**Electrical contractor and person conducting a business or undertaking audit tool**

**Self-assessment to assist electrical contractors**

This audit tool will assist electrical contractors and person conducting a business or undertaking (PCBU) to review the effectiveness and adequacy of their existing risk management and safe systems of work. The audit tool focuses on a range of elements which relate to the safe management of electrical work and provides a thorough performance benchmark, allowing shortfalls and improvements to be identified. Audits provide evidence to substantiate compliance with legislative requirements, identify potential gaps and improvements, enhance systems and processes, and reduce risks associated with undertaking electrical work.

**Self-assessment for PCBU’s**

This audit tool will also assist PCBU’s who employ electrical workers in their workplace, where there is no requirement to hold an electrical contractor licence. In section 3 of the Audit tool - Role of the Qualified Technical Person (QTP) / Qualified Business Person (QBP) – would not be completed.

**How to use this tool**

1. Undertake an initial audit (baseline) to see if you have adequate electrical safety systems and procedures in place to ensure compliance with all relevant acts and regulations.
2. Undertake a second audit (follow-up) to ensure you have addressed any non‑compliances from the baseline audit.

The following elements are covered in the audit:

1. AS/NZS 3000 and relevant Australian Standards
2. Safe systems of work
3. Role of the Qualified Technical Person (QTP) / Qualified Business Person (QBP)
4. Task competency
5. Working on or near energised equipment
6. Testing of Electrical Work
7. Supervision and training of electrical workers and apprentices
8. Complacency
9. Legislation

**Evidence**

There are several elements that will ask for evidence. Normally this audit is undertaken by an external experienced auditor, so they would require evidence to be provided.

Evidence can be, but not limited to:

* toolbox sessions and outcomes
* training records.
* what training is provided?
* induction records.
* competency assessments.
* inspection, testing and verification records.
* compliance recording documents.
* workers understanding safe systems of work? How has evaluation occurred?

When considering these elements, do you have the evidence that can be produced? What do you have or more importantly, what are you lacking?

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| **1.0** | **AS/NZS 3000 and relevant Australian Standards** | **Satisfactory** | **Needs Improvement** | **Comments/action required.** |
| 1.1 | Does the business have access to AS/NZS 3000 Electrical installations (the Wiring Rules) and AS/NZS 3012 Electrical installations – Construction and Demolition sites? |  |  |  |
| 1.2 | Do workers have access to the current standards for the work being undertaken? |  |  |  |
| 1.3 | Is there evidence that work procedures are developed and communicated to staff and workers? |  |  |  |
| 1.4 | Is there evidence of training of staff and workers undertaking electrical work on the requirements of AS/NZS 3000? |  |  |  |
| 1.5 | Are the work procedures adequate for the scope of work required under standards and legislation? |  |  |  |
| 1.6 | Have audits been undertaken to ensure workers understand and are complying with AS/NZS 3000 and other relevant standards to ensure the work complies with the standard and is electrically safe? |  |  |  |
| 1.7 | Other observations/findings? |  |  |  |
| **2.0** | **Safe systems of work** | **Satisfactory** | **Needs Improvement** | **Comments/action required.** |
| 2.1 | Is there effective implementation of policies and procedures in the workplace and available to staff and workers? |  |  |  |
| 2.2 | Are all new staff and workers inducted and trained on the safe systems of work and other relevant matters? |  |  |  |
| 2.3 | Is there evidence of Sub Contractors being inducted ensuring that relevant details are obtained and recorded? |  |  |  |
| 2.4 | Have documents relating to safe systems of work been reviewed and signed off by the PCBU and QTP? |  |  |  |
| 2.5 | Have workers been trained in policies and procedures associated with the business? |  |  |  |
| 2.6 | Are procedures written in a way to be understood and easy to follow? |  |  |  |
| 2.7 | Is there evidence that staff and workers hold training competency in any high-risk tasks? |  |  |  |
| 2.8 | Is there a current licence register? |  |  |  |
| 2.9 | Is there evidence of completed risk assessments detailing all identified hazards are effectively controlled? |  |  |  |
| 2.10 | Are procedures in place to identify and record compliance to scope, drawings, variations and inspection and testing of electrical work? e.g., unterminated live cable |  |  |  |
| 2.11 | Is there evidence an audit program is in place to ensure staff and workers are complying with the company’s safe systems of work? |  |  |  |
| 2.12 | Does the business’ policies and procedures identify how the PCBU meets their duties under the *Electrical Safety Act*? |  |  |  |
| 2.13 | Is there evidence that workers are actively involved and supported in risk assessment processes (job safety analysis and safe work method statement)? |  |  |  |
| 2.14 | Is there evidence of an ongoing auditing program to ensure all workers are familiar with policies and procedures and the requirements are being used correctly? |  |  |  |
| 2.15 | Are there policies and supporting procedures in place for fatigue management, mental health and wellbeing and drug and alcohol? Are these communicated clearly to everyone who comes into the workplace? |  |  |  |
| **3.0** | **Role of the Qualified Technical Person (QTP) / Qualified Business Person (QBP)** | **Satisfactory** | **Needs Improvement** | **Comments/action required.** |
| 3.1 | Does the QTP have adequate knowledge, training, resources and time to enable them to perform and supervise the scope of electrical work undertaken by the company? |  |  |  |
| 3.2 | Does the QTP have the current competencies for the role to carry out the functions of a QTP? |  |  |  |
| 3.3 | Has the QTP maintained the currency of their electrical work licence? |  |  |  |
| 3.4 | Is the QBP competent in meeting the obligations for the business aspects of performing electrical work as, or for, a licenced electrical contractor? (Electrical Safety Regulations s7(1)) |  |  |  |
| 3.5 | Is there evidence the QTP is keeping up to date with current legislation, CoP, wiring rules and standards?(for example evidence may include subscribing the regulator communication such as Esafe, member of an Employer Association, attend regular training and information sessions) |  |  |  |
| 3.6 | Is there evidence all electrical work performed by the electrical contractor licence holder is performed or supervised by a QTP? |  |  |  |
| 3.7 | Is there evidence the QTP is involved in developing safe work procedures and the safe systems of work that addresses the key areas of safety and compliance in the business? |  |  |  |
| 3.8 | Is there evidence the QTP ensures workers undertaking electrical work are competent in the work they are undertaking? |  |  |  |
| 3.9 | Is there evidence the QTP is undertaking audits of the risk management system, training and supervision of electrical workers? |  |  |  |
| 3.10 | Is there evidence the QTP is competent in current standards for inspection and testing of an electrical installation? |  |  |  |
| 3.11 | Is there evidence the QTP ensures all Certificates of Test issued by the electrical contractor is supported by a test report verifying the electrical work performed is electrically safe and complies with the standard. |  |  |  |
| 3.12 | Other observations / findings? |  |  |  |
| **4.0** | **Task competency** | **Satisfactory** | **Needs Improvement** | **Comments/action required.** |
| 4.1 | Is there evidence that the supervisor/s are trained to manage the safety and wellbeing of staff, young workers, trainees and apprentices? |  |  |  |
| 4.2 | Have apprentices been evaluated for their level of supervision and if so, how? |  |  |  |
| 4.3 | Are all required documents and records kept? (e.g., licences, training certificates and induction records) |  |  |  |
| 4.4 | Does the PCBU include subcontractors' electrical licence checks in the business register? |  |  |  |
| 4.5 | Do supervisors of electrical workers hold the appropriate electrical work licence? (Electrical Safety Act s55) |  |  |  |
| 4.6 | Is there evidence of assessment of competence on new and existing staff and workers, to perform tasks including new tasks? |  |  |  |
| 4.7 | Is there evidence regular performance reviews are undertaken with electrical workers by the PCBU? |  |  |  |
| 4.8 | Is there evidence of on-going training of workers? (e.g., testing, risk assessment, safety observer, resuscitation etc.) |  |  |  |
| 4.9 | Other observations / findings? |  |  |  |
| **5.0** | **Working on or near energised equipment** | **Satisfactory** | **Needs Improvement** | **Comments/action required.** |
| 5.1 | Are competency records available for workers conducting testing and carrying out work on or near energised electrical equipment? (Electrical Safety Regulations s15 and s22) |  |  |  |
| 5.2 | Are procedures in place to ensure work is correctly de-energised, isolated and locked out and re-energised to industry standard? Are procedures clearly communicated to all staff? Is lock-out/tag out equipment provided to staff and readily available? (Electrical Safety Regulations s17) |  |  |  |
| 5.3 | Are workers aware of and understand the requirements of safe isolation and lock out/tag out procedures? Are workers audited for compliance with procedure? (Electrical Safety Regulations s17) |  |  |  |
| 5.4 | Is there evidence of the following policies and procedures in place:- no energised work policy- when and how work may be performed live policy- procedure for working on or near live electrical parts and equipment? |  |  |  |
| 5.5 | Are tools and test equipment suitable for the work performed? |  |  |  |
| 5.6 | Are tools and test equipment tested to standard and maintained in good working order? (Electrical Safety Regulations s22) |  |  |  |
| 5.7 | Is there a register of test equipment including model and serial number and last calibration test date? |  |  |  |
| 5.8 | Is there a documented procedure for testing of electrical work? Are record of tests maintained? Does the test record include test values? |  |  |  |
| 5.9 | Is there suitable safety equipment available having regard to the work performed and is clean and in good working order? |  |  |  |
| 5.10 | Does the PCBU have a safe system of work for work being undertaken in ceiling spaces? |  |  |  |
| 5.11 | Does the procedure outlined in 5.8 and 5.10 above include testing to confirm isolation of electricity prior to commencing work? |  |  |  |
| 5.12 | Are there procedures in place that are communicated to electrical workers and apprentices to ensure the apprentice does not work on or near energised or exposed live parts? |  |  |  |
| 5.13 | Is there evidence of supervision of young or inexperienced licenced electrical workers, working on or near energised electrical equipment? |  |  |  |
| 5.14 | Is there evidence workers have been audited or checked to confirm they are trained and carrying out required tests correctly? |  |  |  |
| 5.15 | Are there procedures in place that are communicated to electrical workers and apprentices to ensure no work is carried out on or near energised high voltage or exposed live parts? |  |  |  |
| 5.16 | Is there evidence of training and supervision in place to ensure no work is carried out on or near energised high voltage or exposed live parts? |  |  |  |
| 5.17 | Other observations / findings? |  |  |  |
| **6.0** | **Testing of electrical work** | **Satisfactory** | **Needs Improvement** | **Comments/action required.** |
| 6.1 | Are there procedures for inspection and testing electrical work? Do the procedures comply with the standards? |  |  |  |
| 6.2 | Are test results recorded and are these records maintained? |  |  |  |
| 6.3 | Is there evidence the QTP can demonstrate currency of competency in inspection and testing of an electrical installation to the required standard? |  |  |  |
| 6.4 | Is there a written risk assessment and a safe work method statement that identifies, before commencing testing, consideration is given to the nature of testing particularly live testing? |  |  |  |
| 6.5 | Is there evidence that electrical workers are trained in inspection and testing of an electrical installation, including polarity testing and service polarity testing? |  |  |  |
| 6.6 | Is there evidence electrical workers are audited to confirm inspection and testing competency in the workplace? |  |  |  |
| 6.7 | Other observations / findings? |  |  |  |
| **7.0** | **Supervision and training of electrical workers and apprentices** | **Satisfactory** | **Needs Improvement** | **Comments/action required.** |
| 7.1 | Is there evidence of supervisor and management training of apprentices, young workers and new workers to ensure that safety issues are appropriately managed at the workplace? |  |  |  |
| 7.2 | Is there evidence that information, training, and instruction provided to workers is suitable and adequate with regards to the work carried out including the skill level of the worker? |  |  |  |
| 7.3 | Is there evidence that the information, training and instruction is provided in a way that is readily understandable by the person carrying out the work? (Work Health and Safety Regulation s39) |  |  |  |
| 7.4 | How does the employer determine the level of supervision required for workers and apprentices? |  |  |  |
| 7.5 | Is there evidence the employer uses meetings, presentations, and other communication methods to raise awareness of the unique risk profile of young workers among their supervisors, managers and co-workers? |  |  |  |
| 7.6 | Is there evidence the contractor has a system for managing the training and wellbeing of apprentices over the life of the training contract? |  |  |  |
| 7.7 | Other observations / findings? |  |  |  |
| **8.0** | **Complacency** | **Satisfactory** | **Needs Improvement** | **Comments/action required.** |
| 8.1 | Is there evidence a positive workplace culture is driven by leadership and effective communication to engage staff and workers in health and safety e.g., toolbox talks, safety committees, sharing incidents / near misses / safety alerts? |  |  |  |
| 8.2 | Is the work designed in a way that manages safety risks and contributes to better health and wellbeing of staff and workers? |  |  |  |
| 8.3 | Are there procedures in place to ensure a workplace is left in a safe state including when work is left unfinished? |  |  |  |
| 8.4 | Are workers encouraged to provide feedback and raise safety concerns? |  |  |  |
| 8.5 | Do procedures identify hazards and control measures that reflect to various types of workplaces the business encounters. For example, separation and /or barriers when working on switchboards and testing in a residential environment? |  |  |  |
| 8.6 | Are there evidence of toolbox talks, safety committees, sharing incidents/near misses/safety alerts to identify and manage hazards and are these communicated to staff and workers? |  |  |  |
| 8.7 | Other observations / findings? |  |  |  |
| **9.0** | **Legislation** | **Satisfactory** | **Needs Improvement** | **Comments/action required.** |
| 9.1 | Is there evidence that the PCBU understands their duties to ensure their business is conducted in a way that is electrically safe? |  |  |  |
| 9.2 | Are the procedures adequate to ensure the electrical safety of people and property likely to be affected by electrical work performed by the PCBU? |  |  |  |
| 9.3 | Is there evidence the PCBU has available for use, and uses, appropriate resources and processes to meet its responsibilities with work health and safety and electrical safety requirements? |  |  |  |
| 9.4 | Is there evidence the PCBU acquires and keeps up-to-date knowledge of electrical safety legislation? |  |  |  |
| 9.5 | Other observations / findings? |  |  |  |
| **Relevant legislation and codes of practice*** Work Health and Safety Act 2011
* Work Health and Safety Regulation 2011
* Work Health and Safety Codes of Practice – where required
* Electrical Safety Act 2002
* Electrical Safety Regulation 2013
* Electrical safety code of practice 2020 - Electrical equipment rural industry
* Electrical safety code of practice 2021 - Managing electrical risks in the workplace
* Electrical safety code of practice 2020 - Working near overhead and underground electric lines
* Electrical safety code of practice 2020 – Works
* Construction and operation of solar farms Code of Practice 2019
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| **Relevant standards and guides** * AS/NZS 3000:2018 Electrical installations (the Wiring Rules)
* AS/NZS 3012:2019 Electrical Installations - Construction and demolition sites
* AS/NZS 3017:2022Electrical installations - Verification guidelines
* AS/NZS 3760:2010 In-service safety inspection and testing of electrical equipment
* AS/NZS 4836:2023 Safe working on low-voltage electrical installations and equipment
* AS/NZS 5033:2021 Installation and safety requirements for photovoltaic (PV) arrays
* AS 2067:2016 Substations and high voltage installations exceeding 1 kV AC.
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