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| A picture containing drawing  Description automatically generated | **VEDANTA LIMITED –**  **VALUE ADDED BUSINESS** | **Format No.:** | **FRMT/MR/10** |
| **INTEGRATED MANAGEMENT SYSTEM** | **Revision Date:** | **15.04.2020** |
| **HAZARD IDENTIFICATION** | **Revision No.:** | **01** |
| **Page No.:** | **1 of 1** |

**Rev No: 04** Unit: PID-1

Date: 05.01.2022 Dept: E&I

1. Work activity information : [Checking of Furnace top Transmitters, Thermocouples ,Camera, Proximity and Limit Switches](file:///D:\d%20drive\Paresh\BF1%20173%20m3%20After%20Relining\WI%20&%20HIRA\Intranet%20Upload_2020-2021_Final\HIRA%20Instrumentation\IN%2009%20checking%20of%20top%20transmitters.doc).

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| **Sr.No.** | **Details** | **Remark** |
| 1) | Task being carried out, their duration and Frequency: | Checking of furnace Top transmitters, thermocouples, limit switches, proximity sensors, cameras  30min during breakdown & 2hrs / monthly once in planned shutdown of BF |
| 2) | Location (s) where the work is carried out. | Furnace top of BF-1 / BF-2 |
| 3) | Who normally/occasionally carried out the task | Instrument Technician |
| 4) | Who else may be affected by the work (For example visitors, subcontractors, the public) | Subcontractor |
| 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. | Yes-WI/INST/12 |
| 7) | Is the work permit required for the task | Yes (VL/IMS/VAB/SP45) |
| 8) | Plant and machinery that may be used:  Eg : crusher, conveyor, crane, heavy earthing equipment, Truck etc, | N/A |
| 9) | Any electrically operated hand tools are used | No |
| 10) | Manufacturer’s or supplier’s instructions for operation and maintenance plant machinery and powered hand tools are available or not: | No |
| **Sr.No.** | **Details** | **Remark** |
| 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: | Multimeter, Plier, Adjustable, Pipe wrench |
| 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. | 40 mtrs |
| 14) | Services used Eg: compressed air, oxygen, acetylene,  LPG gas, hydraulic oil, welding electrode for welding | Compressed air |
| 15) | Physical form of substances encountered during the work (For example fume, gas, vapour, liquid, dust/powder, solid): | 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 treatment |
| 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 | N/A  Yes |
| 18) | What is the data (s) required to be monitored during the activity and the frequency of monitoring. | Level of CO gas at all times |
| 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 50 ppm |
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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/09R%20Checking%20of%20Furnace%20Top%20Tx%20and%20TC%20%20.xls)

**Chemical:**

* CO gas poisoning
* Dust

**Mechanical**:

* Trip & Fall

**Physical**:

* High temperature
* High pressure
* Hot Surface

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

* Not adhering to WI/ PPE
* Alcoholism
* Touching thermocouple tip with bare hands
* Use on non-certified tools/equipment

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| **Prepared By:**  Associate Manager– Electrical & Instrumentation PID1 | **Reviewed & Issued By:**  Management Representative | **Approved By:**  Head – Electrical & Instrumentation PID 1 |
| **Signature:** | **Signature:** | **Signature:** |
| **Date:** **05/01/2022** | **Date: 05/01/2022** | **Date: 05/01/2022** |