**WHS LEGISLATION FACTSHEETS**

**MANAGING ELECTRICAL RISKS AT THE WORKPLACE**

**Electrical work**

Does not include the following:

(a) work that involves connecting electrical equipment to an electricity supply by means of a flexible cord plug and socket outlet;

(b) work on a non-electrical component of electrical equipment, if the person carrying out the work is not exposed to an electrical risk;

**Example:** Painting electrical equipment covers and repairing hydraulic components of an electrical motor.

(c) replacing electrical equipment or a component of electrical equipment if that

task can be safely performed by a person who does not have expertise in carrying out electrical work;

**Example:** Replacing a fuse or a light bulb.

(d) assembling, making, modifying or repairing electrical equipment as part of a

manufacturing process;

(e) building or repairing ducts, conduits or troughs, where electrical wiring is or will be installed if:

(i) the ducts, conduits or troughs are not intended to be earthed; and

(ii) the wiring is not energised; and

(iii) the work is supervised by a [licensed or registered] electrical worker;

(f) locating or mounting electrical equipment, or fixing electrical equipment in place, if this task is not performed in relation to the connection of electrical equipment to an electricity supply;

**Inspection and testing of electrical equipment**

(1) A PCBU must ensure that electrical equipment is regularly inspected and tested by a competent person if the electrical equipment is:

(a) supplied with electricity through an electrical socket outlet; and

(b) used in an environment in which the normal use of electrical equipment exposes the equipment to operating conditions that are likely to result in damage to the equipment or a reduction in its expected life span, including conditions that involve exposure to moisture, heat, vibration, mechanical damage, corrosive chemicals or dust.

 (2) In the case of electrical equipment that is new and unused at the workplace, the PCBU:

(a) is not required to comply with (1); and

(b) must ensure that the equipment is inspected for obvious damage before being used.

**Note:** However, electrical equipment that is unsafe must not be used.

 (3) The PCBU must ensure that a record of any testing carried out is kept until the electrical equipment is:

(a) next tested; or

(b) permanently removed from the workplace or disposed of.

 (4) The record of testing must specify the following:

(i) the name of the person who carried out the testing;

(ii) the date of the testing;

(iii) the outcome of the testing;

(iv) the date on which the next testing must be carried out; and may be in the form of a tag attached to the electrical equipment tested.

**Untested electrical equipment not to be used**

A PCBU must ensure, so far as is reasonably practicable, that electrical equipment is not used if the equipment:

(a) is required to be tested; and

(b) has not been tested.

**Residual current devices (RCD)**

A PCBU must ensure, so far as is reasonably practicable, that any electrical risk associated with the supply of electricity to the electrical equipment through a socket outlet is minimised by the use of an appropriate residual current device in the following circumstances:

(a) electrical equipment is used in an environment in which the normal use of

electrical equipment exposes the equipment to operating conditions that are likely to result in damage to the equipment or a reduction in its expected life span, including conditions that involve exposure to moisture, heat, vibration, mechanical damage, corrosive chemicals or dust;

(b) electrical equipment is moved between different locations in circumstances where damage to the equipment or to a flexible electricity supply cord is reasonably likely;

(c) electrical equipment is frequently moved during its normal use;

(d) electrical equipment forms part of, or is used in connection with, an amusement device.

The residual current device must have a tripping current that does not exceed 30 milliamps if electricity is supplied to the equipment through a socket outlet not exceeding 20 amps.

A RCD is not required if the supply of electricity to the electrical equipment:

(a) does not exceed 50 volts alternating current; or

(b) is direct current; or

 (c) is provided through an isolating transformer that provides at least an equivalent level of protection; or

(d) is provided from a non-earthed socket outlet supplied by an isolated winding portable generator that provides at least an equivalent level of protection.

**Note:** This regulation commences on 1 January 2013

**Testing of residual current devices**

(1) A person with management or control of a workplace must take all reasonable steps to ensure that residual current devices used at the workplace are tested regularly by a competent person to ensure that the devices are operating effectively.

 (2) The person must keep a record of all testing of a residual current device (other than any testing conducted daily) until the earlier of the following occurs:

(a) the device is next tested;

(b) the device is permanently removed from use.

**Source: Safe Work Australia Code of Practice**