

DALMIA CEMENT (B) LIMITED – CEMENT PLANT DALMIAPURAM



Issue No. 02 Rev. No: 01 Effective Date: 22.05.2015 SOP/Elect /03

Issued By: S & P Approved By: Elect. & Inst Head

SOP for Transformer Maintenance

Scope/Purpose: This Procedure to establish and maintenance of Transformer

Responsibility : Section Engineer – Electrical

Accountability : Head-Electrical

PPE:

1. Safety helmet,

2. Safety shoe,

3. Rubber Gloves.

Tools:

- 1. Tester
- 2. Megger

Hazard Analysis:

Risks associated Mitigating Measures

Electric Shock Use of proper tool, Rubber Gloves

Oil Slippery

Training needs:

1. Usage of tools and Nature of Hazards

Procedure:

DO'S:-

- 1. First switch "off' the transformer secondary side breaker and then primary side breaker.
- 2. Draw out the breaker carefully.
- 3. Discharge transformer secondary and primary terminals by proper earth rods.
- 4. Put the earth rods on the transformer terminals.
- 5. Display "Men working boards at secondary and primary side" of the breakers.
- 6. After the maintenance job is completed remove the earth rods, and megger test the transformer, if required.



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- 7. Check the oil level in Buccholtz relay and conservator tank.
- 8. Check for any oil leakage in the transformer.
- 9. Ensure body and neutral earth connections are properly connected to Earth pits.
- 10. Ensure that there is no abnormal heat and sound in the transformer while working.
- 11. Check the Silica gel condition in Breather, if it loses its property (Blue color) then change it with new one.

DON'TS:-

- 1. Don't start the work before switching "off" the transformer.
- 2. Don't touch the transformer primary and secondary terminal before discharging.
- 3. Don't over load the transformers at any time.
- 4. Don't disconnect the Neutral Link when transformer is ON.

Emergency / Emergency Shut OFF:

1. If any injury is there, first aid will be given and inform to the safety department or call Emergency number 523 / /9865177444/9865195111.

Records/Annexure:

- 1. Register for Maintenance of Transformer
- 2. JSA is enclosed below.



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JOB SAFETY ANALYSIS:(JSA)

| Job Safety Analysis | Job: Transformer Maintenance | Date: | Analysis by: | Reviewed by: |
|---|--|------------------------------------|------------------------|-----------------------------|
| Title of employee doing job: Permanent/ Contract labour | Supervisor: Section Engineer | Department: Electrical | Section: Plant | Approved by: |
| Req'd/recommended PPE: | Safety helmet, Safety shoe, & Rubber Gloves. | | | |
| Sequence of Basic Job Steps | Potential Hazards | Recommended Safe Job Procedure | What Could Go Wrong | Corrective Action |
| Check the oil level | Oil leakage | Don't leak the oil into the Ground | Slippery may occur | Provide drum for collection |

HEAD E & I HEAD TECHNICAL