##### Appendix 17 – Safe Work Method Statement – Electrical Testing

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| **Work activity: Job description** | |  | | | **E-SWMS #** | | **E-SWMS 001** |
| **Electrical Contractor: contact details** | |  | | **Client:**  **contact details** |  | | |
| **Electrical Supervisor: Contact phone** | |  | | **Workplace location:** |  | | |
| **Person responsible for ensuring compliance with SWMS:** | | |  | **Date SWMS received:** | |  | |
| **What measures are in place to ensure compliance with the SWMS?** | | |  | | | | |
| **Person responsible for reviewing SWMS control measures:** | | |  | **Date SWMS received by reviewer:** | |  | |
| **How will the SWMS control measures be reviewed?** | | |  | | | | |
| **Review date:** | | |  | **Reviewer’s signature:** | |  | |
| **Task Step** | **What are the tasks involved?** | | **What are the hazards and risks?** | **What are the control measures?** | | | |
| 1 | Conduct / confirm workplace risk assessment HRA and secure area | | Electric shock | Test before you touch  Identify tasks and appoint competent personnel for work   * Qualified licensed electrician * Instructed persons under supervision   Inspect the work area and identify potential hazards Identify and review available SWMSs and SWPs  Confirm suitability of work processes and record additional measures | | | |
| 2 | Plan and ensure coordination of activities | | Unscheduled disruptions to others Lack of coordination | Consult person/s with management control Consult with workers and other trades in the area  Notify those potentially affected by power disruption | | | |
| 3 | Is a Safety Observer required? | | N/A | Not required if no serious level of risk exposure | | | |
| 4 | Safety Observer instruction (if required) | | Unresponsive | Ensure Safety Observer is competent and trained in electrical rescue and cardio-pulmonary resuscitation (CPR) – current in last 12 months  Instruct Safety Observer regarding:   * Planned work process * Emergency Procedures * Isolation point/s * Focus on the role of observing | | | |

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| 5 | Select tools, test equipment and PPE | Cuts, abrasions and shocks | Well maintained, suitably rated, checked & tested Rated for the application and calibrated (if applicable) Used properly |
| 6 | Identify ALL energy sources to be isolated | Electric shock | Test before you touch  Check labelling, wiring schedules and drawings Confirm by switching where appropriate |
| 7 | Identify and assess isolation point/s | Electric shock Difficult access | Avoid touching exposed conductive parts Clearly mark or label  Ensure unobstructed access of electrical workers Capable of being operated quickly |
| 8 | Keep work area clear of obstruction | Unnecessary distraction leading to electric shock | Clear area and use appropriate barricades and signage (where necessary) Maintain good housekeeping, tidy and clean |
| 9 | Confirm and record phase rotation if required for commissioning purposes prior to de-energising | Electric shock | Avoid touching exposed conductive parts |
| 10 | Switch power at isolation point on switchboard | Electric shock | Prevent inadvertent contact with exposed energised components |
| 11 | Secure the isolation point with lock and tag | N/A | Use lock and tag or personalised lock Provide contact details |
| 12 | Move to work area and confirm indication of power off | Strains and sprains Electric shock | Confirm power off with minimal lifting of electrical covers, e.g.   * Appliance not working * Lights off * Power point dead |
| 13 | Lift electrical cover/s as required | Electric shock from exposed electrical conductors | Test before you touch  Use test meter, lamp or bell to detect energised  Make positive contact with ALL the near exposed conductor Don‘t use a Proximity Sensors to prove de-energised |
| 14 | Check that testing meter/device is operational | Electric shock | Avoid touching exposed conductive parts |
| 15 | Undertake designated de-energised work | Strains and sprains Electric shock | Be alert to possible changes to workplace conditions, including:   * Possible new safety hazards or risks * Stop work if unsafe and immediately rectify or notify your supervisor Use SWPs where appropriate   TEST EVERY TIME BEFORE YOU TOUCH |
| 16 | Before leaving, make safe | Electric shock | Ensure that no isolated conductors can be energised by switching Terminate and test all conductors before energising  Follow re-energisation procedure |
| 17 | On return, confirm integrity of isolation | Electric shock | Check switch/s and confirm isolation by re-testing, as above |
| 18 | Retain record for Supervisor / Electrical Office | N/A | Retain if the SWMS is revised or a Risk Assessment was prepared Return to Supervisor / Office for ongoing review and improvement |

Worker consultation, instruction, training, toolbox talks, review, acceptance record:

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| --- | --- |
| **Only persons who have completed the signoff are authorised to work on the relevant tasks covered by this document.** | |
| NOTE: Work must be performed in accordance with this E-SWMS, any Risk Assessment prepared in relation to this work and any relevant Safe Work Procedures.  Work on or near energised electrical installations or services is high risk construction work.  This SWMS must be accessible for inspection until the energised electrical work to which this SWMS relates is completed. If the SWMS is revised, all versions should be kept.  If a notifiable incident occurs in relation to the high risk construction work in this SWMS, the SWMS must be kept for at least 2 years from the date of the notifiable incident. | |
| I, the undersigned, acknowledge, understand and accept that:   1. the WHS Policy, relevant Risk Assessments, SWMSs and SWPs for this task have been reviewed, explained and are clearly understood by me, 2. I shall only carry out work for which I am equipped and competent and advised my supervisor of any individual needs, 3. I will comply with all relevant Risk Control Measures, otherwise work must stop immediately, 4. I will be vigilant regarding hazards and the suitability of the identified Risk Control Measures, and 5. I understand that I am authorised and expected to safely stop work and immediately notify my supervisor if a task carries an unacceptable level of risk. | |
| **Name of Worker(s)** | **Worker signature(s)** |
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| **Date SWMS received by workers:** |  |

**Rules for testing for de-energised**

The process steps for Electrical Isolation are:

**Identify, Switch/Isolate, Lock, Tag and Test**

This work is primarily the work of an electrician or a competent person under their supervision and this instruction template is addressed to them and relates to isolation of the low voltage circuit or sub-circuit you are intending to work on (or near).

When you isolate you must test for de-energised. You must not just depend on a proximity indicator, but you must make positive

/ physical contact with your probe on the conductor. You can use a test lamp; bell or meter and you must check your instrument both before and after to prove de-energised.

Note: Proximity sensors are non-contact indicators and must not to be used to prove isolation. They can be useful to detect electrical signals but are not a reliable confirmation of safe de-energisation or isolation.

Testing electrical isolation, or testing for integrity and operability (fault-finding and commissioning) of energised circuits and equipment of an electrical installation, must be conducted in a safe manner. You must have a safe system of work for live testing that includes, as a minimum, all of the following measures:

**Remember: TEST EVERY TIME BEFORE YOU TOUCH**

Preparation:

1. Consult with person with management or control of the workplace before commencing, and ensure no adverse impacts,

e.g. workers should be advised of possible power disruption

1. All live testing must be undertaken by competent workers:
   1. Qualified licensed electrician
   2. Apprentice assessed as competent by supervising licensed electrician and under their supervision
2. Use tools, test equipment and PPE that is:
   1. suitable, checked & tested and well maintained
   2. rated for the application and calibrated (if applicable)
   3. used properly
3. Work in accordance with well proven Electrical Safe Work Method Statements (Appendix 17) and relevant Safe Work Procedures (Appendix 20)
4. Conduct a risk assessment prior to starting and make sure the E-SWMS is suitable for the work to be carried out. If not then document the findings either by marking up the SWMS, SWP or a Hazard Identification and Risk Assessment (HRA) form (Appendix 16)
5. Appoint a trained competent Safety Observer - not required if the only testing AND risk assessment (SWMS, SWP or HRA) shows no serious risk
   1. Note: Any safety observer must be competent in electrical rescue and cardio-pulmonary

resuscitation (CPR), instructed and have full attention to the task of observing. The observer should be aware of emergency measures including the location of the isolation point

1. Ensure the isolation point is:

Getting started:

1. clearly marked or labelled
2. unobstructed for easy access and exit
3. capable of being operated quickly
4. Note that this is not generally applicable to work on the supply side of main switch.
   1. Consult with the workers who are involved and those that may be affected
   2. Prevent unauthorised access to immediate work area
   3. Keep work area clear of obstructions
   4. Prevent inadvertent contact with exposed energised components
   5. Be alert to possible changes to workplace conditions, including:
      1. Possible new safety hazards or risks
      2. Stop work if unsafe and immediately rectify or notify your supervisor
      3. TEST EVERY TIME BEFORE YOU TOUCH

On completion of job:

1. Make safe – terminate all conductors before re-energising
2. If risk assessment has been prepared, retained as a record for 28 days.