|  |  |  |  |
| --- | --- | --- | --- |
|  | **VEDANTA LIMITED –**  **VALUE ADDED BUSINESS** | **Format No.:** | **FRMT/MR/10** |
| **INTEGRATED MANAGEMENT SYSTEM** | **Revision Date:** | **10.07.2023** |
| **HAZARD IDENTIFICATION** | **Revision No.:** | **02** |
| **Page No.:** | **1 of 1** |

|  |  |
| --- | --- |
| **Departmental Use Only** | |
| **Revision No: 00** | **Unit: PID1** |
| **Revision Date: 10.07.2023** | **Dept.: Production** |

A. Work activity information

|  |  |  |
| --- | --- | --- |
| **Sr.No.** | **Details** | **Remark** |
| 1) | Task being carried out, their duration and Frequency: | Hot blast stove checker cleaning, Duration 10-15 Days, once in 4-6 years (tentative), |
| 2) | Location (s) where the work is carried out. | Hot blast stoves |
| 3) | Who normally/occasionally carried out the task? | Engineer in charges from maintenance, operation and refractory.  Mason / mechanical workmen on the job  Contractor workmen on job |
| 4) | Who else may be affected by the work (For example visitors, subcontractors, the public) | Staff, Workmen, consultant working nearby |
| 5) | a) Has the personnel trained for performing the task  b) Any special training required | Yes  Yes (refractory lining & casting) |
| 6) | Is the written systems of work mandatory? If yes state, the procedure no. | Yes.  VL/IMS/PID1/PROD/WI/97 |
| 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, | Crane, masonary tools |
| 9) | Any electrically operated hand tools are used | Man cooler, ID fans |
| 10) | Manufacturers or supplier’s instructions for operation and maintenance plant machinery and powered hand tools are available or not: | Yes |
| 11) | Chain block, tools and shackles such as wire rope, hydraulic jack etc are used. | Crane is used for shifting materials |
| 12) | What materials are handled? Size, shape, surface character and weight of materials that may be handled: | Checker bricks, Castable, blocks. Solid, rectangular and spécial shapes as per Drawings. |
| 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. | Small size bricks by hand from dome platform to work area. Few bricks/ castable bags to be shifted from ground to dome platform and work area.  1.5 MT box shifting by crane from ground to dome platform and back |
| 14) | Services used Eg: compressed air, oxygen, acetylene,  LPG gas, hydraulic oil, welding electrode for welding | Yes – Welding electrode for welding  Oxygen, LPG, compressed air. |
| 15) | Physical form of substances encountered during the work (For example fume, gas, vapour, liquid, dust/powder, solid): | Solid, liquid and gas |
| 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 | Gas Cylinder rule 1981  Factory Act  Yes |
| 18) | What is the data (s) required to be monitored during the activity and the frequency of monitoring? | Temperature, CO and oxygen level inside HBM |
| 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: | Nil |

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

**Hazards identified**

**Mechanical**

1. Fall of bricks, steel, hammer, etc on human body from dome platform to ground
2. Trapping in between objects
3. Impact due to object
4. Tripping of person with compressed air hoses
5. Fall of person from platform, staircase
6. Fall of person from manhole onto checker bed
7. Failure of platform due to overloading

**Physical**

1. Dust Inhalation
2. Gas Exposure
3. Burn injury from hot refractory/ plates
4. Burn injury from hot duct
5. Noise
6. Darkness/less illumination
7. Congestion
8. Suffocation
9. Back pain due to sudden lifting of heavy objects

**Electrical**

1. Electrical shock from welding machine.
2. Electrical shock from punctured cable

**Behavioral Hazard:**

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

|  |  |
| --- | --- |
| **Prepared By:** | **Reviewed By:** |
| **Signature:** | **Signature:** |
| **Review Date: 10.07.2023** | **Review Date: 10.07.2023** |