**Standard Operating Procedure**

**Electrical Preparation**



**ODISHA MINING CORPORATION LTD.**

**KODINGAMALI BAUXITE MINE**

**Authorized By**

**Purpose:** This procedure is to establish and ensure safe electrical preparation work in mines.

**Responsibility:** Electrical I/C

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| **PPE:**   1. Safety helmet 2. Safety shoe 3. Rubber Gloves 4. Nose Mask 5. Fluorescent jacket 6. Safety goggles. | **Tools:**   1. Tools as per job 2. Lock for LOTO | **Training needs:**   1. Usage of tools and Nature of Hazards 2. Usage of PPEs 3. Line of Fire 4. Electrical Hazard 5. Work at Height |

**Definition:**

**LOTO:** Lock Out Tag Out.

**Authorized Personnel:**  Person authorized by mine manager who is qualified and trained.

**Procedure:**

1. Maintenance and repairs shall only be carried out by qualified and trained personnel.
2. Every person working on an electric supply line or apparatus shall use gloves, rubber shoe, safety belt, ladders, earthling devices, helmet, and line tester to protect from mechanical & electrical injury.
3. Ensure the lock out and tag out system of isolating the electrical and mechanical equipment before starting of the work.
4. Always observe correct polarity. Always disconnect battery leads before carrying out any maintenance to the electrical system. The battery contains sulphuric acid, an electrolyte which can cause severe burns and produce explosive gases. Avoid contact with the skin, eyes or clothing.
5. No person shall work on any line or apparatus and no person shall assist such person unless he is authorized in that behalf.
6. Take precautions to protect others in the area where electrical equipment is being used.
7. All electrical tools and appliances will be double insulated.
8. The caution board to be displayed on the equipment, where maintenance job is carried out.
9. Prior to operating electrical powered tools and equipment, ensure that you are working on a dry surface.
10. Always stand to the side of a service box when resetting a breaker.
11. Do the electrical maintenance as per the check sheet at a specified intervals.
12. No electrical panel, switchboard or wiring shall be left open without protection, Use Tags and close when not within the immediate vicinity.
13. Check the Provision and condition of interlocking system, sequential operation system is incorporated.
14. The power fuse along with work permit duly signed by shift in-charge to be handed over to the permit for carrying out the job. The copy of the work permit to be kept at the control room for the information.
15. Ensure the Earthing and inspect regularly for all the equipment.
16. Use only original fuses with the specified current rating, Switch off the plant immediately if trouble occurs in the electrical system.
17. When working with the plant, maintain a safe distance from overhead electric lines. If work is to be carried out close to overhead lines, the working equipment must be kept well away from them.
18. After completion of job, the permit should return back the power fuse & work permit to shift in-charge after signing in work permit.
19. On completion of work, test the equipment for safe operation.
20. To ensure that all electrical installations and equipment is maintained and operated safely and that static electricity hazards are minimized.