

DALMIA CEMENT (B) LIMITED – CEMENT PLANT DALMIAPURAM



Issue No. 02 Rev. No: 01 Effective Date: 22.05.2015 SOP/Elect /15

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

SOP For Earth Pit Maintenance

Scope/Purpose: This Procedure to establish and ensure safe method of Earth Pit Maintenance

Responsibility : Section Engineer – Electrical

Accountability : Section Head - Electrical

PPE:

1. Safety helmet,

2. Safety shoe,

3. Rubber Gloves.

Tools:

- 1. Insulated tools
- 2. Discharge rods & Earth spike, Hammer
- 3. Earth Meggar
- 4. Insulsted wires

Hazard Analysis:

Risks associated Mitigating Measures

Electrical shock Use of proper insulated tools & Proper handling

Training needs:

- 1. Usage of tools and precaution against Hazards occurring
- 2. Usage of PPEs
- 3. Testing procedures

Procedure:

- a) Get work permit from the concerned Electrical section in-charge.
- b) Check possibility for any physical hazards in and around the Earth pit.
- c) Connect earth rods before disconnect the earth flats from earth pipe.



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- d) Use ISI tested Rubber Hand gloves during earth flat disconnection & re-connection works.
 - e) Check the earth pit Value as per Earth pit measurement procedure.
 - f) Normalize the earth pit conditions.
 - g) If the physical condition of the earth pipe is corroded &damaged then corrective action to be taken.
 - h) Apply grease over the connecting bolt and nut to avoid rusting.
 - i) Watering to be done at regular interval to the pit to increase the conductivity and reduce the resistance.

Emergency / Emergency Shut OFF:

- 1. If any injury is there, and inform to the safety department or call Emergency number 251 / 254 / 568 /9842994062.
- 2. Also Elect. Shift 251, CCR-KHD- 233, CCR FLS-555 and Time office-222

Records/Annexure:

- 1. Earth pit maintenance Register
- 2. JSA is enclosed below.



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JOB SAFETY ANALYSIS: (JSA)

Job Safety Analysis	Job: Earth pit maintenance	Date:	Analysis by:	Reviewed by:
Title of employee doing job: Contract Employee	Supervisor: Section Supervisor	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
Removing/ Fixing the earth pit top cover slab.	Injury due to fall of slab / material	Proper handling of Weight objects	Slip while displacing the slabs	Sufficient man power to handle the weight.
Cleaning inside the earth pit.	Insects bite may be there	Cleaning of pit with shovel and crow bar	Movement of person may be restricted	Earth pit surrounding & inside to be keep cleaned.
Earth flat disconnection & re-connection	Electric shock	Proper discharging & Earthing to be done	Usage of Improper tools & Non availability of alternate Discharge path	Usage of proper tools & Proper arrangement of Alternate discharge path
Measuring Earth pit value	Electric shock	Safe operation procedure	Improper measuring tools	Usage of Proper instruments

HEAD E & I HEAD TECHNICAL