|  |  |  |  |
| --- | --- | --- | --- |
|  | **VEDANTA LIMITED –**  **VALUE ADDED BUSINESS** | **Format No.:** | **FRMT/MR/10** |
| **INTEGRATED MANAGEMENT SYSTEM** | **Revision Date:** | **04.04.2022** |
| **HAZARD IDENTIFICATION** | **Revision No.:** | **02** |
| **Page No.:** | **1 of 1** |

|  |  |
| --- | --- |
| **Departmental Use Only** | |
| **Revision No: 03** | **Unit: PID-1** |
| **Revision Date: 10.12.22** | **Dept.: Mechanical** |

A. Work activity information

|  |  |  |
| --- | --- | --- |
| **Sr.No.** | **Details** | **Remark** |
| 1) | Task being carried out, their duration and Frequency: | Ladle inspection and lining procedure.  8 hrs/ shift  Daily |
| 2) | Location (s) where the work is carried out. | Blast Furnace accessories |
| 3) | Who normally/occasionally carried out the task | Engineer in charge  Mason on job |
| 4) | Who else may be affected by the work (For example visitors, subcontractors, the public) | Nil |
| 5) | a)Has the personnel trained for performing the task  b) Any special training required | No  No |
| 6) | Is the written systems of work mandatory. If yes state the procedure no. | [WI/MAINT/26](http://sgl-panj-sp-01:8080/QEHS%20SYSTEM%20(PIP)/ALL%20DEPT%20MANUAL/MECH%20DM/qehs/ohsas/departmental%20manual/11%20%20Work%20instruction/WIMAINT26%20LADLE%20INSPECTION%20AND%20LINING%20PROCEDURE.doc) |
| 7) | Is the work permit required for the task | Yes |
| 8) | Plant and machinery that may be used:  Eg : crusher, conveyor, crane, heavy earthing equipment, Truck etc, | Hydra, Truck |
| 9) | Any electrically operated hand tools are used | Bricks cutting machine |
| 10) | Manufacturer’s or supplier’s instructions for operation and maintenance plant machinery and powered hand tools are available or not: | Yes |
| 11) | Chain blocks, tools and shackles such as wire rope, hydraulic jack etc are used. | Slings, D-shackle |
| 12) | What materials are handled? Size, shape, surface character and weight of materials that may be handled: | Bricks & steel structures  Rectangular irregular  Approximately max 25 kg |
| 13) | Is the material is required to be moved by hand. If yes Distance and heights of the place where materials have to move by hand. | 1 kg by hand (tools & tackles)  2 Mt height approximately |
| 14) | Services used Eg: compressed air, oxygen, acetylene,  LPG gas, hydraulic oil, welding electrode for welding | Oxygen, Acetylene, welding electrode for welding |
| 15) | Physical form of substances encountered during the work (For example fume, gas, vapor, liquid, dust/powder, solid): | Solid, semi liquid, fumes, dust |
| 16) | Content and recommendations of safety data sheets relating to substances used or encountered:  ( this is applicable in case of chemical material) | NA |
| 17) | a) Relevant acts, regulations and standards relating to the work being done, the plant and machinery used and the materials used or encountered:  b) Is the activity is reviewed for compliance to statutory requirement | Factory Act 1948 and Goa factory Act 1985-SRR/16  Yes |
| 18) | What is the data (s) required to be monitored during the activity and the frequency of monitoring. | Nil |
| 19) | Any information available from within and outside the organization on incident, accident and ill health experience associated with the work being done, equipment and substances used: | Premature failure of Mahakaushal bricks  On 12.07.04  Incident 47/PROD/AUG/07 dt 26.08.07 for failure of bricks near trunnion area of L 23 ladle |

2. From the above activity information hazards are to be identified and recorded below using Appendix 'A' of SP/41

Hazards identified

Hazards identified

Mechanical

1. Fall of bricks, steel, hammer, etc on human body.
2. Trapping in between objects.
3. Impact due to object, bricks
4. Snapping of wire rope of slings
5. Breaking of cutting blade
6. Splashing of castable, mortar into eyes
7. Tripping of person
8. Fall of pin and plate while fixing
9. Failure of chain pulley block and slings
10. Fall from height
11. Slip, entanglement while climbing on ladle stair case
12. Cut due to sharp object
13. Tilting of ladder due to improper supporting / not tying
14. Tilting of temporary platform due to unevenness in ground
15. Tripping due to poor house keeping
16. Fall of bricks while handing over from one person to another
17. Failure of pin
18. Hitting of back hoe on structure / person moving near by while shifting
19. Overturning of ladle while shifting with backhoe due to improper handling/level

**Physical**

1. Temperature.
2. Noise
3. Fall of welding spark / splatter on eye/ body
4. Burn injury from cutting set – due to handling over cutting set in ON condition, back fire, welding

**Electrical**

* 1. Electrical shock from punctured cable.
  2. Electrical shock due to non usage of fully insulated welding holder and welding in wet conditions / rain

.**Behavioral Hazard:**

1. Workmen under influence of alcohol
2. Violation of procedure
3. Not wearing PPE’s
4. Not concentrating while operating machine

|  |  |
| --- | --- |
| **Prepared By: Pradhul** | **Reviewed By: Bala joshi** |
| **Signature:** | **Signature:** |
| **Date: 10.12.2022** | **Date: 10.12.2022** |