1 OBJECTIVES

a) To ensure compliance with relevant legislation in managing electrical and mechanical risks to all workers, contractors and others within Kempsey Shire Council.

b) To outline a minimum standard for personal safety and plant protection during routine installation, maintenance and repair of electrical, mechanical, pneumatic and fluid driven plant.

c) To provide information on Plant Isolation safety tag and lockout systems that will avoid confusion and improve safety, particularly where different trades or multi-skilled workers collaborate on routine installation, maintenance and repair work.

2 STATEMENT

a) This procedure is applicable to plant owned or controlled by the Kempsey Shire Council whilst it is subject to operation, inspection, investigation, testing, maintenance or repair.

b) All personnel employed by the Kempsey Shire Council and any contractor who carries out work at any Kempsey Shire Council facility shall strictly comply with this procedure.

c) The requirements stipulated in this procedure are minimum requirements. Other activities may require additional control measures. Such measures shall be additional to, and not in place of the requirements stipulated in this procedure.

3 REFERENCES

i) Work Health and Safety Act
ii) Work Health and Safety Regulations
iii) AS/NSZ 3000 2007 – Wiring Rules
iv) AS 1319 1994 – Safety Signs for the Occupational Environment
v) Code of Practice for Low Voltage Electrical Work

4 DEFINITIONS AND ABBREVIATIONS

a) Competent Person – A person who has acquired, through training, qualifications, experience or a combination of these, the knowledge and skill enabling the person to inspect, test and repair plant/equipment.

b) Electrical equipment – Any apparatus, appliance, cable, conductor, fitting, insulator, material, meter or wire which is:
i) Used for controlling, generating, supplying, transforming or transmitting electricity at a voltage greater than extra low voltage, or

ii) Operated by electricity at a voltage greater than extra low voltage:

   **However**, “electrical equipment” does not include any apparatus, appliance, cable, conductor, fitting, insulator, material, meter or wire forming part of a vehicle if:

iii) It forms part of a unit of the vehicle that provides propulsion for the vehicle; or its source of electricity is a unit of the vehicle that provides propulsion for the vehicle.

c) **Electrically Safe** -

   i) For a person or property - that the person or property is free from electrical risk.

   ii) For electrical equipment or an electrical installation - that all persons and property are free from electrical risk from the equipment or installation.

   iii) For the way electrical equipment, an electrical installation or the works of an electricity entity are operated or used - that all persons and property are free from electrical risk from the operation or use of the equipment, installation or works.

   iv) For the way electrical work is performed - that all persons are free from electrical risk from the performance of the work.

   v) For the way a business or undertaking is conducted - that all persons are free from electrical risk from the conduct of the business or undertaking.

   vi) For the way electrical equipment or an electrical installation is installed or repaired - that all persons are free from electrical risk from the installing or repairing of the equipment or installation.

d) **Electrical Work** – the manufacturing, constructing, installing, testing, maintaining, repairing, altering, removing, or replacing of electrical equipment. Examples of electrical work are:

   i) Installing low voltage electrical wiring in a building;

   ii) Installing electrical equipment into an installation coupler or interconnector, or

   iii) Replacing a low voltage electrical component of a washing machine.

e) **Isolated** – disconnected from all possible sources of supply and rendered incapable of being made live without premeditated and deliberate operation. A suitable warning safety sign must be attached.

f) **Plant** – any machinery, equipment, appliance, pressure vessel, implement and tool including:

   i) A component of plant and a fitting, connection, accessory or adjunct to plant, or

   ii) Scaffolding at a workplace and specified high risk plant (unless otherwise stated).
g) **PPE** - Personal Protective Equipment

h) **SWMS** – Safe Work Method Statement documents.

i) **KSC** – All Kempsey Shire Council controlled sites and workplaces.

## 5 RESPONSIBILITIES

Under work health and safety legislation both the employer and employees have "duty of care" obligations.

### 5.1 Directors/ Managers

a) To ensure resources are available to implement the requirement of this procedure.

b) To maintain, monitor and promote healthy and safe work practices in their areas of responsibility.

c) To refer matters that cannot be resolved locally to key personnel and regularly follow up on those matters until resolved.

d) To ensure that staff have sufficient training to develop competence and understanding to carry out procedures and protocols.

### 5.2 Team Leaders/ Supervisors

a) To ensure formal risk assessments are conducted to ensure any hazards are identified and appropriate controls implemented.

b) To be sufficiently aware of the hazards and risks in carrying out experimental work involving equipment, machinery and fluid power sources.

c) To have a sufficient level of competence and understanding to carry out procedures.

d) To maintain, monitor and promote healthy and safe work practices in their areas of responsibility.

e) To refer matters that cannot be resolved locally to key personnel and regularly follow up on those matters until resolved.

### 5.3 Competent Persons

a) KSC Electricians, Technicians, Maintenance Personnel and Contractors employed by KSC have a responsibility to ensure that any work performed by them is safe and complies with the relevant legislation, supporting Codes of Practice and Standards.

b) To make safe and report any unsafe electrical condition identified while on a KSC workplace.

### 5.4 Workers

a) To follow safe systems of work, use protective equipment and report all injuries, incidents and exposures.

b) To work within the specified control measures identified in the SWMS.
c) To adhere to all instructions, directives and advice to ensure their own safety and the safety of others.

6 PROCEDURES

6.1 Personal Isolation

a) Isolation of plant (equipment, machinery and fluid power sources) in KSC workplaces is conducted by personal isolation and **NOT** group isolation systems.

b) Each person working on plant shall be protected by their Personal Danger tag and lock.

c) The Personal Danger tag and lock informs other workers and/or emergency services, that a worker is still working on this piece of plant and that there is a potential hazard associated with the plant.

d) While Personal Danger tags and locks are two separate items, for the purpose of isolating plant on a KSC workplace they will be used together.

e) The completed Personal Danger tag formally identifies the attached lock and avoids potential confusion.

f) Before work begins:

i) Plan and discuss the job with your supervisor/team leader and co-workers as appropriate and identify the isolation points;

ii) Learn any ‘local’ procedures specific to the work site;

iii) Complete an ‘Out-of-Service’ tag and attach it to the isolation point of the plant to be installed, repaired or maintained;

iv) Follow isolation procedures;

v) Identify sources of energy coming into the plant or within the plant.

vi) Remember that energy fed into the plant may have more than one potential source and supply line and that there may be more than one potential source of energy (eg contents or parts of the plant may be able to move);

vii) Isolate, dissipate and restrain all sources of energy and engage locking devices where available;

viii) Complete and attach your Personal Danger tag(s) and lock(s) at each isolation point, and

ix) Recheck your controls. Ensure that all sources of energy have been isolated, dissipated and restrained and that all energy sources have been tagged and locked.

6.2 Checking for dead or positive isolation of plant

a) Checking for dead equipment or plant prior to commencement of work, can be achieved by the use of meters or test equipment if necessary.
b) Finally to determine that the equipment is ‘dead’ ensure any guards are in place and engage the start mechanism of the plant.

c) If the plant engages or moves, positive isolation has not been achieved and the plant controls are faulty, working on this item of plant could be very dangerous.

d) Turn off the item of plant at the main isolator, remove your Personal Danger tags and locks replace them with Out of Service tags and inform your supervisor of the incident. You must submit a KSC Incident Early Notification Report Form (WHSF0051).

e) If you have achieved isolation you may now work on the item of plant.

6.3 Safety Tags and Locks

6.3.1 Out of Service Tag

a) The Out of Service tag is black lettering on a yellow background with a caution symbol and complies with AS 1319.

b) Out of Service tags identify plant removed from service because a fault makes the plant unsafe to operate.

c) Anyone can place an Out of Service tag on equipment if they consider it to be unsafe or unserviceable and are required to immediately advise the appropriate maintenance service provider.

d) The Out of Service tag must be fully completed, signed/dated and indicate why the plant has been taken from service.

e) It is attached in a suitable location to prevent the operation of faulty or unsafe plant. For example, a faulty electrical appliance would have a tag placed within 300 mm of its plugged end.
f) Plant may need to be disconnected from energy sources, keys or other starting devices removed and locked away and/or locking devices installed to ensure that the plant cannot be operated.

g) Only the person originally attaching the Out of Service tag or a 'Competent Person' is permitted to remove an Out of Service tag. e.g.: an electrician would be a 'Competent Person.'

**Important Notes:**

Plant is taken 'Out of Service' because it is unsafe to operate or there is a risk of causing damage to materials, plant or personnel if operated. Workers or others must not attempt to operate out-of-service plant until the fault(s) has been rectified and any Out of Service tag(s) or Personal Danger tag(s) and lock(s) removed.

An Out of Service tag indicates plant is unsafe to operate. It does not indicate that the plant is safe to work on for maintenance or repair.

### 6.3.2 Personal Danger Tag

![Personal Danger Tag](image)

- **a)** The Personal Danger tag is coloured red and black on a white background and complies with AS 1319.

- **b)** It indicates that the plant to which the tag is attached is being worked on by the individual whose name appears on the tag and the plant cannot be operated.

- **c)** The tag must be completely filled in, signed/dated and indicate why the plant must not be operated.

- **d)** Personal Danger tags and locks must be attached to all switches/valves or other means of operating the plant whenever the operation of the equipment may cause injury to workers or others.
e) The Personal Danger tag and lock informs others that the plant is being installed or repaired and must not be operated.

f) Personal Danger tags **must** be placed in a location that will achieve positive isolation. **Emergency stop buttons and similar controls must not be used for isolation.**

g) The person whose name appears on the Personal Danger tag is the only person permitted to conduct work under its protection. **You are not permitted to work under someone else’s Personal Danger tag or lock.**

h) Personal Danger tags and locks must be removed by the worker at completion of a task.

i) If the worker is required to leave the work site for any reason the worker is required to remove the Personal Danger Tag and place a completed Out of Service tag in its place.

j) Both tags are single use only and when removed must be ripped in half and discarded appropriately.

k) All information placed on the various tags must be printed in ink, **not pencil.**

### 6.3.3 Safety Locks

a) Safety locks provide an additional level of protection when installing, repairing or maintaining plant.

b) Safety locks conjoined to a Personal Danger tag will be installed to secure the means of isolation.

c) Locks will be affixed through the appropriate isolation point with the keys removed to prevent accidental removal.

d) All keys to the lock will stay with the person responsible for applying the isolation.

e) In some instances the plant isolation mechanism may not be physically large enough to restrain the large numbers of required isolation devices.

f) 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.

### 6.4 Removing tags/locks

a) The unauthorised removal of any locks and/or tags will result in disciplinary action.

b) Check that the plant is safe to be returned to service and read the remarks on the Out of Service tag if affixed for additional information.

c) Tell everyone concerned that the plant will return to service and confirm that all guards have been reinstated.
d) Remove only the tag/lock with your own signature and destroy the tag.

e) Never remove or destroy another person’s Personal Danger tag or locking device.

f) Never operate plant while another person’s Personal Danger tag or locking device is in place.

**Important Note:**

Any person finding a loose completed isolation tag shall assume that it has been unintentionally detached from the isolation device and will immediately notify the work supervisor. The work supervisor will then ascertain which item of plant the tag belongs to and make the situation safe.

g) At times a piece of plant is required to be returned to operation and the isolation point contains one or more Personal Danger tags of people absent from the workplace. This may occur because workers take a break without removing their tags or they have left the workplace to retrieve tools or other materials.

i) The person requiring the plant will advise their work supervisor of the situation.

ii) The work supervisor will contact the individuals indicated on the tags and have them come back on site to remove the Personal Danger tags and locks.

iii) If this is not possible, or if the person cannot be contacted, the work supervisor will personally nominate a ‘Competent Person’ to investigate the situation to ensure that no person or plant will be endangered or damaged by the removal of the tag/lock by other than the signatory.

iv) The work supervisor along with the nominated ‘Competent Person’ would co-sign the Personal Danger tags, remove the locks and tags and submit them, along with a KSC Incident Early Notification Report Form (WHSF 0051) detailing the event, to the Manager and the WHS Support & Audit Officer within 24 hours of the incident occurring.

### 6.5 Supplies of Safety Tags

a) Safety tags will be available from the Stores in the Depot.

### 6.6 Competency Assessment

a) For various reasons it will be necessary to achieve a level of competency within various business units through the KSC.

b) Attachment 1 has been provided as part of this document to assist departments check for competency of participants and record these outcomes.

c) The assessment is in two parts.

i) A theory section comprising of seven (7) questions, and

ii) A practical section that will be conducted by the area Supervisor or mentor.
d) The participant will be required to obtain 100% accuracy to achieve competency.

e) The KSC person responsible for conducting this assessment is required to firstly determine if the participant has read this procedure.

f) If for some reason the participant cannot read or has difficulty understanding the content of this procedure, the Supervisor/mentor should read the procedure to the participant.

g) The Supervisor/mentor is to conduct this assessment on an individual basis with the participant.

h) Records of training and participant’s assessment are to be retained by Human Resources for a period of 7 years or for the period of the participant’s employment with KSC.

i) Training materials required for this section will include:

   i) a copy of the Safety Tag and Lockout procedure 5.6.8;

   ii) KSC ‘Out of Service’ tag & ‘Personal Danger’ tag;

   iii) Padlock and keys, a length of string, biro and other isolation covers/devices as required, and

   iv) A piece of plant that would normally be found in the participant’s workplace and is suitable for this assessment.

j) After successful completion of this assessment session the supervisor/mentor can present the participant with an Out of Service Tag and a Personal Danger Tag and lock for use within the area.

7 ATTACHMENTS

Attachment 1 – WHSF0068 Participants Assessment

The forms referred to in this procedure can be obtained from Human Resources or from Council’s Intranet

VARIATION

Council reserves the right to renew, vary or revoke this procedure which will be reviewed periodically to ensure it is relevant and appropriate.
PARTICIPANTS ASSESSMENT

Participants Name: ____________________ Business Unit: ____________________

Read questions 1 to 7 and choose the correct answer by placing a (x) or a (v) in the appropriate section marked True/False, if you make a mistake during the assessment, simply draw a line through the wrong answer and v the right answer.

1. Theory Section (Participant to complete)

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Kempsey Shire Council operates under a personal isolation system where each person working on plant shall be protected by their personal danger tag and their lock.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Before I begin work on a piece of plant in the workplace I am required to plan and discuss the job with my supervisor and co-workers as appropriate.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Only supervisors can place an ‘Out of Service Tag’ on equipment if they consider the equipment to be unsafe or unserviceable.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>‘Stop Buttons’ are suitable isolation points to attach Personal Danger Tags and Lock.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Personal Danger tags and locks will be used to secure the means of isolation to an item of plant.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>The only circumstance under which a ‘Personal Danger Tag’ or lock can be removed, is by the person who placed it on the equipment. In the event of this person being definitely unavailable, is by the Supervisor investigating the situation, after ensuring the safety of all personal involved.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Unauthorised removal of locks and/or tags could result in severe disciplinary actions being taken according to the Council Policy- Fair Treatment (SPOL-44)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Practical Section (Directly managed by the area supervisor/mentor)

<table>
<thead>
<tr>
<th>No.</th>
<th>Assessment item.</th>
<th>Competent</th>
<th>Not Competent</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.</td>
<td>Asked the participant to identify an ‘Out of Service Tag’ from the equipment available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Instruct the participant to correctly attach the ‘Out of Service’ tag to the appliance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Furnish the participant with a Personal Danger tag, lock, keys, bire and any other isolation covers as necessary. Instruct them to isolate the piece of plant and make it safe, as if they were preparing to conduct maintenance work on the item of plant.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. **Acknowledgement** (This section is to be completed by the participant & trainer after competency has been achieved)

I have read and understand the information provided to me for plant isolation and have successfully completed the summary questions at the conclusion of this training package. I have been issued with a copy of the KSC Safety Tag and Lock-out Procedure.

<table>
<thead>
<tr>
<th>Participants Name (Please Print)</th>
<th>Participants Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trainer’s Name (Please Print)</th>
<th>Trainer’s Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>