1. **PURPOSE:** To describe safe procedure for Hose replacement
2. **SCOPE:** MCD
3. **RESPONSIBILITY:** Mechanical in charge & Maintenance Fitter
4. **SAFETY PRECAUTIONS:**

* Ensure *Electrical & Mechanical isolation* prior to starting work on equipment. Follow documented isolation procedure as per Vedanta approved isolation standards.
* Check availability of valid DCP fire extinguishers, if not available then inform shift in charge.
* *Safety briefing / Toolbox talk* to be carried out and to be documented
* Follow *one man one lock* system and use of LOTO box
* Check and ensure safety of man and equipment before starting operations.
* All unwanted material from the area to be removed before releasing the equipment electrical isolation.
* Follow proper documented procedure for releasing the electrical isolations as per Vedanta approved isolation standards.

1. **PPE to be used :**

* Safety Helmet
* Safety shoes
* Safety Goggles
* Hand gloves
* Dust mask

1. **Activities**

* Activity No 1 : Replacement of Hydraulic Hoses

1. **Aspect-Impact:**

* Scrap generation Resource Depletion.
* Dust Generation Air Pollution.
* Oil Spillage Land Contamination & Resource depletion
* Used Cotton Cloth/Handgloves Land Contamination

1. **Hazards** **identified**
2. Physical Hazard

* Fall of Hot coke , flying of coke dust and fines
* Slip due to Oil
* Dripping hot water from tray
* Contact with hot structural parts of tray bottom

1. Mechanical Hazard

* Impact, Entrapment, Slip and fall

1. Chemical Hazard

* Fire and explosion, fumes.

1. Human behaviour aspect of operators:

* Alcoholism.
* Casual approach.
* Horse play.
* Non usage of PPE’s
* Improper Housekeeping
* Height Phobia

1. **PROCEDURE:**

**Procedure for Maintenance:**

* Identify the damaged hose by observing the oil leakage/spillage. Identify by means of pressure drop/fall in the oil level in the hydraulic reservoir/oil tank.
* Position the respective cylinder of the respective car with the damaged hose to home position.
* Shut off the respective valve of the damaged hose to eliminate pressurized oil impact while execution of repair.
* Provision to be given to prevent the oil spillage on the ground by means of container of required capacity.
* Take work permit of the activity from the respective shift in charge .
* Take electrical shutdown permit of hydraulic pump of the particular equipment before attending job.
* Trained workmen should execute the job.
* Hose to be replaced with the new one of same dimensions and capacity.
* Housekeeping needs be done at the area of repair by removing the tools , tackles and scrap.
* Shut off valve to be opened once the hose is replaced.
* Shut downs to be released as per Standard procedure.
* Trials to be taken, Check for any leakages from the hoses, check for the pressure drop/oil level drop, air lock.
* The movement of those respective cylinders to be checked repeatedly.
* Hand over the equipment for the operation department for starting the production once the operation found healthy.
* Close the work permit of the activity from the respective shift in charge and User department.

1. **REFERENCES:**
2. **RECORDS:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr. No.** | **Record No.** | **Record Title** | **Maintained by** | **Soft/Hard form** | **Retention Time** |
| 1. | HI/68 | Hazard Identification | IMS | Soft | 1 Yr. |
| 2. | RA/68 | Risk Assessment | IMS | Soft | 1 Yr. |

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| **Prepared By:**  Head Mechanical Maintenance, Battery 1- MCD | **Reviewed & Issued By:**  Management Representative | **Approved By:**  Head Mechanical Maintenance MCD |
| **Signature:** | **Signature:** | **Signature:** |
| **Review Date: 13.08.2022** | **Review Date: 13.08.2022** | **Review Date: 13.08.2022** |