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|  | **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** |

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| **Departmental Use Only** | |
| **Revision No: 07** | **Unit: SP** |
| **Revision Date: 30.07.2022** | **Dept: Mechanical** |

Doc: HI/SP/MAINT/10

A. Work activity information

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| **Sr. No.** | **Details** | **Remark** |
| 1) | Task being carried out, their duration and Frequency: | Maintenance of Sinter cooler  8 hrs.  Daily |
| 2) | Location (s) where the work is carried out. | Maintenance of Sinter cooler  Main Sinter building |
| 3) | Who normally/occasionally carried out the task? | Engineer in charge  Work men on the job |
| 4) | Who else may be affected by the work (For example visitors, subcontractors, the public) | Production Engineer  Contractor workmen taken on labour supply |
| 5) | a) Has the personnel trained for performing the task  b) Any special training required | Yes (Past Experience)  No |
| 6) | Are the written systems of work mandatory? If yes state the procedure no. | YES  WI/SP/MAINT/ 10 |
| 7) | Is the work permit required for the task? | YES |
| 8) | Plant and machinery that may be used:  E.g.: crusher, conveyor, crane, heavy earthing equipment, Truck etc., | Yes – Crane is used for GB replacement |
| 9) | Any electrically operated hand tools are used | Grinder |
| 10) | Manufacturers or supplier’s instructions for operation and maintenance plant machinery and powered hand tools are available or not: | Yes |
| **Sr. No.** | **Details** |  |
| 11) | Chain block, tools and shackles such as wire rope, hydraulic jack etc. are used. | Yes |
| 12) | What materials are handled? Size, shape, surface character and weight of materials that may be handled: | Irregular shape mostly structures, gear box and motor  Approximately max 1T |
| 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 E.g.: compressed air, oxygen, acetylene,  LPG gas, hydraulic oil, welding electrode for welding | Welding machine & LPG gas for cutting set, Hydraulic jack, Compressed air for pneumatic grease pump |
| 15) | Physical form of substances encountered during the work (For example fume, gas, vapour, liquid, dust/powder, solid): | Solid & dust, heat |
| 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 rules 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: | Yes. On 1st of November 2021, during plant start up after monthly s/d while LS#1 Conveyor trial it was observed that conveyor got tripped due to Sinter overload. Later it was found out that Sinter Cooler was rotated during shutdown in manual mode to reposition Cooler wheels for wheel bearing replacement which in turn resulted in emptying of some cooler pallet cars in discharge chute and jamming of cooler discharge chute as circuit after cooler has had not started yet. This resulted in delay in plant start up and shutdown time was extended by 1 hr. |

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

**Hazards identified**

**Mechanical hazard**

1. Inhaling of dust.
2. Fire hazard.
3. Fall of material
4. Accident due to improper shutdown
5. Flying of Chips during hammering.
6. Failure of sling, chain pulley block, improper hooks welding.
7. Fall of a person.
8. High temperature
9. Entrapment

**Electrical hazard**

Electric shock on equipment

**Environmental hazard**

Spillage of grease on ground

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| **Prepared By:**  **Mechanical In charge Sinter plant** | **Reviewed By:**  **HOD Mechanical Maintenance PID-2** |
| **Signature:** | **Signature:** |
| **Review Date: 30.07.2022** | **Review Date: 30/07/2022** |