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ISOLATION, LOCKING OFF AND ACCESS (Including tagging)

To ensure electrical equipment or circuits remain de-energised while working, they are to be isolated from all relevant sources of electricity supply. This may include opening switches, removing fuses or links, opening circuit breakers or removing circuit connections.

Safe isolation procedures, including the use of locks and tags should be developed in consultation with the relevant workers. Where isolation procedures are used, the appropriate level of information, instruction, training and supervision is to be provided by the supervisor/person in control of the area/activity.

Locking off

Isolation points should be fitted with control mechanisms that prevent the electrical equipment from being inadvertently re-energised. The control mechanism should require a deliberate action to engage or disengage the device. This may include switches with a built-in lock, and lock-outs for switches, circuit breakers, fuses and safety lock-out jaws, clips, screw, bolt or pin that can be inserted to prevent a switch from being operated. They should be used in conjunction with additional control measures such as danger tag and permit systems. In situations where isolation points are accessible by other people the isolation method or system used should not be able to be inadvertently or easily compromised.

Tagging systems

Danger (Lockout) and Out of Service tags must be used to clearly identify that either operators, maintenance staff, contractors and/or sub-contractors are engaged in the cleaning, repair or maintenance of the plant/equipment, or when an item of plant/equipment has been assessed as unsafe and has been isolated from service.

Out of Service tag

- Out of Service tags are used to identify electrical equipment that is not safe to use or fit for purpose.
- Anyone can place an Out of Service tag on equipment if they consider it to be unsafe or unserviceable and must then immediately inform their supervisor/person in control of the activity/area.
- The Out of Service Tag must be completed in ink (or permanent marker); and must be signed, dated and indicate why the plant/equipment has been taken out of service.
- Tags are to be attached in a suitable location to prevent the operation of faulty or unsafe plant/equipment.
- Plant/equipment must be disconnected from energy sources. Keys or other starting devices must be removed and locked away to ensure that the plant/equipment cannot be operated.
- Only a <u>competent person</u>, for the purposes of carrying out inspection and testing of electrical equipment, can remove the tag after fixing or rectifying the defect and making the electrical equipment safe.
- An Out of Service tag indicates that plant/equipment is unsafe to operate. It does not indicate that the plant/equipment is safe to work on for cleaning, maintenance or repair.

Danger (lockout) tag and locks

- A danger tag should be attached to normal locks at all points of isolation used to de-energise electrical equipment from its electricity supply.
- A tag does not by itself, perform the isolation function.
- Danger tags are not required when using dedicated personal isolation locks.
- Danger tags are used for the duration of the electrical work to warn others that:
 - the electrical equipment is isolated or out of service
 - the electricity supply must not be switched back on or reconnected
 - reconnection electricity may endanger the life of the electrical workers(s) working on the equipment.

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Danger (lockout) tag and locks (continued)

- The danger tag should:
 - be durable and securely fixed to the isolator
 - clearly state the warning, including any warning about specific hazards relating to the isolation (for example, multiple points of supply)
 - be dated and signed by the worker or workers involved in carrying out the work or where appropriate, by the supervisor in charge of the workers.
 - be attached in a prominent position on each isolation point
 - only be removed by the signatories to the tag. If
 - unavailable and unable to return, measures must be put in place to manage risk associated with removing the lock or tag (for example, thorough investigation to ensure all workers and others at the workplace are safe.)



If the work is incomplete, the last person removes their danger tag or lock and replaces it with a warning tag for example, out-ofservice or caution tag.

When work is resumed, the person in charge of the work removes the warning (out-of-service or caution) tag and each person then applies their danger tag and/or lock.

When work is completed, each person removes their danger tag and/or lock.

Where a formal permit system is used, all reasonable steps should be taken to ensure that the designated sign-on and tagging procedures are followed.

Removing another person's Danger tag

Under normal conditions, no person will remove or destroy another person's Danger tag or locking device. However, at times a piece of plant/equipment is required to be returned to operation and the isolation point contains one or more tags belonging to people absent from the workplace.

The person requiring the plant/equipment will advise their work supervisor/person in control of the area/activity of the situation.

- The supervisor/person in control of the area/activity will contact the individual indicated on the tag and have them come back on site to remove the tag/lock.
- If this is not possible, or if the person cannot be contacted, the supervisor/person in control of the area/activity will nominate
 a suitable <u>competent person</u>, for electrical work on energised electrical equipment or energised electrical
 installations (in relation to task) to investigate the situation. This investigation must ensure that no person or
 plant/equipment will be endangered or damaged by the removal of the tag/lock by other than the signatory.
- The supervisor/person in control of the area/activity along with the nominated competent person shall co-sign the Danger tag(s), remove the locks and tags and submit them, detailing the event, to the Head of School/Branch within 24 hours of the incident occurring. The incident must then be recorded as per HSW Handbook Chapter <u>Report a safety issue or Incident</u>

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Placement of safety locks

Safety locks provide an additional level of protection when installing, repairing or maintaining plant/equipment. Safety locks conjoined to a Danger tag will be installed to secure the means of isolation. Locks will be affixed through the appropriate isolation point with the keys removed to prevent accidental removal. All keys to the lock will stay with the person responsible for applying the isolation.

In some instances the plant/equipment isolation mechanism may not be physically large enough to restrain the large numbers of required isolation devices. In cases such as this a multiple lock device (lock-out scissors) can be used to restrain the numerous devices for workers until the completion of the task.

Removing tags/locks

- Inform others concerned that the plant/equipment will return to service and confirm that all guards have been reinstated.
- Remove only the tag/lock with your own signature and destroy the tag.
- Never remove or destroy another person's Danger tag or locking device (see below for exception).
- Any person finding a loose completed Out of Service tag shall assume that it has been unintentionally detached from the isolation device and immediately notify the work supervisor/manager. The supervisor/person in control of the area/activity will then ascertain which item of plant/equipment the tag belongs to and make the situation safe.



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