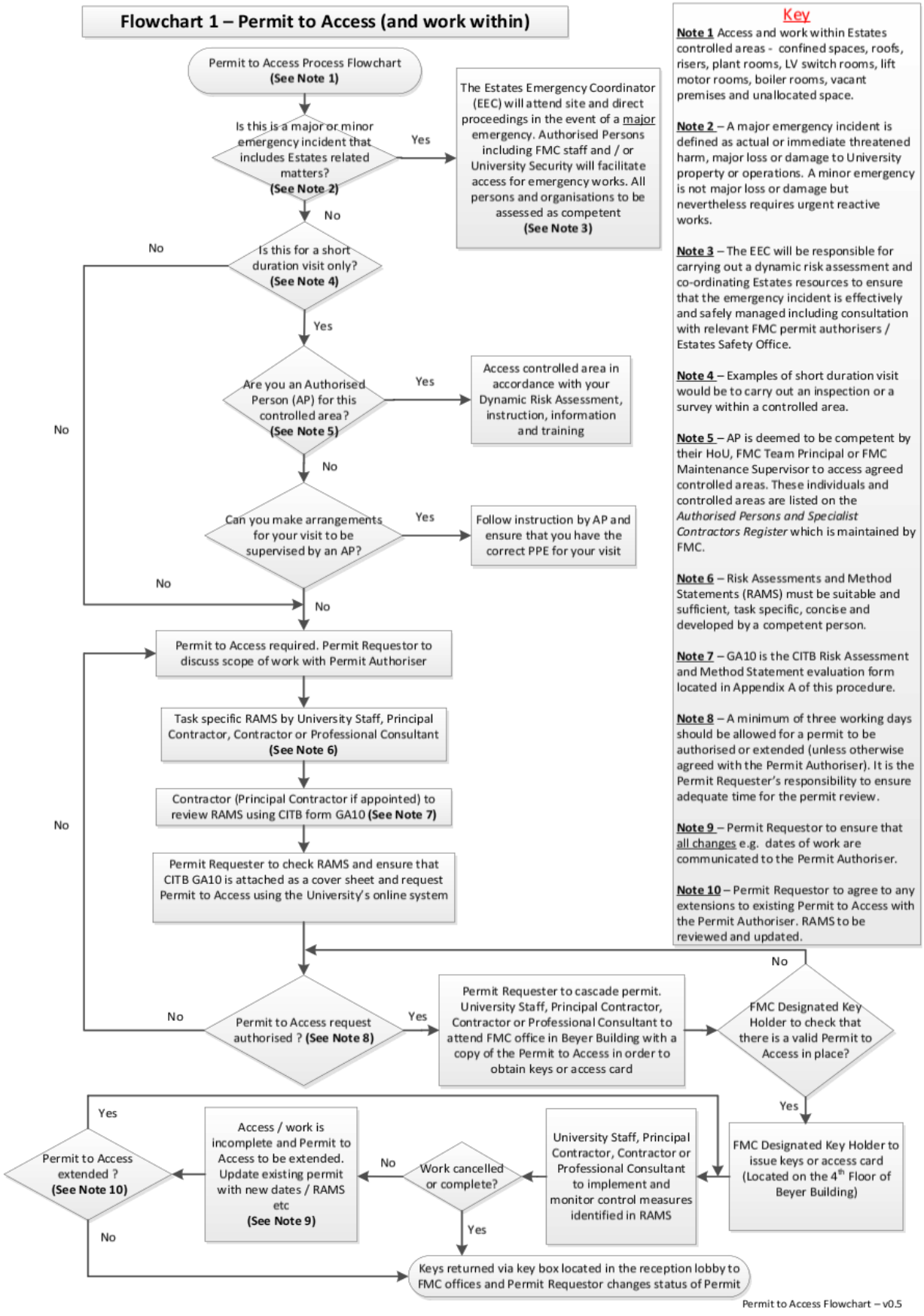
6.1.25 Once the task has been completed, the FMC permit authoriser should be notified without delay so that arrangements can be made to inspect the work area (if deemed necessary) and for the permit to be closed out.

6.1.26 All keys, Simons Voss access cards and other items issued as part of the permit to access are returned to FMC. Keys and access cards can be returned to FMC via the key box situated in the reception lobby to FMC offices on the 4th floor of the Beyer Building.

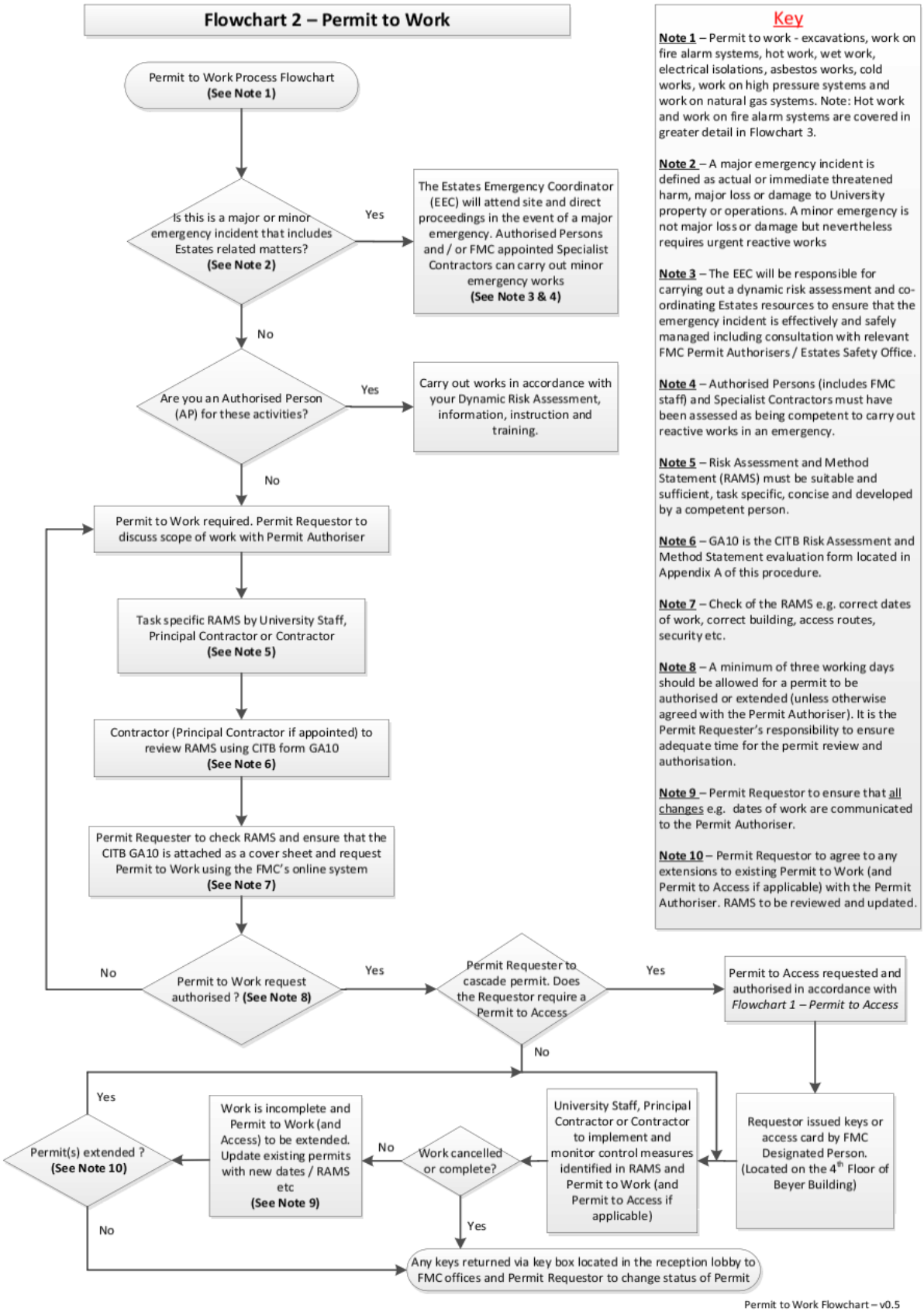
6.1.27 Once the permit has been cancelled or works have been complete, no further work can be undertaken in such areas until a new permit has been requested and authorised.

6.1.28 A permit to work and / or permit to access must not be in operation for **more than one calendar month**. For longer permits an extension or new permit must be agreed with the FMC permit authoriser three working days before the existing permit expires. It must not be assumed that an extension will be automatically authorised.

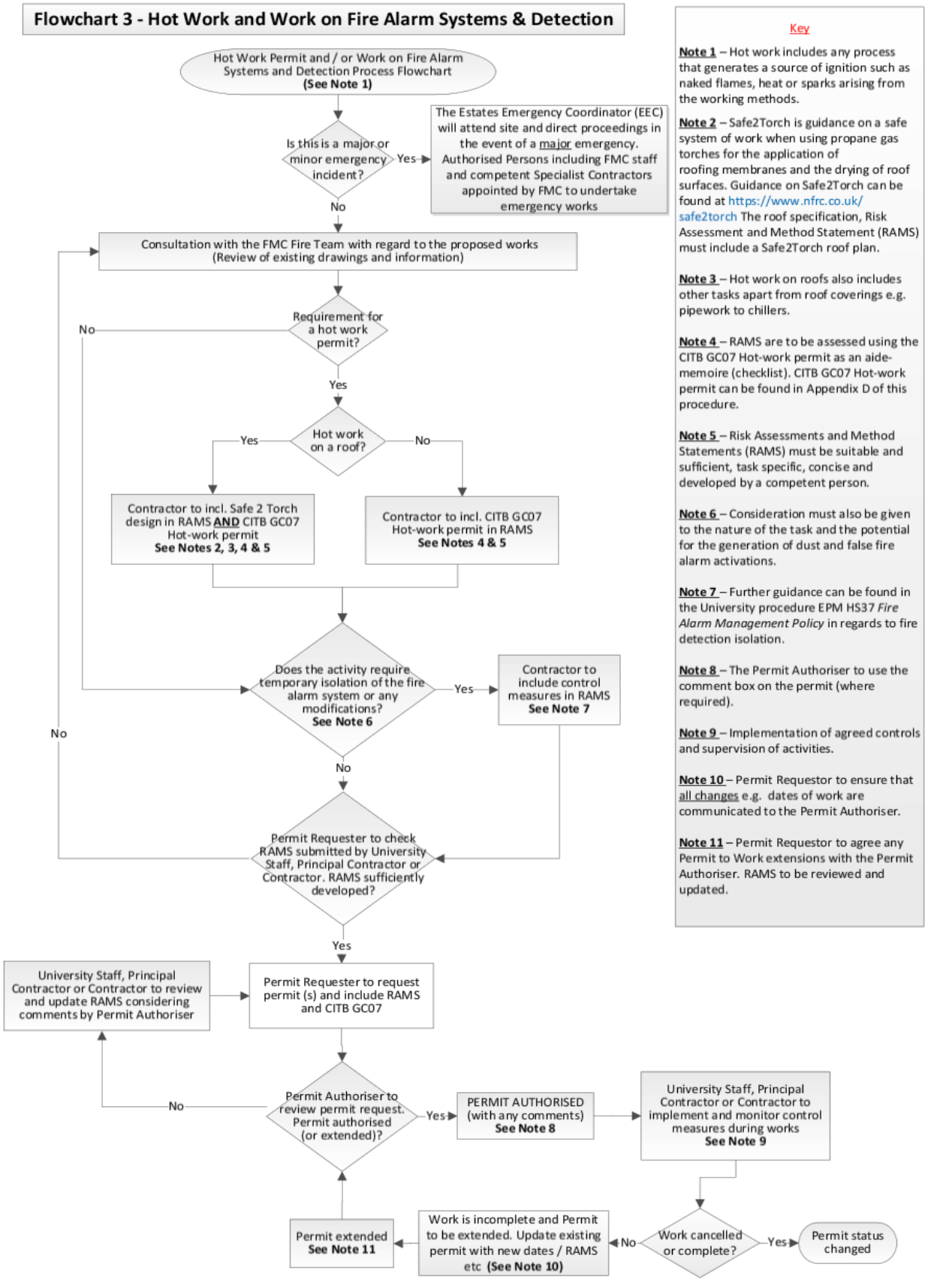
## 6.2 Permit to Access Flowchart



## 6.3 Permit to Work Flowchart



## 6.4 Hot Work and Work on Fire Alarm Systems & Detection Flowchart




Hot Work and Work on Fire Alarm Systems & Detection Flowchart – v0.5

## 6.5 Hot Work - General

6.5.1 The professional competence of contracting staff undertaking hot work safety is essential to the prevention of fires. Hot work during both construction and ongoing maintenance is a major cause of fire. In terms of preventing fires, all contracting staff must be demonstrably competent in their role. There are several ways of demonstrating competence but preferably, contracting staff should hold a current Hot Work Passport from the Fire Protection Association.

6.5.2 Whenever propane / butane torches are to be used on roofs, The National Federation of Roofing Contractors Safe2Torch guidance **MUST** be followed at all times.

6.5.3 Whenever a “fire watch” is included as part of the Risk Assessment Method Statement (RAMS) this MUST be continuous throughout the hot work. It doesn’t start at the completion of the work but from the beginning and for as long afterwards as stated in the RAMS. Where welfare breaks interrupt the work the continuity of the fire watch must be maintained throughout such breaks.

6.5.4 When capping automatic fire detectors, only proprietary caps or bags approved by the FMC Principal Fire Officer will be accepted. The contractor must ensure that all caps or bags are removed at the end of the shift to ensure the area is fully protected by fire detection outside working hours. Contractors **MUST** maintain daily records of their process for capping and un-capping detectors and these must be made available for inspection as requested.

6.5.5 The issue of a hot work permit will **not exceed one calendar month.** For longer permits an extension or new permit must be agreed with the FMC permit authoriser three working days before the existing permit expires. It must not be assumed that an extension will be automatically authorised.

6.5.6 Hot works activity will be checked periodically to ensure compliance with the submitted RAMS.

## 6.6 Wet Working – General

6.6.1 Summary: If the outcome of the wet working risk assessment is that there is a foreseeable **major** risk of harm to the University should an escape of water or liquid occur, then a Wet Work Permit (WWP) needs to be requested using the online permit system.

6.6.2 Wet working can be defined as any work involving water, non – flammable liquid or fluid on pipework distribution, pumping, drainage or mechanical building systems. Wet working includes processes to install, modify, extend, freeze, fill, pressure test, flush and maintain mechanical systems such as:

- Hot and cold water systems
- Heating – Medium Temperature Hot Water / High Temperature Hot Water
- Heating boiler plant and associated equipment
- Mechanical equipment including HVAC, AHU and associated plant
- Cold water storage tanks
- Cooling plant and refrigeration
- Steam and condensate systems
- Fire suppression risers, pipework distribution and sprinklers
- Drainage and rainwater systems including pumped systems
- Sanitary sewer systems

6.6.3 In addition to the processes outlined in paragraph 6.6.2, activities can also be described as wet working such as:

- Using hoses to convey water for mixing materials
- Waste water disposal when draining down a water system
- Installation and use of temporary water supplies and connections
- Flushing of outlets within a building as required by the Legionella written control scheme

6.6.4 Although not directly wet working on pipework, drainage and mechanical systems, certain activities also need to be considered and assessed. For example:

- Accidental damage to pipework as a result of removing asbestos containing materials
- Excavating and accidental damage to buried services and pipework
- Ingress of rainwater when carrying out roofing works including forming new openings

6.6.5 Escape of water (including non-flammable liquids and fluids) during construction of new builds, refurbishment and maintenance activities described in the processes and activities in paragraphs 6.6.2, 6.6.3 and 6.6.4 can all cause significant damage to the structure, building and building contents. This damage can result in significant financial loss to the University, large insurance claims and negatively impact on research and development, the environment, business continuity, loss of services and project objectives.

6.6.6 Pro-active measures to reduce the risk of escape of water or liquid should be assessed throughout all stages of the lifecycle of a construction project and included on the project risk register (likelihood and impact of an escape of water or liquid); surveys and location of isolation valves; designer risk assessments considering buildability, usability and maintainability of mechanical systems and pipework distribution; wet working on the agenda of design, pre-start and progress meetings and identification of mitigation measures; programme of works including dates and times for key wet working activities; arrangements for inspections and monitoring; and identifying and sharing lessons-learnt from investigating incidents.

6.6.7 In order to prevent an escape of water or liquid, a suitable and sufficient wet work risk assessment and method statement shall also be completed when carrying out day-to-day maintenance tasks (this could be in the form of a dynamic risk assessment); Planned Preventative Maintenance; compliance works such as flushing for Legionella as part of the written control scheme; and when instructing specialist contractors to work on mechanical systems and pipework distribution at the University.

6.6.8 It is a therefore a requirement of the University, that **all** wet working activities performed by University staff, principal contractors, contractors (including specialist contractors appointed by FMC) that may accidentally result in an escape of water or liquid will require:

- Wet working to be included in the task specific risk assessment and method statement and appropriate controls measures identified to reduce the likelihood (and impact) of an escape of water or liquid
- That the organisation instructed for the works appoints a competent person to undertake the wet working risk assessment (a competent person by definition is an individual who possesses the necessary skills, training, experience and knowledge of the pipework distribution, pumping, drainage or mechanical building systems)
- A programme of works for larger projects or key dates and planning for maintenance activities and works by specialist contractors
- That all University staff and operatives working on pipework distribution, pumping, drainage or mechanical building systems are suitably trained and experienced, including in the implementation of emergency procedures
- University staff, principal contractors, contractors (including specialist contractors appointed by FMC) have been assessed as capable, including accreditation with approved contractor schemes (where applicable)
- That there is an appropriate level of supervision of all wet work activities
- That there is an appropriate number of visual inspections for leaks post completion of wet works as determined by the wet work risk assessment
- Work equipment is maintained and in good order e.g. pressure testing rigs
- All work on a water system is carried out in accordance with the requirements and specifications of *EPM PM7 – Code of Practice for Design Teams* and arrangements are in place by University staff, principal contractors, contractors (including specialist contractors appointed by FMC) to inspect workmanship and compliance with the specifications

6.6.9 Using a combination of desktop study, design risk assessments, Health and Safety File information, as-fitted drawings, manuals and pre-work site inspection, the wet work risk assessment should consider the following questions in regards to the area, location and proximity of equipment:

- Risk profile of the building including age of building. Is there potential for water or liquid to escape through floor openings or cracks, staircases and lift shafts to floors below and affect multiple rooms?
- What is the building predominately used for? E.g. GEIC with expensive research equipment or Williamson building for teaching?
- Location of wet working and is there expensive equipment or sensitive research in the adjacent rooms or floors below? (information can be obtained from a number of sources including area owner, FMC Teams, FMC Maintenance, HoU, Faculty Estates Teams and the Compliance and Risk Office)
- Proximity to key infrastructure e.g. electrical switchgear and IT communication rooms? Is this equipment protected from water damage?
- Are all drains (floor and sink) in the area of work functional and clean?
- If the work is being performed on the roof, are the temporary or permanent roof drains/scuppers connected, free of debris and functioning properly? Do temporary roof drains, downspouts or storm drains allow water to run back into the building or structure?
- What is the age and type of water systems and pipework and the risk of inadvertent damage?
- Are there existing measures already in place to mitigate the impact of an escape of water or liquid e.g. bunding or floor drainage in a plantroom?

6.6.10 The wet work risk assessment should also consider the scope of work:

- Is the system currently drained? Is it practical to drain the system? If not, confirm type and volume of water or liquid which could potentially escape from the system and / or pipework?
- Is there potential for the work activity to accidently damage pipework or a mechanical system? For example when removing asbestos containing materials from pipework or when connecting temporary services and hoses
- Does the task include excavations where accidental damage to pipework could result in water infiltration and subsequent flooding of an adjacent building or area?
- Does the task include roof works or forming of new openings in roofs which could accidentally result in significant rainwater ingress, especially during adverse weather events
- Will there be any generation and disposal of waste water from the task e.g. flushing? If yes, where will the waste water be disposed of?

6.6.11 Considering the responses to the questions in paragraphs 6.6.9 and 6.6.10 and the impact assessment in Table 1, if the outcome of the wet working risk assessment is that there is a foreseeable **major** risk of harm to the University should an escape of water or liquid occur, then a Wet Work Permit (WWP) needs to be requested using the online permit system and subsequently authorised by a designated person in FMC.

**TABLE 1 - Impact table if an escape of water or liquid was to occur**

| Key Impact (Harm) | Minor / Moderate (Wet Work Risk Assessment Controls) | Major (Wet Work Permit Required) |
|---|---|---|
| **Financial loss** | • Localised damage to building fabric contained within a non-essential room e.g. toilet | • Extensive damage to the building fabric in multiple rooms<br>• Damage to expensive item(s) of equipment and machinery |
| **Business continuity** | • Minor disruption of non-critical services to a room, area or facility | • Sustained or permanent loss of a service or facility including 'knock-on' negative effects to other areas of University business<br>• Damage to critical areas, equipment and services e.g. electrical switchrooms<br>• Interruption of research projects including loss of data and / or materials |
| **Environment** | • Release contained and clean up by operatives using local spill kits | • Toxic release with significant impact on the environment requiring clean up by specialist contractors and / or the use of specialist equipment |
| **Loss of services** | • Short term loss of non-critical services to a room, area or facility | • Loss of critical services within a room, area or facility |
| **Project objective** | • Reduction in scope or quality of project; project objectives or schedule | • Significant project overrun or inability to meet project objectives |
| **Reputation** | • Student and staff complaints | • Local and national media coverage<br>• Adverse publicity |

6.6.12 If there is any doubt in regards to the requirement of a WWP, then consultation with the appropriate FMC WWP permit authoriser should be undertaken at the earliest opportunity. This includes supplying the FMC permit authoriser with all relevant information on the mechanical system, scope of work, location, pipework drawings, programme etc.

6.6.13 The authorisation of a WWP may also be required in addition to other permit to work and permit to access requests:

- Works to a fire sprinkler system will require both a WWP and a permit to *'Work on fire alarm systems and detection'*
- If the impact assessment shows that there is 1. Foreseeable **and** 2. Major risk of harm to the University (building or contents) if the activity could potentially result in:
    - Accidental damage to pipework distribution or mechanical system e.g. A WWP will be required in addition to an *'asbestos works and asbestos contaminated areas'* permit if asbestos containing materials are being removed from pipework and accidental damage could potentially result in a significant escape of water causing damage to expensive research equipment
    - Significant water ingress into a building during roofing works. A WWP will be required in addition to an '*access onto and work on roofs'* permit
    - Flooding of a basement area of a University building if buried services are accidently damaged during excavation works. A WWP will therefore be required in addition to an '*excavation*' permit

6.6.14 University staff, principal contractors, contractors (including specialist contractors appointed by FMC), professional consultants and all other persons who have requested a WWP are responsible for providing updates on the progress of works directly to the permit authoriser so that client assurance visits can be considered, planned and arranged if necessary.

6.6.15 There are limited exceptions to requesting a WWP and this is covered in Section 6.8 of this procedure – *Permit Requirements in an Emergency.* In accordance with EPM FM5 *Estates Emergency Response Procedure,* and in terms of wet working, the University recognises that the following situations are considered to be a major emergency:

- The uncontrolled leak or escape of water, oil or other liquid causing damage to the building infrastructure
- A significant leak of rainwater into any building

6.6.16 The issue of a WWP may therefore delay or prevent expedient works so emergency wet works can be completed without the requirement for a WWP after consultation (verbal or email communication) with the appropriate FMC permit authoriser and completion of a dynamic risk assessment.

6.6.17 For **all** wet working (processes and activities) including those tasks that could inadvertently damage pipework, drainage or mechanical systems, it is good practice to include the following in the wet work risk assessment control measures:

- Clearly identify the scope of work, location and type of pipework or mechanical system(s) and how the system is to be isolated and / or drained down. Including location of valves and highlight on drawings
- Work equipment and test certification (where applicable)
- Robust arrangements for 'Wet Work Watch' - The work area should continue to be periodically inspected prior to leaving for the day including ceasing works one hour before the shift ends. Follow up inspections may also be prudent in critical areas or around critical systems for several days after the work has been completed. Note: 'Wet Work Watchers' should be trained on the response procedures in place in the event of a leak or accidental water discharge, including a review of all applicable shut-off valve locations
- Arrangements for supervising wet works including works by University staff, principal contractors, contractors (including specialist contractors appointed by FMC) and all other persons
- Induction of University staff, principal contractors, contractors (including specialist contractors appointed by FMC), professional consultants and all other persons
- Management arrangements to reduce the likelihood of human failure which includes slips and lapses (these are unintended actions); mistakes (errors of judgement or decision-making); or a violation (non-compliance, circumventions, shortcuts and work - arounds)**.** Training including procedural training and supervision can reduce human error and non-compliance
- Requirement for suitable spill kits considering the systems being worked on
- Application of warning signage (where required)

6.6.18 With regard to wet works undertaken by University staff, principal contractors, contractors (including specialist contractors appointed by FMC), these should include records of inspections, water watch and any corrective actions taken - this could be as simple as recording in the site manager's daily diary. Also required is demonstrable evidence of the competencies of operatives and their skills, knowledge, training and experience for working on the specified mechanical system(s) and pipework distribution.

6.6.19 With regard to works which requires the isolation of fire hydrant(s) and / or associated pipework, it is a **mandatory** requirement that consultation takes place with the relevant Fire and Rescue Service and that temporary arrangements are agreed and implemented throughout the works.

## 6.7 HV Sub-station and LV Electrical Switch Room Access

6.7.1 If access is required into a HV sub-station for a short-duration visit e.g. to carry out a survey or inspection, then a request needs to be made in the first instance to the FMC Principal Electrical Engineer (Responsible Person) who can organise and facilitate access including supervision of the visit.

6.7.2 As a minimum, all personnel are required to wear arc flash protection, safety boots, safety helmet, gloves and safety glasses when entering a HV sub-station.

6.7.3 For any other activities in a HV sub-station, this will require agreement with the FMC Principal Electrical Engineer who will require attendance of their Safety Standby Person to provide close supervision. Note: The attendance by an Electricity North West Limited (ENWL) representative can be arranged by contacting the FMC Principal Electrical Engineer in the first instance.

6.7.4 If any loss of electrical supply occurs as the result of the actions of the person(s) accessing the HV sub-station or LV switchroom e.g. principal contractor, contractor or professional consultant, that organisation will be responsible for the costs of the business loss to the University. This must be agreed before consent is given to access these controlled areas.

6.7.5 If the nature of the task involves a short duration visit to a LV switch room e.g. to carry out an inspection or survey, this visit can be facilitated by the FMC Electrical Team or an authorised person – please see Section 6.9 of this procedure for further information in regards to authorised persons.

6.7.6 If works within a LV switch room are required, then a representative from FMC Electrical Team will be required to be present for the entire duration of the task to monitor the works being undertaken.

6.7.7 In limited circumstances, the FMC Principal Electrical Engineer may deem that a FMC Electrical Team (Inspector) is not required for the duration of the task but instead will complete a risk assessment and identify suitable precautions (dependent on the nature of the task and the hazards present within that particular switch room) that the contractor will need to implement. This will need to be agreed by the FMC Principal Electrical Engineer who will have complete responsibility.

6.7.8 Access or work in a HV sub-station or LV switch room will be subject to University staff, principal contractors, contractors (including specialist contractors appointed by FMC), professional consultants and all other persons providing suitable and sufficient risk assessments and method statements for their activities (including any precautions stated by the FMC Principal Electrical Engineer).

6.7.9 It is incumbent on University staff, principal contractors, contractors (including specialist contractors appointed by FMC), professional consultants and all other persons to liaise with the FMC Principal Electrical Engineer to ensure that there is adequate planning time to facilitate access or works within these controlled areas and to provide a comprehensive scope of work.

## 6.8 Permit Requirements in an Emergency

6.8.1 In regard to accessing controlled areas and carrying out works in a **major** emergency, further guidance can be found in EPM FM5 *Estates Emergency Response Procedure.*

6.8.2 The University recognises that the following situations are considered to be a major emergency:

- The uncontrolled leak or escape of water, oil or other liquid causing damage to the building infrastructure
- The accidental release of a gas or vapour which poses a risk to the health and or safety of building users
- The collapse of any significant part of a building infrastructure such as ceilings and internal walls (structural damage to property)
- The critical failure of IT infrastructure
- Loss of electrical supply to an essential part of a building (serious disruption to services)
- Serious acts of vandalism that leave buildings or services in a dangerous or potentially dangerous condition
- A fire in any part of a building that requires isolations of services
- A significant leak of rainwater into any building

The following examples would **not** be considered to be an emergency:

- An insignificant leak of water, oil or other liquid which is insufficient to cause damage to the building infrastructure and can be contained by collection
- Loss of power or services that are not considered to be critical to the operation of the University
- Minor vandalism or damage to a building that can be secured and isolated at source

6.8.3 The University Emergency Incident Manager (EIM) has the overarching responsibility for the management of major emergency incident. If the incident includes Estate related matters, The DOEF will nominate an Emergency Estates Coordinator (EEC) to coordinate the resources of the DOEF to ensure that the emergency incident is effectively and safely managed after consultation with the appropriate FMC permit authoriser / Estates Health and Safety Professional.

6.8.4 The University recognises that during an emergency, the issue of a permit to access and / or a permit to work may delay or prevent expedient access. To support University staff and contractors, including specialist contractors, that are required to access controlled areas, in order to isolate and terminate utilities, this work can be undertaken without a permit to access and / or permit to work upon a dynamic risk assessment by the EEC.

6.8.5 The EEC will also be responsible for instructing University staff and / or (specialist) contractors to undertake emergency repair works. Note: Specialist contractors and University staff e.g. FMC maintenance staff, should be assessed as competent and capable to undertake emergency works using the respective forms in appendix E and F of this procedure.

6.8.6 In order to access any locked off area in the University in an emergency situation the University Security Office should be notified in the first instance who will contact the nominated EEC.

6.8.7 In order to inform the dynamic risk assessment, the EEC should consult with University Staff including FMC staff in order to obtain site specific information on hazards within the area.

6.8.8 A minor emergency is not major loss or damage to University property or operations but nevertheless requires urgent reactive works e.g. water ingress from a damaged roof covering or leaking pipework. In the case of minor emergency works:

- Authorised persons including FMC maintenance operatives can undertake minor emergency works if the individual has been assessed as competent to do so by their HoU, FMC team principal or FMC maintenance supervisor. This assessment needs to be documented using the form in Appendix E of this procedure - *Assessing Skills, Knowledge and Experience of Authorised Persons*
- Specialist contractors can also undertake emergency works under the supervision of FMC staff. If the minor emergency is out of hours then University Security will facilitate access to the specialist contractor
- Specialist contractors should be assessed as capable (including emergency procedures) using the form in Appendix F of this procedure– *Assessing Skills, Knowledge and Experience of Specialist Contractors to undertake works in an Emergency*
- Only those individuals named on the specialist contractors assessment form (Appendix F) and who have attended an induction by the FMC maintenance supervisor will be permitted to carry out emergency works at the University of Manchester
- It is the responsibility of the specialist contractor to provide the FMC maintenance supervisor with any changes in personnel so that they can attend a DOEF induction

6.8.9 No emergency works shall take place where it is foreseeable that persons may be exposed to asbestos fibres until the FMC Asbestos Team have been consulted by telephone or email asbestos@manchester.ac.uk

## 6.9 Authorised Persons and Specialist Contractors

6.9.1 Authorised Person (AP) Permit to Access - Those persons with authorised permit to access status will not require a permit when gaining access into an Estates controlled area. This is based on the person working regularly at the University and the person being inducted and aware of the hazards associated with such areas. By their skills, knowledge and experience they are authorised by their HoU, FMC team principal or FMC maintenance supervisor to enter these agreed areas. When access is required keys or a Simons Voss access card will be issued by the designated person in FMC using the formal booking system.

6.9.2 Authorised Person (AP) Key Holder – e.g. FMC maintenance staff or University staff on call. Where granted this means that the named individual can access and work in agreed Estates controlled areas without a permit to access and will retain keys and / or a Simons Voss access card to these agreed areas. This is based on the person working regularly at the University and the person being inducted and aware of the hazards associated with such areas. By their skills, knowledge and experience they are deemed competent by their HoU, FMC team principal or FMC maintenance supervisor to retain access as part of their day-to-day normal duties.

6.9.3 Authorised Person (AP) Permit to Work – Those persons who are deemed to have the required skills, knowledge and experience by their by their HoU, FMC team principal or FMC maintenance supervisor to carry out prescribed activities without a permit to work. An example of this would be FMC electrical maintenance operatives carrying out electrical isolations to a distribution board as part of their day-to-day normal duties.

6.9.4 Unless it is an emergency, authorised persons are required to apply for hot work and wet work permits as per this procedure.

6.9.5 In regard to researchers and tenants who require access into Estates controlled areas (maximum of one month) the permit to access request should be via the appropriate FET Officer and accompanied by suitable task specific risk assessments and method statements. FMC staff will be responsible for providing an induction and supervision where appropriate.

6.9.6 If researchers or tenants require access for longer than one month, then FMC staff will be responsible for providing an induction and supervision as appropriate. The researcher or tenant shall be issued with a key or access card and added to the *Authorised Persons and Specialist Contractors Register* for a defined period of time.

6.9.7 With regard to specialist contractors:

- The Head of FMC will designate person(s) to consult with the Estates Safety Office in carrying out a capability assessment in accordance with EPM HS14 - *CDM 2015 Procedure* (unless the contractor is already assessed as competent as part of a Framework at the University of Manchester)
- FMC maintenance supervisors are required to review the specialist contractor's risk assessments and methods statements and apply for a permit to work and / or permit to access on their behalf
- FMC maintenance staff will ensure adequate supervision of the specialist contractor's activities

6.9.8 Specialist contractors are only allowed to carry out works to their own items of equipment and are not permitted to interfere with University building services unless this is specifically stated in the risk assessment, method statement and permit to work. All works are to be completed in accordance with the specialist contractor's risk assessments, method statements and Safe Operating Procedures.

6.9.9 The current list of *Authorised Persons and Specialist Contractors Register* is a 'live' document that remains in the ownership of FMC. Requests to be added or removed are to be made by the HoU, FMC team principal or FMC maintenance supervisor who have satisfied themselves regarding individuals or contractors competency and have in place a suitable and sufficient risk assessments and method statements covering the work activities.

6.9.10 The assessment of authorised persons and specialist contractors should be reviewed by designated person(s) in FMC and the Estates Safety Office on a regular basis via site inspections, audits, toolbox talks and monthly review meetings – all of which should be formally recorded and documented to evidence ongoing compliance.

6.9.11 The list of key and Simons Voss access cardholders (including agreed areas of access) is retained by FMC. HoU, FMC team principals and FMC maintenance supervisors are responsible for informing the designated person(s) in FMC when any changes to staff or access occur so that the register can be updated accordingly.

6.9.12 CPD training in regard to the permit to work and access into Estates controlled areas will be at the discretion of the Head of FMC.

### 6.10 Guidance for applying permits where a Principal Contractor has exclusive possession of an area

6.10.1 The University recognises that during construction work the University may hand over parts of Estate to the control of a principal contractor during major construction work. Due to the complicated nature of the University's buildings it is imperative that there is clarity regarding who has responsibility for which area, and any isolations and access into these areas.

6.10.2 Where an area of the University's Estate is handed over to a principal contractor and the principal contractor secures and takes responsibility for the area, the principal contractor will be responsible for the application of their permit to work procedure and clearly demarcate their 'CDM Area'.

6.10.3 Where principal contractor's work requires isolation of services outside of their CDM Area, or isolation within their CDM Area impacts on building users or building services, the University will be responsible for the authorising of permits to work and / or permits to access. Principal contractors should request permits in this instance from the permit requestor (usually the client representative or project manager).

6.10.4 Principal contractors and permit requestors should consider the notice periods for undertaking work that requires the issue of a permit to ensure that the procedures for permit to work are followed at all times.

6.10.5 It is the responsibility of the permit requestor to ensure that permits are applied to appropriate areas and to ensure that building services are reinstated and energised following the completion of the work.

### 6.11 Skills, Knowledge and Experience of Dutyholders

| Dutyholders | Requirements |
|---|---|
| **University Staff including Director of Estates and Facilities, FMC, HoU and Authorised Persons** | ➢ Continued Professional Development (CPD) as required by their professional membership.<br>➢ Health and Safety training as defined in the Estates Health and Safety Training Catalogue.<br>➢ DOEF CPD training in the effective implementation of this procedure and monitoring requirements.<br>➢ DOEF CPD training in assessing the skills, knowledge and experience of authorised persons and specialist contractors. |
| **Principal Contractor, Contractor and Professional Consultant** | ➢ Contractor or consultant who has demonstrated the necessary skills, knowledge and experience for the nature of the work inaccordance with Regualtion 8 of CDM 2015. (This includes both framework and non-framework contractors).<br>➢ Training and awareness in specialist activities e.g. confined space entry, roof work, rope access, excavations, hot working etc.<br>➢ DOEF training in the effective implementation of this procedure and monitoring requirements. |
| **Permit Requestor** | ➢ DOEF training in the effective implementation of this procedure and monitoring requirements.<br>➢ Knowledge and access to competent Health and Safety advice. |
| **Permit Authoriser** | ➢ DOEF training in the effective implementation of this procedure and monitoring requirements.<br>➢ Training in specialist activities e.g. confined space entry, roof work, rope access, excavations etc. in consultation with the Estates Safety Office.<br>➢ Continued Professional Development (CPD) and Health and Safety training as defined in the Estates Health and Safety Training Catalogue. |

## Appendices

### Appendix A – CITB GA10 - Risk assessment and method statement evaluation form

LEGAL AND MANAGEMENT

citb

#### GA10 Risk assessment and method statement review

| | | | |
|---|---|---|---|
| **Company name** | | **Project title** | |
| **Location** | | **Contract no.** | |
| **Risk assessment and method statement activity** | | | |
| **Preparing company** | | **Prepared by** | |
| **Document reference no. (if any)** | | **Revision** | |

*Record of principal contractor's review. (Results of review to be formally communicated to preparing company.)*

| Check | Guidance on aspects that should be covered | Adequate? *(See comments)* | |
|---|---|---|---|
| | | **Yes** | **No** |
| **1. Scope of work** | Brief description of work with scope defined by area, floor or structure (where specified conditions dictate). Should also define any limitations of use and **must be site specific**. | | |
| **2. Organisation** | Key staff involved in managing and supervising the work and the anticipated type of labour required, including any required induction, training and proof of competence. | | |
| **3. Materials** | Materials required, including storage location, any identifying marks and any special safety measures to be taken during storage, handling, use and protection. COSHH details as required. | | |
| **4. Plant/equipment** | Major plant and equipment required, including any lifting equipment and any plant or equipment calibration/certification/thorough examinations: 12-monthly or 6-monthly if lifting people and for lifting accessories/weekly inspections. | | |
| **5. Preparation** | Details of any permit approvals, notices or completion of other work needed prior to starting work (such as permit to dig, work or load), electrical isolations, mechanical isolations, commissioning, access proposals, restrictions and requirements. | | |
| **6. Safety and health** | Safety and health of all who may be affected (employees/third parties), including anticipated hazards and required precautions (included or by reference to risk assessment). PPE, access, egress, control of work at height, first aiders, barriers, training, planning, inspections, communication, etc. | | |
| **7. Environment** | Anticipated hazards or special conditions requiring precautions (such as traffic conditions, waste management/disposal, dust or noise, ground conditions, watercourses, environmentally sensitive areas and wildlife (animals and vegetation) protected) and appropriate mitigation measures. | | |
| **8. Emergency procedures** | Procedures and arrangements for dealing with health, safety or environmental incidents and accidents (overarching is company/site management incident investigation process). | | |
| **9. Method and sequence** | Definition of how the work is to be carried out, including the proposed sequence and any temporary works. (Required for complex operations only.) | | |
| **10. Protection** | Protection of partly and fully completed work against damage, deterioration, third parties and/or the public. | | |
| **11. Inspections/ checks/tests** | Required prior to, during and on completion of work. Any hold points where approval to continue is required and who can release them. | | |
| **12. Records** | To be obtained or produced during and on completion of the work. | | |
| **This document is/is not* considered suitable and sufficient to allow the work outlined above to commence/continue*.** | | | |
| **All site supervisors and operatives undertaking the activity must be aware of and understand the risk assessment and method statement. It is important that the risks and controls are explained and understanding tested.** | | | |

** Delete as applicable*

## GA10 Risk assessment and method statement review *continued*

| Comments | |
|---|---|
| 1. Scope of work | |
| 2. Organisation | |
| 3. Materials | |
| 4. Plant/ equipment | |
| 5. Preparation | |
| 6. Safety and health | |
| 7. Environment | |
| 8. Emergency procedures | |
| 9. Method and sequence | |
| 10. Protection | |
| 11. Inspections/ checks/ tests | |
| 12. Records | |

| Name | | Position | | Signature | | Date | |
|---|---|---|---|---|---|---|---|

## Appendix B – CITB GA03 - Risk assessment template

LEGAL AND MANAGEMENT

### GA03 Risk assessment (quantitative)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Company name** | | | | | | | | | | | |
| **Project title** | | | | | **Location** | | | | | | |
| **Risk assessment no.** | | | **Review date** | | | | **Revision no.** | | | | |
| **Person supervising work** | | | | | **Employer** | | | | | | |
| **Persons exposed** *(tick box)* | **Employees** | | **Other workers** | | **Public/visitors** | | **Young persons** | | **Estimated total number of persons at risk** | | |
| | **New/expectant mothers** | | | | **Vulnerable persons** | | **Others** | | | | |

**Likelihood**

Rating 1 = Very unlikely
Rating 2 = Unlikely
Rating 3 = Likely
Rating 4 = Very likely
Rating 5 = Almost certain

**Severity**

Rating 1 = No injury
Rating 2 = Minor injury or illness
Rating 3 = 7-day injury or illness
Rating 4 = Specified injury or illness
Rating 5 = Fatality, disabling injury, and so on

| Severity | | | | | |
|---|---|---|---|---|---|
| 5 | 5 | 10 | 15 | 20 | 25 |
| 4 | 4 | 8 | 12 | 16 | 20 |
| 3 | 3 | 6 | 9 | 12 | 15 |
| 2 | 2 | 4 | 6 | 8 | 10 |
| 1 | 1 | 2 | 3 | 4 | 5 |
| | 1 | 2 | 3 | 4 | 5 |
| | | | Likelihood | | |

**Risk = Likelihood x Severity** Low Medium High

| **Hazard(s)** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Factors of harm** | | **Risk** *(Likelihood x Severity)* | **Additional control measures** | **Factors of harm** | | **Residual risk** *(Likelihood x Severity)* | **Control measures implemented by** *(name)* | **Low risk** | |
| | **Likelihood** *(1–5)* | **Severity** *(1–5)* | | | **Likelihood** *(1–5)* | **Severity** *(1–5)* | | | **Yes** | **No** |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

## GA03 Risk assessment (quantitative) *continued*

| Hazard(s) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Factors of harm | | Risk *(Likelihood x Severity)* | Additional control measures | Factors of harm | | Residual risk *(Likelihood x Severity)* | Control measures implemented by *(name)* | Low risk | |
| | Likelihood *(1–5)* | Severity *(1–5)* | | | Likelihood *(1–5)* | Severity *(1–5)* | | | Yes | No |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

| | Name | Position | Signature | Date |
|---|---|---|---|---|
| Persons conducting assessment | | | | |
| | | | | |

The outcomes of this risk assessment must be communicated to operatives before work commences.
A separate briefing sheet (GA11) should be used and be made available to the operatives for reference.

## Appendix C - CITB GA08 - Method statement template

LEGAL AND MANAGEMENT

### GA08 Method statement

| | | | |
|---|---|---|---|
| **Company name** | | **Project title** | |
| **Location** | | **Contract no.** | |
| **Method statement title** | | **Reference** | |
| **Description of work** | | | |

| | |
|---|---|
| **This method statement has been developed and must be read in conjunction with the following risk assessments** | |
| **Risk assessment reference number** | **Title** |
| | |
| | |
| | |
| **Work commences on** | |
| **Areas to be worked in** | |
| **Duration of work** *(actual or estimated)* | |
| **Number of workers** *(actual or estimated)* | |

| | | |
|---|---|---|
| **Personnel** *(include details of all personnel involved in the task and any specific training, skills or qualifications required)* | | |
| **Name** | **Position** | **Competence details** |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| | | | |
|---|---|---|---|
| **Emergency arrangement details** | | | |
| Fire/evacuation | First aid | Pollution/spill | Other |
| | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Personal protective equipment (PPE) requirements** | | | | | | | | |
| Head (EN 397) | Foot (BS EN 345-1) | Hi-vis vest | Hand (BS EN 388) | Eye (EN 166) | Hearing (EN 352-1) | Fall arrest | Other | Other |
| | | | | | | | | |

| | | | | |
|---|---|---|---|---|
| **Construction dust** ***(Note:*** *construction dust is harmful and can lead to fatal lung diseases such as silicosis)* | | | | |
| **Will the work create dust or fumes?** | | Yes | | No |
| **Identify specific control measures to avoid or minimise dust or fumes** | | | | |
| **Identify respiratory protective equipment (RPE) that will be required if dust or fumes cannot be avoided** | | | | |

## GA08 Method statement *continued*

| Hazardous materials | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Are hazardous materials to be used?** | Yes | | No | | **Are COSHH/DSEAR safety data sheets available?** | Yes | | No | |
| **Attach or identify specific controls required from COSHH/DSEAR risk assessment** | | | | | | | | | |
| **Permit required** *(tick below)* | | | | | | | | | |
| **Permit to work** *(general)* | | **Permit to enter** *(confined spaces)* | | | **Permit to dig** | | | | |
| **Hot-work permit** | | **Out-of-hours work permit** | | | **Other** | | | | |
| **Details of person issuing permit(s)** | | | | | | | | | |
| **Description of safe method of work** | | | | | | | | | |
| *(Where appropriate, include information such as sketches, photographs, details of significant risk control, sequence of works, etc.)* | | | | | | | | | |
| **Tools, plant and equipment to be used** | | | | | | | | | |
| **Type** | | | | | **Details of inspections/test certificates** | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

## GA08 Method statement *continued*

| **Briefing register** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **A copy of this briefing register must be attached to the method statement, together with other relevant information** *(such as the associated risk assessments, permits or COSHH assessments)*. | | | | | | | |
| **Supervisor in charge of the work** | | | | | | | |
| I confirm that I have read and understand the requirements of this method statement and associated risk assessments *(as highlighted on first page)* and have communicated them to operatives under my control and to others who may be affected by its requirements.<br><br>***Note:*** *it is important that you test the operatives' understanding and confirm that they have read and understood the method statement and risk assessments.* | | | | | | | |
| **Name** | | **Position** | | **Signature** | | **Date** | |
| **Operatives/workforce carrying out the work** | | | | | | | |
| I understand and will agree to adhere to the contents of this method statement and the associated risk assessments *(as highlighted by the supervisor)*. I have attended a site induction/briefing that explained the general site rules and necessary site specific arrangements.<br><br>***Note:*** *if you have any doubt about information given or contained in this method statement, ask for clarification.* | | | | | | | |
| **Name** | | **Position** | | **Signature** | | **Date** | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

## Appendix D – CITB GC07 – Hot-work permit

GENERAL SAFETY

### GC07 Hot-work permit

Hot-work permits are required for any operation involving open flames or producing heat and/or sparks and must be prepared by a competent person. Hot works include brazing, torch cutting, grinding, soldering and welding.

| | | | |
|---|---|---|---|
| **Company name** | | **Project title** | |
| **Location** | | **Contract no.** | |
| **Supervisor** | | **Permit no.** | |
| **Contractor** | | | |
| **Equipment used** | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Date of works** | | **between** | | **hrs** | **and** | | **hrs** |

| **Precautions to be taken** | **Yes** | **No** | **N/A** |
|---|---|---|---|
| Hot work must **cease at least one hour** before end of shift. Areas where hot works have been carried out should be checked before leaving site. | | | |
| Services affected must be **isolated** before work commences. | | | |
| **Isolate** smoke detectors in the vicinity of hot works. | | | |
| A suitable fire extinguisher must be available and be kept close at hand, at all times. | | | |
| Supervisors must ensure suitable personal protective equipment (PPE) is provided and **worn** by operatives. | | | |
| All cylinders must be transported and secured **upright**. | | | |
| Valves and hoses **must** be in good condition. | | | |
| All cylinders must have **flashback** arrestors fitted. | | | |
| When not in use, cylinders must be **shut off** and returned to store. | | | |
| LPG cylinders must **not** be **left in the building** overnight without formal approval. | | | |
| **Arc welding** equipment will comply with current standards. | | | |
| Spent welding rods **must be** immersed in a bucket of water. | | | |
| **Minimum radius** of hot work to be **2 m** from other persons working. Screens should be erected if needed. | | | |
| Where hot works are required adjacent to combustible material, a fireproof protective mat should be placed between the material and the heat source during the hot works. (Check both sides of partition walls to ensure that heat has not been transferred by conduction to combustible materials.) | | | |
| Work areas to be kept **tidy** and free from combustible materials. | | | |
| When operatives are working in **riser shafts** or on staging with cylinders, work will be secured and openings to other levels covered with a fire blanket or other non-combustible materials. | | | |
| Operatives must remain in the area for 15 minutes **after completing** work to ensure there is no hot spot residue. | | | |
| **Operatives carrying out hot work must:** | **Yes** | **No** | **N/A** |
| understand the permit conditions and the fire and safety precautions | | | |
| be in possession of a permit at all times | | | |
| stop work if required to do so by an authorised person | | | |
| immediately report any hazard likely to affect the fire and safety precautions | | | |
| ensure satisfactory access to and egress from the work area. | | | |

## GC07 Hot-work permit *continued*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Confirmation by contractor's supervisor:** I confirm that the precautions specified above will be complied with and I will ensure that the persons carrying out the work described above are fully briefed on the safe method of work. | | | | | | | |
| **Name** | | **Position** | | **Signature** | | **Date** | |
| **Confirmation by operator:** I understand the precautions to be taken in carrying out the hot works. | | | | | | | |
| **Name** | | **Position** | | **Signature** | | **Date** | |
| **Site management authorisation:** I certify that the above work can commence with the precautions listed above. | | | | | | | |
| **Name** | | **Position** | | **Signature** | | **Date** | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Cancellation of permit by operator:** *(**Note:** hot works must cease at least one hour before end of shift.)* I confirm that the work has been completed and the area has been checked and is safe. | | | | | | | |
| **Name** | | **Position** | | **Signature** | | **Date** | |
| **Cancellation of permit by site management** | | | | | | | |
| **Name** | | **Position** | | **Signature** | | **Date** | |
| **Inspection of area covered by hot-work permit by fire warden/site management after cancellation of permit** | | | | **Inspection completed after** | | | **hr(s)** |
| **Name** | | **Position** | | **Signature** | | **Date** | |

## Appendix E - Assessing Skills, Knowledge and Experience of Authorised Persons

| | | | |
|---|---|---|---|
| **Name of Person:** | | **Job Title:** | |
| **DOEF Unit:** | | **Work Area(s):** | |
| **Assessment By:** | | **Assessors Job Title:** | |

| **1. Authorised Person (AP) Permit to Work** | | | **2. Authorised Person (AP) Permit to Access** | | |
|---|---|---|---|---|---|
| **Activity** | **Required** | | **Estates Controlled Area** | **Required** | |
| Electrical isolations (low voltage) | Yes ☐ | No ☐ | Access into plant and boiler rooms | Yes ☐ | No ☐ |
| Work on fire alarm system and detection | Yes ☐ | No ☐ | Access into a confined spaces | Yes ☐ | No ☐ |
| Work on high pressure systems (steam and compressed air) | Yes ☐ | No ☐ | Access into vacant premises and unallocated space | Yes ☐ | No ☐ |
| Hot Work **(Emergency Only)** | Yes ☐ | No ☐ | Access into service risers | Yes ☐ | No ☐ |
| Wet Work **(Emergency Only)** | Yes ☐ | No ☐ | Access into LV electrical switch rooms | Yes ☐ | No ☐ |
| | | | Access onto and work on roofs | Yes ☐ | No ☐ |
| | | | Access into lift motor rooms | Yes ☐ | No ☐ |

| **3. Individuals Skills, Knowledge and Experience** | |
|---|---|
| **Information** | **Evidence** |
| Qualifications | |
| Skills Cards | |
| Training & Technical Knowledge | |
| Professional memberships | |
| H&S Qualifications | |
| Experience | |

| **4. Assessors Comments and (any) Further Agreed Actions** |
|---|
| |

**5. Assessors Sign off**

| **Permit Type** | **Sign Off** | | **Assessors Signature** | **Date** |
|---|---|---|---|---|
| Authorised Person - Permit to Work (for the activities above in 1.) | Yes ☐ | No ☐ | | |
| Authorised Person - Permit to Access (for the Estates controlled areas above in 2.) | Yes ☐ | No ☐ | | |
| Key holder for Estates controlled areas | Yes ☐ | No ☐ | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Key or access card issued | Yes ☐ | No ☐ | N/A ☐ | Key register updated | Yes ☐ | No ☐ | N/A ☐ |
| List of keys and areas for Simons Voss card access | | | | | | | |

## Appendix F – Assessing Skills, Knowledge and Experience of Specialist Contractors to undertake works in an Emergency

| | | | |
|---|---|---|---|
| **Name of Contractor:** | | **Job Description:** | |
| **Name of Key Contact:** | | **Contact Details:** | |
| **Assessment By:** | | **Assessors Job Title:** | |

| **1. Specialist Contractor (SC) Permit to Work** | | | **2. Specialist Contractor (SC) Permit to Access** | | |
|---|---|---|---|---|---|
| **Activity** | **Required** | | **Activity** | **Required** | |
| Electrical isolations (low voltage) | Yes ☐ | No ☐ | Access into plant and boiler rooms | Yes ☐ | No ☐ |
| Work on fire alarm system and detection | Yes ☐ | No ☐ | Access into a confined spaces | Yes ☐ | No ☐ |
| Work on high pressure systems | Yes ☐ | No ☐ | Access into vacant premises and unallocated space | Yes ☐ | No ☐ |
| Work on natural gas | Yes ☐ | No ☐ | Access into service risers | Yes ☐ | No ☐ |
| Hot Work | Yes ☐ | No ☐ | Access into LV electrical switch rooms | Yes ☐ | No ☐ |
| Wet Work | Yes ☐ | No ☐ | Access onto and work on roofs | Yes ☐ | No ☐ |
| Excavations | Yes ☐ | No ☐ | Access into lift motor rooms | Yes ☐ | No ☐ |
| Cold work | Yes ☐ | No ☐ | | | |
| Work areas on the Estate (Specify Buildings) | | | | | |

| **3. Specialist Contractors Skills, Knowledge, Experience and Organisational Capability** | | | | |
|---|---|---|---|---|
| **Capability assessment** | **Signed Off** | | **Assessment By** | **Date** |
| CDM 2015 - EPM HS14 | Yes ☐ | No ☐ | | |
| Framework Contractor | Yes ☐ | No ☐ | | |

| **4. Named persons who will be attending the University of Manchester Campus** | | |
|---|---|---|
| **Ref** | **Names of Employee** | **Skills, Knowledge and Experience of Individual** |
| **a)** | | |
| **b)** | | |
| **c)** | | |
| **d)** | | |

| **5. Assessors Sign off** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Permit Type** | | | **Signed Off** | | **Assessors Signature** | **Date** | |
| The above named Contractor is authorised to access and carry out works identified in 1 & 2. | | | Yes ☐ | No ☐ | | | |
| The persons named in 3. have received an induction at the University of Manchester | | | Yes ☐ | No ☐ | | | |
| Keys or Simons Voss access card issued | Yes ☐ | No ☐ | N/A ☐ | Key register updated | Yes ☐ | No ☐ | N/A ☐ |
| List of keys and locations enabled for Simons Voss access card | | | | | | | |

| Document Control Box | |
|---|---|
| Procedure / Procedure title: | EPM HS12 – Permit to Access & Permit to Work |
| Lead contact email | Brent.Wills@manchester.ac.uk |
| Date updated: | May 2021 |
| Approving body: | DOEF Policies and Procedures Working Group |
| Version: | V0.3 |
| Supersedes: | V0.2 |
| Previous review dates: | October 2018 |
| Next review date: | May 2023 |
| Equality impact outcome: | |
| Related Statutes, Ordinances, General Regulations: | • Health and Safety at Work etc. Act 1974<br>• The Management of Health and Safety at Work Regulations 1999<br>• The Construction (Design and Management) Regulations 2015 |
| Related policies/procedures/guidance etc. | • The University of Manchester Health and Safety Policy<br>• EPM HS1 Estates and Facilities Health and Safety Local Arrangements<br>• EPM HS14 CDM 2015 Procedure<br>• EPM FM5 Estates Emergency Response Procedure<br>• EPM HS16 Electrical Shutdown Procedure<br>• EPM HS20 Mercury Awareness and Guidance<br>• EPM HS25 Asbestos Management Plan<br>• EPM HS37 Fire Alarm Management Policy<br>• EPM PM6 Code of Practice for Contractors on Campus<br>• EPM HS17 Gas Safety Management Arrangements |
| Procedure owner: | Brent Wills – DOEF Head of Facilities Management & Compliance (FMC) |
| Lead contact: | Brent Wills – DOEF Head of Facilities Management & Compliance (FMC) |