



Fire System Isolation & Impairment Procedure

1 Purpose

Fire system isolations and impairments affect the ability to detect and respond to fires, it is essential that appropriate fire protection measures are in place to mitigate risk associated with isolations and impairments. These procedures cover UTS requirements, notification of impairments, processes and permits to be used by UTS trade service contractors and principal contractors.

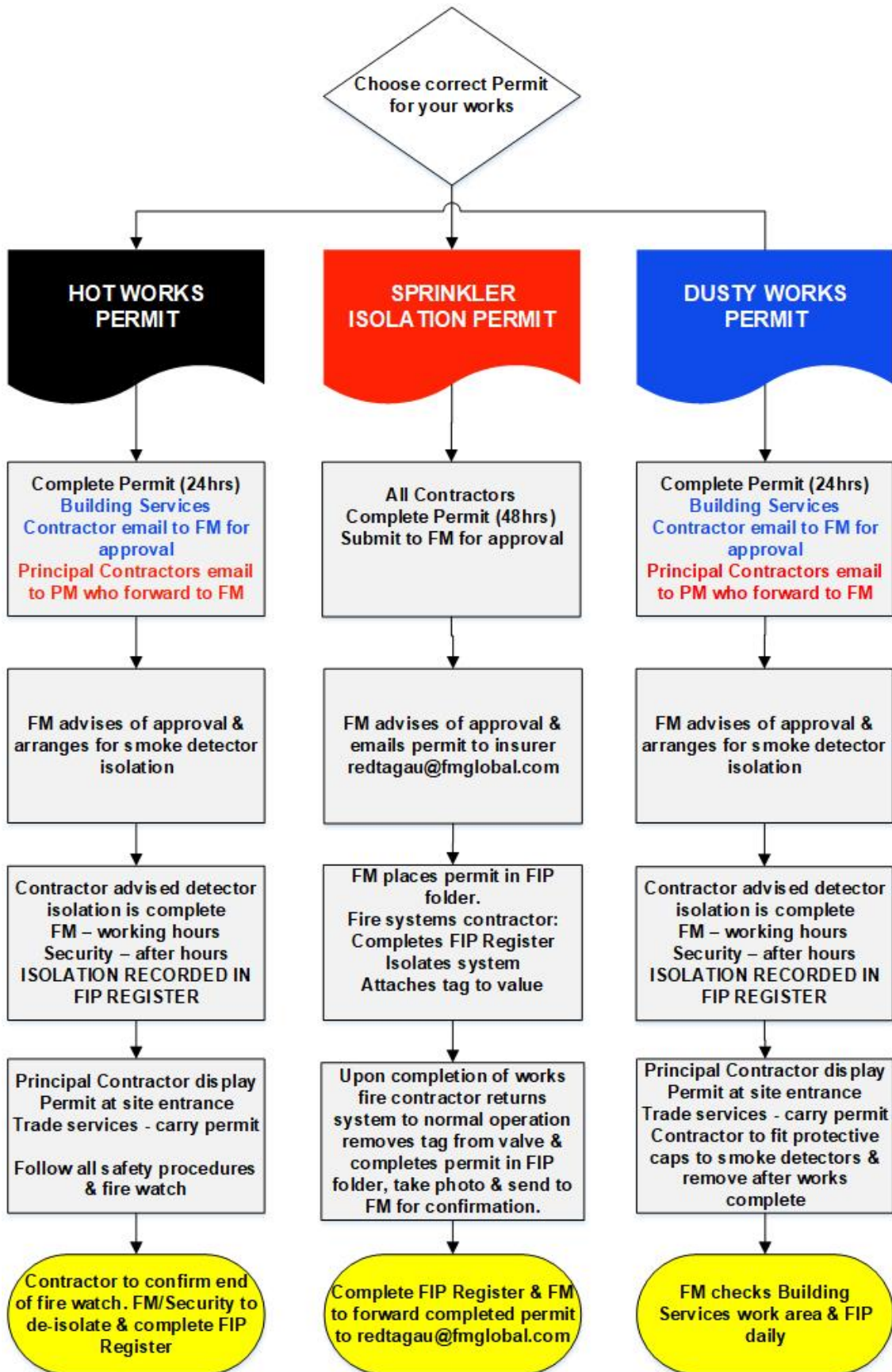
2 Definitions

<i>Hot Work</i>	Grinding, welding, thermal or oxygen cutting or heating, and other related heat or spark producing or operations.
<i>Dusty Work</i>	Demolition, construction, maintenance or cleaning operation which produce significant dust, steam or airborne particles, which could affect the fire systems.
<i>Impairment</i>	Operating condition of the fire protection system is totally or partially disabled
<i>Isolation</i>	The disengagement or disconnection of a system such that it cannot operate effectively
<i>Permit Duration</i>	Permits will NOT be approved if over 6 working days. Project Managers to check duration before recommending and forwarding to Facilities Manager.
<i>Fire Watch</i>	Continuous and systematic surveillance of a defined area for the purpose and detection of unwanted fires for at least 60 minutes.
<i>FIP</i>	Fire Indicator Panel
<i>Permit Approver Facilities Manager (FM)</i>	The FM is responsible for the building and has the authority to sign off permits.
<i>Permit Requestor</i>	A person who requests approval for work to be undertaken under the relevant permit.
<i>Security Offices</i>	City Campus – Building 1 Security Office / Haymarket – Building 5 Security Office.

3 Application

This procedure is applicable to all work undertaken on all UTS campuses by FMO/PMO, ITD/AVS, contractors, sub-contractors and their employees. It is intended to supplement any standard processes contractors would use when undertaking hot, dusty work at UTS and includes specific procedures with regards to sprinkler isolations.

4 Fire impairment process



5 Planned Impairments

All attempts must be made to avoid the isolation and impairment of the fire protection systems. They may only be isolated if an alternative means of conducting the required works is not achievable. Where this is unavoidable, if possible only one fire protection system should be impaired at any given time to ensure the property has some form of fire protection system in place. Please AVOID simultaneous impairments (e.g. sprinkler valves & smoke detectors for one building). Contractors will have to provide ongoing fire watch patrols of the unprotected areas. Impairments should always be planned for the shortest duration possible.

Before a planned impairment look at the following precautions:

- Plan work for times when facility is not operating, if this is not possible shut down any hazardous processes in the impaired areas;
- Limit scope and duration of the impairment, do not allow hot works;
- Provide temporary protect to the impaired area e.g. fire hoses connected to the sprinkler system/hydrant, extra extinguishers, charged hoses etc;

All Fire Protection Impairments must be authorised, recorded and strictly controlled by Facilities Management. Contractors must complete Sprinkler Isolation Permit WHS028 and submit to FM for approval.

The university's insurer must be notified of any isolations or impairments: Facilities Manager to submit permit to redtagau@fmglobal.com

6 Unplanned Impairments

When a Fire System is impaired as a result of an unplanned occurrence, the Permit Approver (FM) is to be contacted immediately. They will identify remedial works required and associated timeframes as well as keeping FM Global and any external authorities advised.

7 Fire Indicator Panel (FIP) Isolations

The isolation and de-isolation of the FIP's can be undertaken by Facility Managers (FM), Security personnel under the direction of the FM's and fire service technicians. All persons performing isolations MUST complete the FIP Register.

8 Hot Works

A Hot Work Permit WHS026 is required for any temporary operation involving open flames or producing heat and/or sparks as defined in the definitions section. This procedure provides contractors with the precautions to be taken prior to, during and after hot and/or dusty work activities. Ensuring that the work undertaken is done so, without risk to the health and safety of UTS staff, students and visitors and damage of UTS property. The procedure is intended to provide information for UTS Project Managers, Security Services, Building Services Branch and contractors.

Supervision - The contractor shall appoint a 'Responsible Person' who will directly supervise the safe execution of the hot work. This person shall have satisfactory knowledge of the hazards associated with hot works and be adequately trained and experienced in the role of the 'Responsible Person'.

Inspection of Site - Before hot work commences, the site shall be thoroughly inspected by the contractor and made safe, or alternative methods of carrying out the work shall be adopted. On completion of hot work, a thorough inspection of the site shall be carried out by the contractor to ensure that the site is safe.

Prior to Performing Hot Work - Before commencing hot work, the following precautions shall be taken to prevent fire, explosion, injury or other danger developing during the performance of hot work:

- Identify and control any fire hazard (including the presence of flammable or combustible liquids, gases, vapours, dusts, fibres or substances) within **10 metres** from the hot work;
- Consider relevant hazards that may exist outside the 10 metre area;
- Properly ventilate the hot work area;
- Firefighting equipment appropriate for the particular hazard must be supplied by the person undertaking the hot work, and shall be located within 10m of the work area;

- Arrange for temporary isolation of Smoke Detection Zone, if necessary with the UTS Permit Authoriser;
- Appropriately segregate the area with safety barricades where the hot work is to be performed, to prevent unauthorised access to the site and protect others from the hot work activities;
- Do not commence the hot work, until complying with all of the above requirements

Firewatchers

- During the progress of hot work, the assigned firewatcher shall ensure that no condition arises, or action is taken, that will lead to a hazardous situation in the hot work area. Constant vigilance, checking of adjacent equipment and observance of safe work practices is essential.

Conduct of Work

- While carrying out hot work the following requirements shall apply:
- A current Hot Work Permit shall cover the work and shall be **prominently displayed on site**. *Note: A Hot Work Permit is only valid for the date or job it has been issued for and of a period no longer than 6 working days.*
- A new Hot Work permit is required in the event that the works extend beyond the initial permit.
- Each person associated with the hot work shall be conversant with the precautions to be taken as specified on the hot work permit and with the safety requirements of the site.
- Welders shall not work alone.
- After hot work has been completed, inspections shall be undertaken to ensure no smouldering materials remain.
- The contractor is to inform the Facilities Manager and Project Manager once the above has been complete.
- Any fire department call out due to failure of these procedures by the contractor could incur the cost of the fire department attending site.

9 Dusty Works

Smoke detectors activate from dust, heat, fumes etc so it may be necessary for specific zones to be isolated prior to commencing works.

Permit requestor (contractor) to complete Dusty Works Permit, once approved contractor to fit suitable protective caps to smoke detectors and remove once works have been completed. This is required on daily basis if the permit is longer than one day unless otherwise agreed with the Facilities Manager.

If hot works and dusty works are being completed at the same time for the same duration only the Hot Works permit is required to be completed with additional information on dusty works and the placement of protective caps on detectors.

10 Authority to Isolate

- Facilities Managers shall isolate detectors when available and on site during working hours.
- Security Services shall isolate detectors when Facilities Managers are not available and only when the Facilities Manager instructs them to do so after hours.
- **Fire** service technician may isolate detectors as required when on site.