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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:** 03 | **Unit: PID-1** |
| **Revision Date: 13.09.2023** | **Dept.: INSTRUMENTATION** |

1. Work activity information Working in CO gas concentrated areas

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| **Sr.No.** | **Details** | **Remark** |
| 1) | Task being carried out, their duration and Frequency: | Personnel working in CO Gas concentrated  Areas while in operation |
| 2) | Location (s) where the work is carried out. | Cast House, GCS, Hearth, Furnace top, Bustle platform, Gas line, Gas holder, Flare stacks |
| 3) | Who normally/occasionally carried out the task | Instrumentation Engineer / Instrumentation Technician / Contractor |
| 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 | Yes  No |
| 6) | Is the written systems of work mandatory. If yes state the procedure no. | WI/INST/11 |
| 7) | Is the work permit required for the task | N/A |
| 8) | Plant and machinery that may be used:  Eg : crusher, conveyor, crane, heavy earthing equipment, Truck etc, | NIL |
| 9) | Any electrically operated hand tools are used | NIL |
| 10) | Manufacturer’s or supplier’s instructions for operation and maintenance plant machinery and powered hand tools are available or not: | NA |
| **Sr.No.** | **Details** | **Remark** |
| 11) | Chain block, tools and shackles such as wire rope, hydraulic jack etc are used. | NIL |
| 12) | What materials are handled? Size, shape, surface character and weight of materials that may be handled: | Multimeter, Tools, CO monitor; All light in weight. |
| 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. | NA |
| 14) | Services used Eg: compressed air, oxygen, acetylene,  LPG gas, hydraulic oil, welding electrode for welding | NIL |
| 15) | Physical form of substances encountered during the work (For example fume, gas, vapour, liquid, dust/powder, solid): | Liquid metal, water, slag, CO gas, Dust. |
| 16) | Content and recommendations of safety data sheets relating to substances used or encountered:  ( this is applicable in case of chemical material) | Data on Toxic effect of CO gas |
| 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 | NA  Yes |
| 18) | What is the data (s) required to be monitored during the activity and the frequency of monitoring. | CO gas concentration-Continuously |
| 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: | CO gas level content should be less than 50ppm.  Incident dated 03.04.12, Online CO detectors power failure.  Near miss dated 05.02.2013 valve leakage & Online CO detectors power failure |
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2. From the above activity information hazards are to be identified and recorded below using Appendix 'A' of SP/41

[**Hazards identified**](../Risk%20Assessment%20Instrumentation/14R%20Working%20on%20hydropack%20.xls)

**Physical:**

* Fire
* Explosion
* Honeybee/snake bite
* Noise
* Hot Surface

**Mechanical:**

* Trip & Fall

**Chemical:**

* CO Gas poisoning
* Steam
* Dust
* Graphite

**Ergonomics:**

* Insufficient work practices

**Hazard due to Human Behavior/Human error:**

* Not adhering to WI/ PPE
* Alcoholism
* Use on non-certified tools/equipment.

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| **Prepared By:**  Head Instrumentation PID1 | **Reviewed By:** Head – Electrical & Instrumentation PID1 |
| **Signature:** | **Signature:** |
| **Review Date:13.09.2023** | **Review Date: 13.09.2023** |