**ACTIVITY: CHANGING OF COUPLING PADS/TYRES/BUSH OF DIFFERENT**

**DRIVES**

* Objective **: -** Safe changing of coupling pads/tyres/bush of different drives
* Scope : - Blast Furnace Accessories
* Ref. : - All drives where ever applicable
* Responsibility : - Engineer in charge

**PPE –s to be used:**

 Helmet, Safety shoes, Hand gloves, Cotton cloth , ear plugs and goggles

**Aspect – impact:**

Scrap generation Resource Depletion

Oil Spillage Land contamination & Resource Depletion

Oil traced waste generation Land contamination & Resource Depletion

**Hazards identified :**

**Physical Hazard** - Pressure, temperature, dust inhalation, , congestion

**Mechanical Hazard** - Trapping, Impact of moving/slinged items, entanglement, fall of material, fall of person from platform & height

**Electrical Hazard** – Shock

Chemical hazard - Co gas poisoning & Fire

Biological Hazard - Bee sting Human

Human Behavior aspect of operators: Operator nature, alcoholism, casual approach, horse play, use of mobile at workplace, back pain & non usage of PPE?s

1. Take clearance from production department of the drive on which work has to be done.
2. Take shutdown of the particular drive to be attended, from electrical department in the prescribed shutdown slip with LOTO.
3. Ensure the equipment number (nomenclature) mentioned on the shutdown slip and the actual shutdown taken, is the same as that of the required equipment.
4. Remove the coupling guard and keep it at safe distance.
5. Remove the spacer/bushes in case of spacer/bush coupling, & tyre in case of tyre coupling.
6. Clean the surfaces of damaged tyres on the coupling, thoroughly.
7. Remove damaged bolts in case if it is broken.
8. Realign the drives in case alignment is out of acceptable limits. Acceptable limit for high speed fan +/- 5 divisions of the dial gauge (+/-0.05mm), for conveyors +/- 0.5mm, for pumps +/- 10 divisions of the gauge.
9. Fix the new pads/bolts, tyre in case of tyre coupling and fully tighten the bolts.
10. Refix the coupling guards after completing the job.
11. Check the level of oil of either pump or gearbox as the case may be to safe level.
12. Clear shutdown of the equipment and check for smooth running and give clearance to production.
13. Put the old pads to respective scrap bin.

Follow the house keeping procedure as per instruction VL/IMS/PID1/MAINT/WI/91

**DO:**

* Clear all debris of oil, grease and other rubber and metal scrap.
* Use all necessary PPEs.
* Check the oil level of the gear box before trial.
* Check the coupling condition.  Put guarding back in position.
* Maintain housekeeping.
* Use the required tools & tackles (like stool, stand, etc.) wherever required.

**DON’T:**

1 Throw oil soaked waste here & there 2 Spill oil on the ground.

* 1. By pass safety measures.
  2. Wear loose clothing.
  3. Work without informing control room



**Amendement Record**

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| **Date** | **Manual Section Ref. & Para** | **Brief details of Revision** | **New Rev.** |
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| **Prepared By:**  Area Engineer | **Reviewed & Issued By:**  Management Representative | **Approved By:**  Mechanical Head |
| **Signature** | **Signature:** | **Signature:** |
| **Review Date: 12.12.22** | **Review Date: 12.12.22** | **Review Date: 12.12.22** |