



**DALMIA CEMENT (B) LIMITED – CEMENT PLANT
DALMIAPURAM**



Issue No. 01	Rev. No: 00	Effective Date: 01.03.2016	SOP/Elect /25
Issued By: S & P		Approved By: Elect. & Inst Head	
SOP For LRR Maintenance (SPRS Related)			

Scope/Purpose : This SOP is applicable for safe working during LRR Maintenance

Responsibility : Section Supervisor – Electrical

Accountability : Section Head - Electrical

PPE:

1. Safety shoe
2. Safety Helmet
3. Nose mask
4. Rubber Gloves

Tools:

1. Box Spanner set
2. Ring Spanner set
3. Insulated electrical tools
4. Earth discharge rod

Hazard Analysis:

Risks associated

Injury due to electric shock
Injury due to fall of materials

Mitigating Measures

Ensure LOTO and OFF condition of all electrical circuits
Ensure proper handling mechanism

Training needs:

1. Emergency Preparedness
2. Maintenance and operation exposure of LRR

Procedure:

- a) Get work permit from the concerned Electrical Section Supervisor.
- b) Ensure Power circuit & Control circuits are in Switched OFF condition (HT feeder, HT & LT Isolators, SPRS panel).
- c) Check & clean the control cubicle.



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- d) Check & clean the Short circuit contactor.
- e) Check & clean the fixed & moving electrode assembly.
- f) Check phase barriers, supporting insulators & LRR tank condition.
- g) Check Electrolyte level & Electrolyte Specific gravity. Add electrolyte, if required.
- h) Check & clean Pilot motor & moving mechanism. Apply lubrication, if necessary.
- i) Check End limit sensors & limit switches.
- j) Check Electrolyte temperature sensor & level sensor.
- k) Check electrolyte circulating pumps.
- l) Check Heat exchanger.
- m) Check LRR operation in manual/Local mode. After checking in manual/Local mode, put LRR in Auto mode.
- n) Return the Work permit.

Emergency / Emergency Shut OFF:

1. If any injury is there, inform to the Electrical Shift Engineer (251 / 9842994062) or Safety Department (523) or call Emergency number 9865160055

Records/Annexure:

1. JSA is enclosed below.



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JOB SAFETY ANALYSIS: (JSA)

Job Safety Analysis	Job: LRR Maintenance	Date: 18.11.2015	Analysis by: J.Chandrasekaran	Reviewed by:
Title of employee doing job: Electrician	Supervisor: Section Supervisor	Department: Electrical	Section:	Approved by:
Req'd/recommended PPE: Safety Shoe, Safety Helmet, Nose Mask & Rubber Gloves.				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Checking Power & Control circuit	Exposure to Live circuit	Use Rubber Gloves & Insulated tools	Damaged Tools	Periodic inspection & Replacement
Clean the LRR by Air blower	Dust emission	Use Nose Mask	Damaged Nose Mask	Periodic Replacement
Manual operation of LRR	Injury due to Bounce/Slip of handle	Ensuring proper engagement of Gear wheel operating Handle	Damaged Handle / Handle lock mechanism is not in tact	Before manual operation, Ensure the Handle condition & Handle Lock mechanism