

Electrical Safety

Electrical Safety

- No work is to be carried out on live electrical equipment
- Any item of electrical equipment shall be assumed to be live until verified otherwise
- All equipment shall be isolated and verified prior to work commencing
- Safety interlocks must not be interfered with unless authorised by the Plant Owner.
- A written JSEA will be created to capture all hazards and their control measures that need to be put into place to ensure that by defeating the safety interlock it does not create risk to personnel or machinery. The written JSEA will be required to be signed off by the Plant Owner.

Electrical Safety

- It is not permissible to defeat safety interlocks for the purpose of making a task easier for Operators e.g. polishing rolls etc.
- Ensure follow up action is taken promptly to return interlocks to undefeated condition
- All portable RCD's units are required to be tested by the test button before use by the user of the equipment. If the RCD unit fails, the test it must be removed from service and an Out of Service Tag applied
- Any person receiving an electric shock, no matter how small, shall be escorted immediately to the MM Kembla, Port Kembla Medical Centre

Releasing a Victim from Live Low Voltage Equipment







- If possible and safe to do so – de-energise the power supply
- If a flexible power cord cable is present, switch off the supply and remove the plug from the socket.
- Only those persons appropriately trained and competent in Low Voltage Release and Rescue shall attempt a rescue.
- For low voltage. If it is not possible to switch off or break the current, remove the person from contact by using non-conductive dry materials e.g. heavy duty insulated gloves, insulated rescue crook located in the Low Voltage Rescue Kit etc.
- Use extreme caution if the skin at the point of contact or the ground is wet, as water conducts electricity.
- Ensure all plant is isolated and has been made safe.
- Continue with first aid response and assist the affected person only when you are sure it is safe to do so

Safe Approach Distances for Overhead Lines

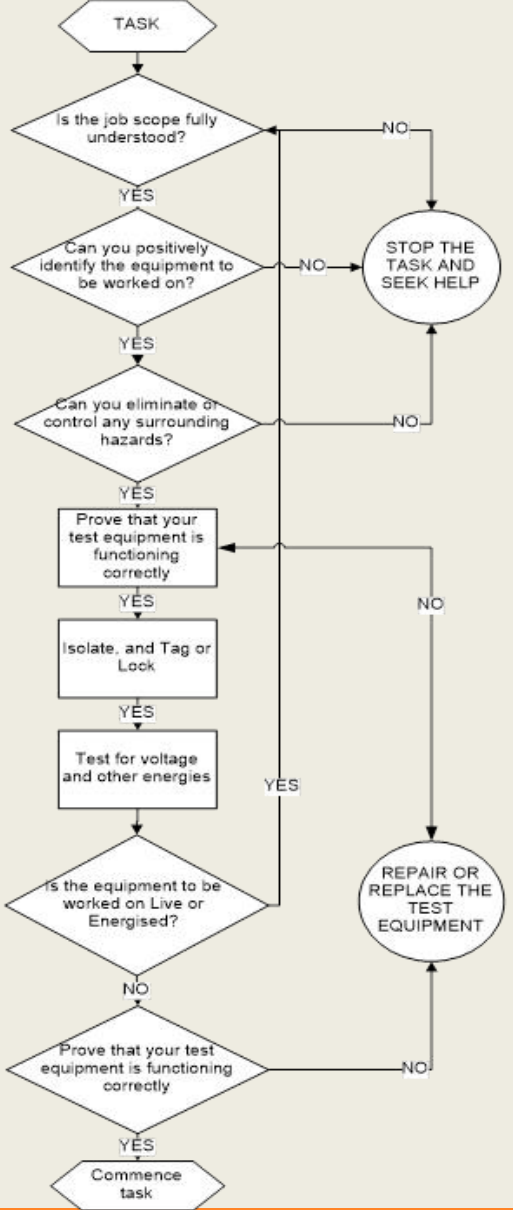
| Overhead Power Line Voltage | Approach Distance 'X' |
|-----------------------------|-----------------------|
| Up to 132kV | 3 metres |

- If any power lines have fallen it must be immediately reported to Phone Number 222.
- No person or vehicle can come within 8 metres of the fallen conductor.
- The person reporting the incident must stay in the area to warn others of the issue until they are relieved by a response person. They are to maintain the 8-metre exclusion zone for themselves and others at all times.
- No person shall handle the cable or come within the 8-metre exclusion zone until the cable is isolated, proved de-energised, shorted and earthed.

Site Electrical PPE Requirements

| <p align="center">Figure 2.1.1 MM Kembla, Port Kembla Electrical Workers PPE Policy</p> <p>Base Level of PPE for Electrical Workers:</p> <ul style="list-style-type: none"> - Safety Hard Hat to be worn until it is not possible to do so. Your JSEA will detail why. - Safety Glasses. - TIG pigskin gloves to be worn until it is not possible to do so. Your JSEA will detail why. - No exposed metallic jewellery, watches, keys, rings etc. | | | Arc Rated Shirt | Switching Jacket/ Heavy Cotton Drill Shirt | |
|---|---|---|---|--|--|
| TASK | FAULT LEVEL | |  |  | |
| | LOW VOLTAGE SUPPLY LESS THAN 100 AMPS | LOW VOLTAGE SUPPLY MORE THAN 100 AMPS LESS THAN 400 AMPS | | | LOW VOLTAGE SUPPLY MORE THAN 400 AMPS |
| Operating Work (Switching, Isolating, removing fuses and links) | Heavy cotton drill shirt + Safety Helmet + Safety Glasses Note: Arc Rated Pants and Shirt, collar up and top button done + Flame Resistant Gloves if removing fuses and links. Refer to Photo 5 or 6 | Arc Rated Pants and Shirt, collar up and top button done + Flame Resistant Gloves + Safety Helmet + Safety Glasses Refer to Photo 3 or 4 | Arc Rated Pants and Shirt collar up and top button done + Flame Resistant Gloves + Safety Helmet + Safety Glasses + Face Shield Refer to Photo 1 or 2. |  |  |
| Isolation Verification, Testing, or Fault Finding | Arc Rated Pants and Shirt, collar up and top button done + Flame Resistant Gloves + Safety Helmet + Safety Glasses Refer to Photo 3 or 4 | Arc Rated Pants and Shirt, collar up and top button done + Flame Resistant Gloves + Safety Helmet + Safety Glasses Refer to Photo 3 or 4 | Arc Rated Pants and Shirt collar up and top button done + Flame Resistant Gloves + Safety Helmet + Safety Glasses + Face Shield Refer to Photo 1 or 2. |  |  |
| Working (Isolated and Verified) | Heavy cotton drill shirt or Arc Rated Shirt + Safety Helmet + Safety Glasses + Flame Resistant Gloves if JSEA requires them to be worn. Refer to Photo 5 or 6 | Heavy cotton drill shirt or Arc Rated Shirt + Safety Helmet + Safety Glasses + Flame Resistant Gloves if JSEA requires them to be worn. Refer to Photo 5 or 6 | Heavy cotton drill shirt or Arc Rated Shirt + Safety Helmet + Safety Glasses + Flame Resistant Gloves if JSEA requires them to be worn. Refer to Photo 5 or 6 | | |
| <p>Notes:</p> <ul style="list-style-type: none"> -The PPE in this chart sets the minimum requirements, however a JSEA may direct an elevated use of PPE. -Switching Coat can be worn with a heavy cotton drill shirt in the event of Arc Rated Shirt not being available. - If the current level cannot be determined the highest level (Red) of PPE must be worn. | | | <p align="center">HIGH VOLTAGE PPE</p> <p>PPE for all High Voltage Operating Work and Isolation Verification, Testing or Fault Finding is Switching Coat + Flame resistant gloves + Safety Glasses + Face Shield. PPE for working is same as above. Refer to Photo 2.</p> | | |

“Test Before You Touch” Isolation Flowchart



End Of Induction Presentation

TO COMPLETE THE INDUCTION, YOU WILL NEED TO COMPLETE THE ONLINE ASSESSMENT VIA THE WEBSITE YOU ACCESSED THIS PRESENTATION.

PLEASE CONTACT MM KEMBLA IF YOU ARE NOT ABLE TO ACCESS THE ASSESSMENT.