|  |  |  |  |
| --- | --- | --- | --- |
|  | **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: 01** | **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: | Dumping debris into slag pot  Daily |
| 2) | Location (s) where the work is carried out. | Baghouse area |
| 3) | Who normally/occasionally carried out the task? | Company`s & contract employees |
| 4) | Who else may be affected by the work (For example visitors, subcontractors, the public) | Visitors & subcontractors |
| 5) | a) Has the personnel trained for performing the task  b) Any special training required | Yes |
| 6) | Is the written systems of work mandatory? If yes state, the procedure no. | Yes  VL/IMS/PID1/PROD/WI/19G |
| 7) | Is the work permit required for the task? | No |
| 8) | Plant and machinery that may be used:  Eg : crusher, conveyor, crane, heavy earthing equipment, Truck etc, | Wheel loader, truck, motor, pumps, ladle etc |
| 9) | Any electrically operated hand tools are used | No |
| 10) | Manufacturers or supplier’s instructions for operation and maintenance plant machinery and powered hand tools are available or not: | Nil |
| 11) | Chain block, tools and shackles such as wire rope, hydraulic jack etc are used. | No |
| 12) | What materials are handled? Size, shape, surface character and weight of materials that may be handled: | Debris |
| 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. | No |
| 14) | Services used Eg: compressed air, oxygen, acetylene,  LPG gas, hydraulic oil, welding electrode for welding | No |
| 15) | Physical form of substances encountered during the work (For example fume, gas, vapour, liquid, dust/powder, solid): | Debris, water, graphite dust etc. |
| 16) | Content and recommendations of safety data sheets relating to substances used or encountered:  (This is applicable in case of chemical material) | NIL |
| 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  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 |

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

1. On 13.02.06 at 3.15 hrs while dumping ladle in baghouse one of the link chain at bottom gave way & ladle started swinging on 25T crane hooks
2. On 19.02.06 12T hook wire rope went on other side of the ladle through the gap between snatch box bottom and ladle bottom. As a result, 12T rope came out of the pulley.
3. On 30.06.2006 while tilting ladle in baghouse bottom chain of the ladle snapped & ladle swung on the structure.
4. On 07.08.2006 in third shift While tilting the ladle in baghouse link chain gave way-Sajjan Sawant
5. On 27.09.2006 While tilting the ladle in baghouse link chain of the ladle gave way
6. On 18.04.07 while tilting ladle, river side chain got disengaged.
7. On 29.03.2008 at around 15:30 hrs in while dumping the ladle debris in the bag house, the operator positioned the ladle inside the bag house with all the indicators on. As the pile of debris was slightly more, the operator lifted the ladle slightly to avoid touching the debris. While lifting the 12T hook, the operator found that the pulley block was striking the roof, due to which the operator slightly lowered the 25T hook. In this process, the ladle touched the debris & got slightly tilted & one hook came out of the ladle trunion. Ladle rested on the debris, with one hook. The hook was put back in trunion with the help of Hitachi. -Mr. Santu Gurav/Mr. Milind Barve
8. On 15.04.2012 at around 21:30 hrs, bag house crane operator had accidentally operated the crane due to which its hook got twisted up to 30°. Mr. Sadanand Parab, bag house crane operator took the ladle from ladle transfer car & placed it in front of bag house and went to operate valve for washing pigs from truck, during which he had kept the crane remote under his arm when the 25T hoist button on the remote got pressed accidentally when it was under his arms. Then the hook got engaged with the ladle trunnion got twisted by 30°.No injury was reported.
9. On 13/08/13, it was observed that PCM#4 discharge end protection sheets/structure got bend. On enquiring, it was told that 25/12T Baghouse Crane Hook had struck the structure while operation and as a result of which structure got bend
10. On 16//09/13 in first shift at 11:45 hrs. baghouse crane operator while lifting ladle from ladle transfer car by 25/12 Baghouse crane mistakenly rested the ladle on the ladle car guide holders. As he continued cross travel movement one hook got disengaged from the trunion resulting in dislodging of the ladle.
11. On 12.04.2019 night shift, Hitachi was removing debris from the newly commissioned dumping chamber. While in operation the back portion of Hitachi got rubbed against the barricade of pit where ladle is cleaned. Due to this, the fog gun which was welded with the barricade for its support got toppled and fell on the ground. Later on, it was lifted up and shift mech. engg. Was called and was taken in operation.
12. On 15.06.2019 B-shift at 21:50 hrs. Ladle No.9 was being taken out on ladle car for dumping in baghouse. On parked position while lifting the ladle by baghouse 25T crane, crane rope got snapped and ladle got lowered on ladle car. It got lowered on one of the stoppers in tilted position. No one got injured and the whole area was barricaded.
13. On 29.07.2019 at around 17:00hrs, while lifting L01 ladle kept at discharge end of PCM 3 using Bag house crane one of the hooks (27 mtr side) got bent. 25/12 T operator was Viraj Gawas.

**Hazards identified**

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