**WORK INSTRUCTIONS FOR BLOWDOWN OF GCS TANK**

**Criteria: Flushing of the settled dust particles in the GCS Tank.**

PROCEDURE FOR BLOW DOWN OF GCS TANK

**OVERALL RESPONSIBILITY**: **Cooling Tower Officer**

**Identified Hazards:**

1. Impact with GCS water on pressure
2. Fall of person causing injury
3. Miscommunication between engineers at control room & site.
4. Not using the PPE.
5. Not adhering to work instructions
6. Improper house keeping
7. Entrapping of person
8. Jamming of drainpipe causing water to get accumulated in pit and in the surrounding areas.
9. Jamming/blocking of the drain valve when open, due to which it would be difficult to close it, leading to emptying of tank and stopping of the furnaces.
10. Impact with hot water
11. Contact with lime / chemically treated water

**Significant Aspect**:

Wastage of water

Slurry Generation

**Procedure:**

1. Unauthorized operation or repair of any equipment is a punishable offence.
2. Person doing the activity should wear all PPEs (Helmet, safety goggles, safety shoes, hand gloves etc.) before starting the activity.
3. Unauthorized operation or repair of any equipment is a punishable offence.
4. The activity should be carried out only in the general shift.
5. It should be carried out in the presence of a mechanical engineer.
6. Before starting the activity, the shift in charge should be informed about the activity. After taking clearance from him regarding the tank level the activity can be carried out. Do not carry out the blow down if the GCS tank level is low.
7. The drain valve of the GCS tank needs to be opened with the help of the fabricated F-handle.
8. The water should be flushed out for a few minutes, provided the level of the tank is being monitored continuously. If the level is going down speedily then the makeup should be started immediately.
9. After draining the tank for a few minutes, the valve should be closed, and the GCS tank level has to be raised below the overflow mark.
10. Once again, the valve is to be opened and point no 7 & 8 to be done.
11. Once the activity is completed the drain valve is to be closed tightly & the fabricated handle should be taken off and kept in its place.
12. The persons operating the valve should work in calm and composed manner, so as to avoid any accident. Every person should be aware of all the safety rules and regulations.
13. In case of an emergency as in valve closing failure, the shift in charge should be immediately informed to take the necessary action.

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| **Prepared By:**  Head – Production PID I | **Reviewed & Issued By:**  Management Representative | **Approved By:**  Head – Pig Iron Division |
| **Signature:** | **Signature:** | **Signature:** |
| **Date: 10.07.2023** | **Date: 10.07.2023** | **Date: 10.07.2023** |

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| 15.07.2022 | Procedure for BLOWDOWN OF GCS TANK | Change in format | 04 |
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