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| Logo  Description automatically generated | **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: Power plant 1** |
| **Revision Date: 07/08/2023** | **Dept.: MECHANICAL** |

1. Work activity information : Maintenance of Pumps.

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| **Sr.No.** | **Details** | **Remark** |
| 1) | Task being carried out, their duration and Frequency: | Maintenance of Pump  PM-4 hrs, GM/overhauling – 12hrs  Monthly, once in six month. |
| 2) | Location (s) where the work is carried out. | Plant areas, river water. |
| 3) | Who normally/occasionally carried out the task | Engineer in charge  Maintenance fitter/technician/helper on the job |
| 4) | Who else may be affected by the work (For example visitors, subcontractors, the public) | No |
| 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/MAINT/](http://sgl-panj-sp-01:8080/shama/INTIGRATED%20SYSTEM-SIL/QEHS%20SYSTEM/ALL%20DEPT%20MANUAL/MECH%20DM/qehs/ohsas/departmental%20manual/11%20%20Work%20instruction/WIMAINT44%20MANTENANCE%20OF%20PUMP.doc) 01 |
| 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, | Hydra, truck. |
| 9) | Any electrically operated hand tools are used | Yes |
| 10) | Manufacturer’s 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. | 1T chain block, Sling, D-shackle |
| 12) | What materials are handled? Size, shape, surface character and weight of materials that may be handled: | Pump Assembly, spare parts  Irregular  Approx 300 kg max |
| 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. | 4 kg by hand (tools & tackles)  1 Mt height approximately max |
| 14) | Services used Eg: compressed air, oxygen, acetylene,  LPG gas, hydraulic oil, welding electrode for welding | Oxygen, acetylene, welding electrode using. |
| 15) | Physical form of substances encountered during the work (For example fume, gas, vapor, liquid, dust/powder, solid): | Solid, dust/powder |
| 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  Yes |
| 18) | What is the data (s) required to be monitored during the activity and the frequency of monitoring. | Vibration, Lubrication.  Monthly |
| 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: | No |

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

[Hazards identified](http://sgl-panj-sp-01:8080/shama/INTIGRATED%20SYSTEM-SIL/QEHS%20SYSTEM/ALL%20DEPT%20MANUAL/MECH%20DM/qehs/ohsas/5%20hazard%20identifaiction%20and%20risk%20assesment%20master%20list/4%20RISK%20ASSESMENT/WIMAINT44%20MAINTENANCE%20OF%20PUMP.xls)

A. Mechanical Hazard: Fall of object, man and material

B. Physical Hazard: Impact, Trapping in between two object, like coupling, impeller, shaft assembly,

C. Electrical Hazard: Electric shock.

D. Chemical Hazard: dust, fumes during winding.

E. Human behavioural: Non use of PPE, improper housekeeping,

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| **Prepared By:** Engineer– MECHANICAL – PP | **Reviewed By:** Head -Power |
| **Signature:** | **Signature:** |
| **Date: 07.08.2023** | **Date: 07.08.2023** |