1. **PURPOSE:** Screw conveyor sealing / RAV gland packing
2. **SCOPE:** Ram Car
3. **RESPONSIBILITY:** Engineer In charge, Company Fitter & Contract workmen
4. **SAFETY PRECAUTIONS:**

* Ensure all Electrical & Mechanical isolation prior to starting work on equipment. Follow documented isolation procedure as per Vedanta approved isolation standards.
* Take Electrical shutdown of respective machines-Hot Coke Car, Charge Car 2, Charge Car 3, Ram car & work permit, if necessary, before attending any electrically operated units.
* Safety briefing / Toolbox talk to be carried out and to be documented
* Follow *one man one lock* system and use of LOTO box.
* Check availability of valid DCP fire extinguishers, if not available then inform shift in charge.
* Check and ensure safety of man and equipment before starting operations.
* Cordoning /barricading of area where work in progress
* 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.
* *Certified lifting Tools & Tackles* to be used for the job.

1. **PPE to be used :**

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

1. **Activities**

Activity No 1 : Screw conveyor sealing

Activity No 2 : RAV gland packing

1. **Aspect-Impact:**
2. Scrap generation Resource Depletion.
3. Dust Generation Air Pollution.
4. Coal Spillage Resource depletion
5. **Hazards Identified:**
6. Physical Hazard

* flying of coal dust and fines
* Contact with silicone sealant
* Electrical shock
* High Temperature

1. Mechanical Hazard

* Impact, Entrapment, Entanglement, Slip , trip and fall

1. Ergonomical Hazard

* Poor workplace design

1. Health Hazard :

* Inhalation of coal dust
* Irritation on skin/ eyes

1. Human behaviour aspect of operators:

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

1. **PROCEDURE:**

**Activity No 1: Screw conveyor sealing**

* Ensure isolation of the system with Lock out and tag out sytem. (Power or Screw Conveyor s/d)
* Open the cover and remove old/damaged seals clean the surface of conveyor thoroughly.
* After surface is cleared, apply sealant to seal and fix on the surface of the conveyor.
* While handling sealant, the concerned workmen should avoid contact with skin and eyes. Also excess sealant should be wiped off.
* In case of contact with skin or eyes immediately wash the affected part of the body.
* Place back the covers and tighten the clamps.
* Damaged/worn-out seals to be disposed off in appropriate waste bay.
* Normalize/ Clear electrical shutdown and take trial

**Activity No 2: RAV Gland packing changing.**

* 1. Ensure isolation of the system with Lock out and tag out sytem. (Power or RAV s/d)
  2. Loosen the bolts of stuffing box packing ring and remove the ring.
  3. Remove all the old packing from the gland housing with the help of pointed rod.
  4. Reinstall new packing rings (see that ends of each ring is away from each other, Joints to be staggered.)
  5. Reinstall the stuffing box ring and gradually tighten the bolts.
  6. Release electrical shut down and take trial.
  7. Worn-out packing’s to be disposed off in appropriate waste bay.

1. **REFERENCES:**

OEM Manuals & reference drawings, SP44, SP45

1. **RECORDS:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr. No.** | **Record No.** | **Record Title** | **Maintained by** | **Soft/Hard form** | **Retention Time** |
| 1. | HI/12 | Hazard Identification | IMS | Soft | 1 Yr. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Manual Section Ref. & Para** | **Brief details of Revision** | **New Rev.** |
| 13-08-2022 | Header | Company logo & Document no. | 6 |
|  |  |  |  |
|  |  |  |  |

|  |  |  |
| --- | --- | --- |
| **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** |