

## **SOUTH CENTRAL RAILWAY**

**Safety.387/Fly Leaf/09/2022**

**Fly Leaf No. 09 / 2022**

**Attention..... All Concerned .....**

### **GENERAL SAFETY PRECAUTIONS TO BE OBSERVED IN OHE TERRITORY**

#### **S&T Department :**

##### **DOs**

- ✓ Warn the staff about the danger of coming in close contact to the live traction overhead wires within 2 m.
- ✓ Do report any abnormality in OHE which may adversely affect safety to the TPC. If the damage is heavy or the moving dimensions are infringed take steps to protect the lines.
- ✓ While working on signal posts, keep away from OHE live conductors. If necessary, take 'power block' and 'permit to work' from TRD.

##### **DON'Ts**

- ✗ Do not work on any portion of a signal post or its fittings falling within a radius of 2m from 25 KV live OHE unless such portion is protected with a metallic screen or power to the live OHE has been switched 'off' and a 'permit to work' has been obtained. Paint a red band of 10cm wide all around the signal post at a height of 3m above the rail level at such locations. Counsel the staff accordingly.
- ✗ Do not depute the staff to work on a signal post where protective screen is not provided.
- ✗ Do not carry out any works within a distance of 2m from the live parts of overhead traction wires unless they are made dead and earthed; and 'permit to work' is obtained.
- ✗ Do not use steel measuring tapes or long metallic wires rod or levelling staff.
- ✗ Do not disturb track bonding / earthing of TRD installations.
- ✗ Do not touch the two ends of fractured rails with bare hands.
- ✗ Do not change track circuits without the knowledge of Traction Staff.

#### **Engineering Department :**

##### **DOs**

- ✓ Warn all the staff about the danger of coming in close contact to the live traction overhead wires within 2m.
- ✓ All staff to report immediately about any abnormality on the OHE which may adversely affect safety to the TPC. If damage is heavy or the moving dimensions are infringed take steps to protect the lines.
- ✓ The risk of direct contact with the live OHE is ever present while working in electrified sections such as for painting of steel work of through spans of bridges

and platform covered sheds, etc., Therefore no work shall be done within a distance of 2m from the live OHE without 'permit to work'. Also, no tool or any part of the body of the worker comes within the danger zone.

- ✓ The return current in the rails may cause a potential difference between two ends of a fractured rail and at an insulated joint, etc., provide temporary electrical connection invariably.
- ✓ When unloading the rails along the side of the track, do ensure that rails do not touch each other to form a continuous metallic mass of length greater than 300m.
- ✓ During maintenance / renewal of track, continuity of rails shall invariably be maintained. For bridging gaps which may be due to removal of fishplates, breakage of rail etc., jumpers to be provided. The two ends of fractured rail should be temporarily connected by metallic jumpers of approved design taking necessary precautions.
- ✓ Since relaying unit involves removal of existing rails along with all the different types of traction bonds, provide temporary jumpers for passage of return current till such time the permanent bonds are fixed to the new rails.
- ✓ Maintain implantation as per SOD in consultation with TRD.
- ✓ In track circuited area, do not bridge insulated jointed rails with bare hands or with any metallic article. Also, do not have simultaneous contact with an insulated section of rail and non-insulated section of rails. Ensure availability of TRD, S&T staff at site for removing and replacing the traction bonds and jumper / bonding connections wherever required. Cancel the block to resume the normal traffic only after ensuring that traction bonds / cable jumpers have been reconnected by TRD, S&T staff.
- ✓ Do take care when carrying or handling long pipes, poles, ladders, overhanging on shoulders which may inadvertently come in contact with or within 2m of live OHE.
- ✓ Do always keep clear of all materials, the top of foundation block of OHE mast. Keep the top of foundation blocks of traction structures clear of all materials and tidy.
- ✓ Do give notice of 48 hours in advance to the TRD staff having alteration to alignment or level of track / relaying work of any major work on track in electrified territory is carried out.
- ✓ Do ensure that while excavating or digging near a mast foundation, the foundation is not exposed. All such works to be done under intimation to TRD staff.
- ✓ At LC Gate, do maintain approaching road levels such that the clearance between the top member of the LC gauge above the road level shall be a maximum height of 4.78m and contact wire shall be at a height of minimum 5.5m above the rail level at level crossings.
- ✓ Provide continuous protective screens / parapet walls on all FOBs / ROBs and also ensure commissioning of FOBs only after completion of the work with all statutory provisions like screening, electrical earthing of FOBs steel work etc., Until then, the entry for FOB under construction shall be physically blocked for the use of public.
- ✓ While working on service buildings and structures in the proximity of OHE, do exercise special care to ensure that tools, measuring tapes, materials, welding cables are not placed in a position where they are likely to fall or may come in contact with OHE.

- ✓ While carrying excavation works adjacent tracks and cable routes in an electrified area, take adequate precautions for the safety of staff and to avoid damage to underground cables and rail bonds.
- ✓ No crane shall be worked adjacent to OHE unless OHE is made dead and earthed and authorised OHE staff is present.
- ✓ In case of wire snaps at level crossing, the Gate Keeper shall immediately make arrangements to stop all road traffic and inform the nearest SM / TPC / OHE section in-charge.
- ✓ As far as possible, use closed wagons for Engineering Material train.
- ✓ No part of a tree shall be nearer than 4m from the nearest live conductor. Any tree or branches likely to fall on live conductor should be cut or trimmed periodically to maintain this clearance.

### **DON'Ts**

- ✗ Do not use steel measuring tapes, metal tapes, tapes with woven metal reinforcement, metallic levelling staff and long metallic wire rods on the electrified track.
- ✗ Do not touch fallen or hanging traction wires. In case the wires drop at a level crossing, the Gate Keeper shall make arrangements to stop all road traffic and keep the public away.
- ✗ Avoid contact with the rails when an electrically hauled train is within 250m.
- ✗ Do not touch two ends of the rail with bare hands. Gloves of approved quality shall only be used.
- ✗ Do not carry out any works within a distance of 2m from the live parts of overhead traction wires unless the traction wires are made dead and earthed and 'permit to work' is obtained from TRD.
- ✗ Do not cut or trim a tree near the traction OHE without the presence of an authorised traction staff and without obtaining 'permit to work' from TRD.
- ✗ Do not disturb track bonding or bonding provided to OHE structures. If any bond is disconnected / disturbed, immediately inform the traction staff.
- ✗ Do not remove / loosen the fishplates without making a temporary connection with a jumper or approved design.
- ✗ Do not bridge with bare hands or any metallic articles, the insulated joints or rails in track circuited area.
- ✗ Do not have simultaneous contact with an isolated section of rail and non-isolated section of rail of the same or other track.
- ✗ Do not use rails as route path for sitting or for such other purposes.
- ✗ Do not carry long pipes, poles, ladders, vertically which will come within the danger zone of 2m of live overhead traction equipment.
- ✗ Do not open temporary jumper without informing the TRD staff.
- ✗ Do not hang / keep loose the welding cable while ROB works are under progress.
- ✗ Do not raise the rail level under FOBs, ROBs and other over line structures. Do not slew track / realign without the knowledge of traction staff.
- ✗ Do not use any kind of tools or metal articles such as paint pots, oil case, metal bars, etc., which can be either lifted or be dropped or be carried by the wind on to the live OHE.

## **Mechanical Department (C&W and LOCO) :**

### **DO's**

- ✓ Warn all staff about the danger of coming in contact with the live traction within 2m.
- ✓ All staff to report immediately about any abnormality on the OHE which may adversely affect safety to the TPC. If the damage is heavy or the moving dimensions are infringed, take steps to protect the lines.
- ✓ No crane shall be worked on or near OHE unless an authorised representative of OHE is present. When so working, care shall be taken to avoid hitting or damaging OHE structures.
- ✓ Observe Caution Orders and signals exhibited by OHE staff working at site.

### **DON'Ts**

- ✗ Do not climb / get on to the locomotives / carriages standing below the OHE unless the OHE is made dead and earthed.
- ✗ Never direct a jet from a hose towards OHE while filling water, the jet of water should only be directed horizontally far away from the live OHE and not vertically.
- ✗ Do not carry long poles or any other articles which may come within the danger zone of 2m of the live traction wires.
- ✗ Do not open water filling hydrants till the other end of the hose pipe has been inserted in the tank of the carriages. Do not withdraw the hose pipe from carriage tank till the hydrant is closed. This is necessary to avoid accidental contact of a water jet with the live overhead traction wires.
- ✗ While attending the diesel loco, do ensure that tools do not get within the danger zone of 2m of the OHE.

**PRINCIPAL CHIEF SAFETY OFFICER**

**SAFETY ORGANISATION**

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