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|  | **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** |

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| **Departmental Use Only** | |
| **Revision No: 01** | **Unit: PID1** |
| **Revision Date: 10.07.2023** | **Dept.: Production** |

A. Work activity information

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| **Sr.No.** | **Details** | **Remark** |
| 1) | Task being carried out, their duration and Frequency: | Hot blast stove ceramic burner top layers replacement  24 hrs for 15 days |
| 2) | Location (s) where the work is carried out. | Hot Blast stoves |
| 3) | Who normally/occasionally carried out the task? | Engineer in charge Mason on job and contractor masons |
| 4) | Who else may be affected by the work (For example visitors, subcontractors? the public) | All people working there |
| 5) | a) Has the personnel trained for performing the task  b) Any special training required | yes  yes |
| 6) | Is the written systems of work mandatory? If yes state, the procedure no. | Yes  VL/IMS/PID1/PROD/WI/23D |
| 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, | Hoist, |
| 9) | Any electrically operated hand tools are used | Nil |
| 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. | Slings, D-shackle, Cage, Rods, lancing pipe, plumbers |
| 12) | What materials are handled? Size, shape, surface character and weight of materials that may be handled: | Bricks, monolithics & steel structures  Rectangular irregular  Approximately max 50 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. | 60 kg by hand (tools & tackles) by two persons  0.5 Mt height approximately |
| 14) | Services used Eg: compressed air, oxygen, acetylene,  LPG gas, hydraulic oil, welding electrode for welding | compressed air, Diesel |
| 15) | Physical form of substances encountered during the work (For example fume, gas, vapour, liquid, dust/powder, solid): | Solid, fumes, dust, liquids |
| 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: | Consultant will be present during activities. |

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, rope, wooden plank etc on human body as well as on Ceramic Burner from top of Combustion Chamber.
2. Fall of objects, broken part of refractory from Hot Blast main opening.
3. Collapsing of Combustion chamber wall
4. Collapsing of Stove Dome
5. Collapse of checker layers
6. Trapping in between objects like rope, fall arrester, electric cable, compress air hoses
7. Impact due to object like bricks, checkers, and hand lamp.
8. Fall of person inside combustion chamber
9. Fall of person from platform, staircase
10. Failure of rope, fall arrester, Alumina ladder, electrical cable.
11. Failure of channel, platform due to overloading
12. Failure of “Confine entry and rescue system”.
13. Jamming of ceramic burner air passage.

**Physical**

1. Temperature.
2. Dust.
3. Back Pain due to sudden or heavy load like ceramic burner blocks.
4. BF Gas inhalation
5. Dust Inhalation
6. Suffocation
7. Burn injury from Hot surface / Temperature of Partition wall.
8. Dehydration
9. Hot Blast leakage from HBV
10. Deficiency of oxygen level.

**Electrical**

* 1. Electrical shock from Cable.
  2. Improper illumination

**Behavioral Hazard:**

1. Workmen under influence of alcohol
2. Violation of procedure
3. Not wearing PPE’s
4. Not concentrating while operating rope, fall arrester, rescue system etc.
5. Fear of confined sapces

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