Authorisation – Access to High Voltage Vicinity

WHS-PRO-CHK-025k

JAMES COOK UNIVERSITY AUSTRALIA

Electronic copies of this checklist are current. All other copies are uncontrolled and currency can only be assured at the time of printing

This authorisation also includes excavation work within 3 metres of
Padmounts / Switching Substations (huts) / Stays / Underground Cables / HV Equipment

Section 1: To be Completed by the Contractor

Work order number:				
Permit validity:	Start		End	
This permit is issued to:	Organisation/Company:			
	Contact name:			
	Contact Telephone Number:			
Location of activities (attach plan or map):				
Type of Powerlines:	☐ HV overhead ☐ HV underground			
Distance from lines?				
Reason for and description of activities:				

a. **Overhead services safe approach limits**

	Activity	Assessment
1	What is the voltage of the powerline?	Volts
2	What is the maximum reach of plant?	Metres
3	What is the clearance distance between powerline and plant?	Metres
4	Is the approach distance within prescribed clearances?	Y/N
5	Based on distances, will a spotter be required?	Y/N
6	Do powerline risks need to be controlled by isolation or placed into a protected state?	Y/N
7	Based on the distance, is a SWMS required?	Y/N

b. **Electrical Isolation:**

Will the power lines be electrically isolated for the duration of the work? ☐ Yes ☐ No

If HV lines have been isolated, workers must sign on to JCU authorised HV Switching Contractor HV access permit for the work (provided by the HV switching contractor).

Isolation being conducted by:

☐ Ergon

☐ JCU approved HV contractor. Name of contractor: _____

c. **Safety Observer (spotter):**

A safety observer is required to be present at all times? ☐ Yes ☐ No
NOTE: Mandatory if there is a risk of any person, equipment or plant entering the exclusion zone.

Safety observer details: Name: _____ Company: _____

The safety observer is trained and competent to perform the role in observing, warning and communicating with the plant operator: ☐ Yes ☐ No

d. **Risk Assessment (or SWMS):**

A job specific risk assessment (which maybe in the form of a SWMS) is attached to this permit?
☐ Yes ☐ No

Section 1 Completed by (Contractor):

Acknowledgement:

☐ I have attached works methodology description

☐ I agree to terms and conditions listed in this document

☐ I will stop work if conditions change and immediately report to the JCU Representative

Name:		Signature:		Date:	

Section 2: To be Completed by JCU Reviewer

JCU Reviewer - HV keyholder only:

Reviewed: ☐ **Acceptable** ☐ **Unacceptable**

Comments:

Name: Signature: Date:

Terms and Conditions:

a. **Methods of Excavation:**

Hydrovac conditions within 3m of electrical assets:

- Electronically detect (Ultrasonic and Wand) the excavation zone to narrow down the High Voltage Cable location.
- Hydrovac System Fitted with:
  - Nonconductive (neoprene rubber or equivalent) vacuum (suction) hose
  - Oscillating nozzle on pressure wand with water pressure adjusted to not exceeding 2000psi within the cable zone.
- Maintain a minimum distance of 200mm between end of pressure wand and underground electrical assets. DO NOT insert the pressure wand jet directly into subsoil.
- Ensure pressure wand is not directly aimed at underground electrical assets (cables/equipment).
- HV spotter is required – must be authorised and instructed on the actual HV network and approved by JCU.

Potholing using hand tools

- Using a round nose, non-conductive (timber or fibreglass) handled shovel, is considered a safe method for excavation.
- Picks, mattocks, crow bars, sharp edged appliances, or any hand held impact tools such as pneumatic drills and electric jack hammers are not to be used.

b. **Padmounts / switching substation (huts) / stays:**

The following Padmounts / switching substations additional excavation rules to those above apply:

- Grading rings surround padmount and switching substations. Earth cabling must not be broken while excavating.
- Mechanical excavation is not permitted within the Earth Grid Zone surrounding the padmount and potholing / positive asset location used to identify grading rings location.
- Damaged or broken earth wires and stakes may pose a severe electrical shock risk. Call the Estate Directorate project Supervisor immediately, remain clear and keep others clear until assistance arrives.

The following distances must be maintained for excavations near stays / power poles:

- 3000mm distance from pole or stay
- 1800mm depth within the 3000mm from pole or stay