

## Working in accordance with an electrical permit

### Target audience

Authorised Person Mains, Authorised Person Substations, Accredited Substation Permit Holders, Accredited Permit Holders, Transport for NSW, and Sydney Trains' workers, including contractors, who undertake work on or around Sydney Trains Electrical Network.

### The Issue

A recent possession to undertake Overhead Wiring Works on the Sydney Trains' Network involved an incorrect decision to use a hi-rail track access point other than the designated access point for the workgroup. This resulted in works being undertaken outside the *Safe Work Area* and within the *Safe Approach Distance* (SAD) of Live 1500-volt overhead wiring.

An investigation into the incident identified the following contributing factors:

- While the delineation markers used to protect the limits of the worksite location were in place, the worksite limits were exceeded by the hi-rail plant (Plant), resulting in the Plant being parked on top of the delineation marker.
- Workers failed to request approval for the change of track access point location from the *Electrical Permit Holder*.
- Workers failed to gain authority to proceed past the worksite limits from the appropriate safeworking personnel.
- Plant operators failed to identify they were exiting the limits of the *Electrical Safe Work Area* as recorded on the *Electrical Permit to Work* (Permit).
- Hazard awareness was absent when the workers assessed the travel path to the new track access point.

### What you must do

The **Authorised Person** issuing the Permit must ensure that the:

- electrical equipment has been isolated, tested dead and rail connected or earthed;
- prospective permit holders listed on the Permit are all Accredited to hold the Permit;
- prospective permit holders have been instructed in accordance with the relevant Permit System documented in the *Electrical Network Safety Rules*; and
- Permit Holder understands all details of the Permit prior to writing their name and signing on the Permit in acknowledgment and acceptance of the associated responsibilities.

As a **Permit Holder**, you shall ensure understanding of the requirements of the Permit (both sides) and that:

- the Permit fully describes the work to be carried out;
- the Permit describes the plant and machinery being used for the work;
- the work process is understood and adequately controlled so that persons carrying out the work for which the Permit was issued do not work beyond the limits of the electrically safe work area (the Permit Holder may use appropriate markers to assist in the control of the work process);
- the arrangements set out in "Permit Holder requirements" and "Pre-work requirements" in the Permit are in place;
- the Permit is always retained on site until all workers are signed off and the permit is returned by Permit Holder to the Authorised Person (Mains) to be cancelled; and
- anyone who has signed off the Personnel Register understands that permission for them to carry out work for which the Permit was issued has been withdrawn.

**All persons (including the Permit Holder)** carrying out work as per the issued Permit are instructed, warned and understand:

- which equipment is covered by the Permit and is safe to work on or near;
- that all other exposed electrical equipment shall be treated as live for the purposes of this Permit;
- that no work is to be carried out, on or near the isolated equipment in the electrically safe work area, other than that specified on the Permit;
- not to allow any part of their body, clothes, tools, material, or machinery they may be using or carrying to come within the minimum SAD of exposed electrical equipment, other than the isolated equipment in the electrically safe work area;
- that work process controls have been put in place and that they shall not pass over or under any work area access markers, safety fences, demarcation tape or special barriers placed in connection with the Permit; and
- to comply with the instructed process for exiting and re-entering the Electrically Safe Work Area of the worksite. This includes plant movement along the track and from the worksite to/from track access points.

**If, for any reason the Permit Holder can no longer adequately control the work process for the work for which the Permit was issued, all persons signed on Permit shall cease the work for which the Permit was issued until the Permit Holder is again able to control the work process, after which that work may recommence.**

Contact your Line Manager, SEQR Representative or the [Sydney Trains' Electricity Distribution Unit](#) if you have any questions.



Chadi Chalhoub

Executive Director SEQR