**STANDARD OPERATING PROCEDURES**

**FOR**

**OPERATIONS AND MAINTENANCE**

2017-18



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**What Is a Standard Operating Procedure?**

A set of fixed instructions or steps for carrying out routine operations and to provide detailed guidance for initiating and completing any Operations and maintenance works.

**The Objective / Purpose**

The objective and purpose of this document is to provide and maintain the protocol for the all employees. This document will ensure that all departments follow these instructions. Examples of the benefits and outcomes of this document are listed below and aren’t exclusive:

* Effective utilization of Operations and maintenance department.
* Desirable working relationships among all members of the organization.
* Maximum individual development.

***Hard Facilities Management (FM)*** – means the maintenance and replacement of the infrastructure of the building and its associated plant/equipment and buildings systems and can extend to the estate where the building is situated (including grounds and gardens).

***Soft Facilities Management (FM)*** – means the services that are provided to the students occupying the building. There are five questions related to aspects of those services:

* ***Cleaning*** – who undertakes the cleaning, either of the residences or the communal areas?
* ***Security*** – who undertakes the security, particularly out of hour's security? Often this work is shared between a provider and an educational establishment, in which case points would be awarded to both.
* ***Repairs*** – who undertakes any day to day repairs within the building?
* ***Health and Safety Routines*** – who is responsible for health and safety routines: testing fire alarms, servicing safety equipment, undertaking a risk analysis of the building?
* ***Out of Hours Services*** – who would deal with out of hours emergencies in respect of the building, for example, a power outage, a plumbing leak? This does not cover out of hours services to students offered under tenancy relations or residential cover.

**Fire safety**

**Detection and alarm**

Fire safety systems must be maintained in working order and regularly tested in accordance with regulations relating to each particular piece of equipment and each building type. The design and detail of systems in existing buildings will be determined in accordance with a fire safety risk assessment and in consultation with the fire authority or local authority as appropriate.

Specifically:

• Fire alarm systems must be tested weekly at pre-arranged times (but see paragraph xxi) of this Code).

• A record of fire alarm testing and inspection must be maintained.

• At the beginning of their period of occupation students must be provided with information on fire safety and good practice. Advice on action to be taken in case of fire including fire containment procedures must be prominently displayed.

• Any fire extinguishing equipment provided must be properly maintained.

**Electricity**

Except in the case of emergencies or essential maintenance, electricity and lighting must be maintained without interruption. Electrical installations must be properly maintained and tested in accordance with statutory electrical safety requirements.

Where students need to operate controls for hot water systems, and / or fixed electrical room heaters or appliances, simple and precise instructions for their safe and efficient use must be available.

**Electrical Installations**

All new electrical installations including fixed equipment must be installed and all existing installations maintained in accordance with the most recent version of the Institute of Electrical Engineers (IEE) Regulations.

All building electrical installations must be inspected and tested in accordance with statutory requirements, and the results recorded in an appropriate register.

There must be a procedure for dealing with any potentially dangerous personal electrical equipment. This might include labelling as unsafe, an instruction to remove, or in extreme cases (subject to the terms of the licence or tenancy), for example if there is a risk of fire or electrocution, removal to safe keeping or disabling. The students must be made aware of the procedure and the action implemented.

**Water Supplies**

All premises must be provided with hot and cold water to appropriately marked taps.

**Waste water**

All waste water must be removed via an appropriate trapped connection to the sewerage system.

**Water Hygiene**

Hot and cold water services must be installed, monitored and maintained in accordance and statutory public health requirements.

**SECURITY**

**Building and room security**

Accommodation must be securable. All registered buildings must be subject to local security risk assessments, with particular attention being paid to access control, surveillance of site perimeter and securing ground and basement windows.

All main entrances and individual bedroom doors must be lockable, the main entrance door being accessible by all Wardens of the building and bedroom doors accessible only by the student occupant.

All basement, ground and first floor windows must be securable by the student in order to deter theft and intrusion in student bedrooms.

**Staff**

All members of staff (including contractors) must be readily identifiable whilst on the premises. There must be a record kept of staff accessing bedrooms in the absence of the student.

Staff must be subject to vetting / checks in accordance to the institution’s policy formulated under the relevant legislation. Such policy to include reference to contractors.

The procedures regarding the issuing of keys/access cards [including the replacement of lost keys] must be clear and transparent and arrangements for access in the event of lost keys etc must be set out in the students' welcome pack or equivalent.

**CCTV**

Wherever student residences are monitored by CCTV this must be advised in the foyer or on the external entrance to the building. Installation and operation must be in accordance with the relevant legislation.

**Washing facilities, furnishing, and other matters**

**Bathroom, toilet and shower areas**

These areas must be provided with adequate ventilation and slip-resistant flooring. All sanitary ware must be in good working order and free from cracks and breaks. All toilets must be provided with fitted toilet seat. Shower curtains or screens must be provided as appropriate.

**Furnishing Quality**

Decor and furnishings should be provided and maintained in reasonable condition. All furnishings provided must conform to the relevant regulations.

All bedrooms must be fitted as a minimum with bed, mattress, worktop or study desk, chair, curtains/blind, drawers/shelving, wardrobe and waste receptacle.

**Repair and Maintenance management**

**Approved contractors**

Where O&M is directly responsible for repairs and maintenance these must be carried out by appropriately identified department employed staff or external approved contractors.

**Fault / Defect notification and rectification**

The Warden must provide students with information on how to report a defect or fault, including out of office hours procedure and expected response times from the service provider.

The information should set down response times in the published categories – the usual terminology will be: emergency, urgent and non urgent. If response times are different for different locations this should be made clear. Students should be kept informed of progress in rectifying any reported defect and in particular any delay in meeting defined response times e.g. if an initial visit is diagnostic or if batching of works occurs.

Where repairs or maintenance work is necessary due to damage caused by residents or their guests, the residents should be notified of the total costs and charges for the repair as soon as practicably possible.

**Planned Maintenance**

All maintenance works should be undertaken so as to minimize inconvenience to residents. This will not always be possible with unplanned (reactive) maintenance. For planned maintenance 7 days notice should normally be given to residents; endeavours should be made to avoid sensitive periods such as examinations. For urgent work the minimum notice should be 24 hours unless an emergency requires immediate action.

**Grounds maintenance**

Grounds should be cleared of rubbish and litter on a regular basis and kept tidy. Students should be encouraged to avoid causing, or adding to, litter.

Repair / replacement in existing concrete / plaster / masonry work, wood work, sewerage work, steel work, plumbing work, road work, painting work, flooring work, roofing work, and interior decoration works; removal of chokes, seepage, leakage, dampness; clearing debris, wild vegetation, excavation of earth for miscellaneous purposes including electrical and mechanical works & back filling of same earth after completion of job etc., and various preventive maintenance works. Minor Addition / alterations / renovations in existing Civil works involving concrete work (including RCC), Brick work , structural steel work , plumbing work , wood work , earth works , site grading (including soling, sand filling, moron filling etc., ) , plastering , interior decoration and finishing work .

-PLUMBING

* Plumbing Systems and Fixtures. All plumbing fixtures shall be properly installed and maintained in working order, kept free from obstructions, leaks, defects, and capable of performing its function. Fixture Clearances.
* Plumbing fixtures shall have adequate clearance for usage and cleaning.
* Plumbing System Hazards. If a hazard is found, the person responsible shall require the defects to be corrected to eliminate the hazard promptly.
* All plumbing fixtures shall be properly connected to either a public sewerage system or to an approved private sewage disposal system. Every plumbing stack, vent; Waste and sewer line shall function properly and be kept free from obstructions, leaks, and defects.
* Response to student complaints
* AMC checklist of all plumbing equipments.

-ELECTRICAL APPLIANCES

* Electrical Equipment Installation. All electrical equipment, wiring and appliances shall be properly installed and maintained in a safe and  approved manner. Every habitable space in a dwelling unit shall contain at least two separate and remote receptacle outlets. Any new bathroom outlet shall have ground fault circuit interrupter protection. Lighting Fixtures. Every public hall, interior stairway, bathroom, kitchen, laundry room, boiler room, and furnace room shall contain at least one electric lighting fixture.
* Response to student complaints
* AMC checklist of electrical equipment.

-HOUSEKEEPING

* General sweeping, cleaning, mopping and drying of all floors, corridors, 1staircases, other centralized facilities of all the hostels twice daily with non-corrosive liquid cleaner or detergent etc. Vertical surfaces, ceilings, floors & windows of rooms and high reach area, ceiling of corridor/ lobby and staircases must be cleaned properly using Vacuum cleaner at least once a month and as per requirement.
* Cleaning and maintenance twice a day of toilets and bathrooms including floors, doors, windows, wash basins, mirrors and every other items within the toilets and bathrooms and of all floor area . Corners or dirty places, if any may be scrubbed using plastic hand scrubber. The floors are to be wiped dry.
* Response to student complaints

-LAUNDRY

* Makes sure machinery for washing and drying clothes for laundry is working efficiently and effectively. They may also test the water to make sure it is of good enough quality for clothes washing and generating steam.
* Keep a regular check on Laundry service provider services.
* Keep a check service provider comes twice a week.
* Keep a check on provision of laundry bags to every student.
* AMC checklist for washing machines.
* Respond to students complaints.

-WIFI

* The vendor will provide competent service engineers for trouble shooting related to any problems as and when required.
* Ensuring that servers have an uninterruptible power source
* Installing a firewall to keep the network secure
* Putting in adequate ventilation for heat-sensitive device.
* Response to student complaints.

-MEDICAL

* Medical facility available with medicines provided to sick students
* Transportation on medical emergency
* First aid kit maintenance with regular check on expiration of medicines

-PEST CONTROL

* Conduct routine inspections.
* Review infestation and control issues with PCO, take necessary steps to controlling and/or eliminating pests.
* PCO reports and staff observations logs.
* Install weather stripping around windows and doors to close off any gaps that pests could enter through. Inspect for worn-out door weather strips and sweeps and replace accordingly.
* Inspect vents and have them properly screened.
* Look for cracks and other damages to exterior wall structures. Make the repairs and seal with weather-resistant sealant.
* Inspect the roof for any cracks or missing shingles.
* Inspect for openings, voids or easily dug spots in building foundation where raccoons and skunks can dig to nest. Keep them out by sealing off these sites.
* Consider replacing your current exterior security lights with either high or low pressure sodium lights as these will not attract pests
* Respond to students complaints.

-WATER PURIFIER & COOLER

* Electronic Monitoring System to ensure complete purification of water before allowing the flow
* The activated carbon block and sediment filter is being replaced, the refrigeration circuit is to be serviced.
* The breakdowns of the complete equipment (Water Cooler & Water Purifier) are to be attended throughout the year. All the material required for repair/replacement of any of the component / system shall be arranged. All the parts to be used shall be sourced from O&M only.
* Responding to student complaints
* AMC Checklist for water coolers.

-TRANSPORTATION

* Regularly ensure a smooth running of the services
* Maintaining accurate records.
* Organizing vehicle checks.
* Identifying operational issues in transport, potential problems and opportunities.
* Resolving and managing queries and complaints courteously and efficiently.
* Responding to student complaints

-FIRE SAFETY

* Do all emergency fastening devices to ­ the exits (push bars and pads, etc.) work correctly?
* Does testing a manual call point send a signal to the indicator panel?
* Did the alarm system work correctly when tested? Did staff and other people hear the alarm? Did any linked ­ protection systems operate correctly?
* Escape routes Do all visual alarms work? Do voice alarm systems work correctly? Was the message understood?
* Is all equipment in good condition?
* AMC for all fire equipments.

-CARPENTRY

* Maintenance of a range of carpentry, joinery and other general maintenance work within our main hostel and surroundings.
* Repair and maintenance of furniture in the hostels under the overall control of Warden In charge (Maintenance). This activity includes welding for metal work, polishing; and wood work.
* AMC for all wooden things.
* Respond to students complaints.

-WATER TESTING

* Water treatment removes contaminants and undesirable components, or reduces their concentration so that the water becomes fit for its desired end-use.
* Detect defective portions by performing periodic maintenance and inspection.
* Reduce the failure rate by replacing parts at the designated period based on checks of the past inspections and promote preventive maintenance.
* In case of the failure, take a fast trouble-shooting action based on the past periodical inspection data and recover the facility at the earliest.
* AMC check.
* Respond to students complaints.

-DIESEL GENERATOR MAINTENANCE

* Routine engine exercise.
* Routine general inspection such as testing batteries, Fuel system, cooling system, lubrication of services.
* AMC check.

-BOILER MAINTENANCE

* Functionality testing of all components.
* Inspection and cleaning of all pipes and components.
* Replacement of any parts which are no longer functioning.
* Proper functioning and working of boilers during morning 6 A.M. to 10 A.M. and evening 6 P.M. to 8 P.M. Hours respectively.
* AMC check.

-BIOMETRIC MAINTENANCE

* Regular maintenance every three months, or as often as use demands, could eliminate these challenges and extend the life of the system.
* Necessary diagnostics on all systems.
* Critically assessing the network, the database, environmental factors, and the impact of other devices on the biometrics and related systems.
* Proactively address or make provision for changes in organizational processes, infrastructure and personnel.
* AMC Check.
* Respond to complaints.

-CCTV MAINTENANCE

* Visually inspect all major components and connections for signs of deterioration or damage
* Check all control equipment (DVR, NVR, multiplexer, video switcher, telemetry units etc) for correct operation
* Check mains & power supplies and stand-by batteries including charging rates.
* Check environmental conditions for adverse effects, including growth or shrubbery obscuring camera views
* Check time and date settings in equipment and update the settings as appropriate
* Check integrity of all cabling and sample check external insulation for damage
* Clean cable fixings for security
* Check auxiliary lighting equipment, infra-red units and photocells (if any) for correct operation
* Check air vents are clear in all control equipment including PCs
* Clean cameras, lenses and housing surfaces as necessary
* Check all glands and seals on external equipment
* Clean control equipment surfaces including PC (if applicable)
* Establish regular back-ups are taken
* Check camera is aligned to user specification, pictures for correct field of view and adjust as necessary
* Check brackets, towers and fixings for corrosion or damage. Check clamping bolts/brackets are tightened correctly
* Check wash/wipe units and wiper blades (if any) for correct operation and fill washer reservoir where necessary
* Check quality of recording during day time and night time modes
* Check pan and tilt assembly (if any) including fixings, electrical connections and functions.
* Check the satisfactory CCTV transmission of images to remote site (if applicable)
* Check warning signs are in place
* Check all camera presets
* Check all alarm presets (if applicable)
* AMC Check.

**Environmental Quality**

Adequate heating, lighting, hot water and ventilation must be provided, as appropriate, for each bedroom, social space, kitchen, circulation space (e.g. corridors, stair cases, entrance lobbies) and shower/bath room.

Wardens must be able to demonstrate how they encourage residents and staff to be environmentally responsible in their consumption of energy and water.

**Refuse Collection**

Provision must be made for the collection of all domestic refuse generated from residences. Details should be communicated to students and notices on collection arrangements should be placed in appropriate common areas.

**Pest Control**

Arrangements for reporting infestations should be made clear together with the anticipated response times.

**Transport and Travel**

Managing transportation for students.