**WORK INSTRUCTIONS FOR PCM MOULD HEATING BY FIRE WOOD**

**Criteria:** Safe handling of flame during heating

**Responsibility**: PCM Incharge

**Identified Hazards**:

**Mechanical Hazard:**

1. Burn injury due to diesel fire
2. Contact with hot fumes
3. Inadequate local lighting
4. Fall of material from height
5. Nonuse of PPE
6. Fall of a person from height
7. Improper housekeeping

**Electrical hazard:**

1. Damage of electric cable due to flame
2. Electric shock

**Significant aspect:**

  Smoke in the area

1. Ash generation
2. Heat Generation
3. Land contamination

**Heating by fire wood**

1. Unauthorized operation or repair of any equipment is a punishable offence.
2. Use of safety goggle, hand gloves, protective clothing and other PPE viz helmet, shoes, and dust mask is must.
3. Before starting activity PCM Incharge should ensure that electrical shut down of lime pump and PCM is taken. Ensure lime pump is in stop condition during PCM heating.
4. Place one bucket (1.5 m3) of fire wood and cotton jute if available below PCM around tail end by maintaining minimum gap between fire wood and moulds.
5. PCM in charge should ensure that there are no power cables around place of fire.
6. Make fire wood/cotton jute wet by spreading diesel on it.
7. Light the torch and put the fire to fire wood by maintaining a safe distance of minimum one meter. Give air support if needed.
8. Clear the shutdown of PCM & Start the PCM and keep one person to monitor the flame.
9. Heating to be kept on for min. 30min. and temp of mould should be min. 50degree.
10. Pouring to be started immediately before flame vanishes.
11. People working in the area to be made aware of the process.

|  |  |  |
| --- | --- | --- |
| **Prepared By:**  Head – Production PID I | **Reviewed & Issued By:**  Management Representative | **Approved By:**  Head – Pig Iron Division |
| **Signature:** | **Signature:** | **Signature:** |
| **Date: 15.07.2022** | **Date: 15.07.2022** | **Date: 15.07.2022** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Amendment Record** | | | |
| **Revision date** | **Manual Section ref. and para** | **Brief details of revision** | **New Revision No.** |
| 12.07.2021 | Procedure for mould heating by firewood | Point no 7,8 | 05 |
| 15.07.2022 | Procedure for mould heating by firewood | Change in format | 06 |