**WORK INSTRUCTIONS FOR UNLOADING THE BULKER AT PID-1 AND RECIRCULATION OF PCI COAL INTERNALLY**

**Responsibility: PCI Shift operator of PID-1**

**Overall responsibility: PCI Shift In charge of PID-1**

**Identified Hazards:**

1. Non- use of PPE & work instruction
2. Pressurized bulker
3. Mechanical Hose leakage
4. Contact of coal dust
5. Inadequate local lighting.
6. Pulverized coal leakage.
7. Over filling of bulker
8. Improper Coordination.
9. Static electricity shock
10. Fire

**Aspect:**

* Spillage of Coal fines
* Noise generation
* Emission of coal dust

**Impact:**

* Land Contamination
* Noise Pollution
* Air Pollution

**Procedure (Bulker unloading):**

Open 1/3 of bulker incoming valve

Open V603

Close all manual valve

Connect anti-static wire.

Connect soft pipe

Park truck

Open 2 fluidizing valves

Open discharge valve

Open 1/3 of gas compensation valve

Open DN125

Pressure≤0.2MPa

Coal discharge start

Adjust pressure of bulker and gas compensation

Adjust incoming total valve and compensation valve

Observe weight increase of coal silo

Prevent pipe jam

Observe the pressure of bulker inlet and gas compensation, decrease persistently

Increased weight of coal silo is appr. Equal to the coal charge weight of bulker

Coal discharge completed

Open DN80 discharge, if no any pressure and close

Close compensation valve

Close V603

Keep purging 1minute

Close coal discharge valve

Close fluidizing valve

Disconnect anti-static wire

Disconnect pipe

Close DN125

Close receiving

Main valve

Open DN32

**Procedure (Recirculation):**

1. In case of injection being stopped in furnace, pulverized coal in silo needs to be circulated in order to prevent them from forming lump.
2. Close furnace side main injection valve and ensure N2/CA line is supplying the same to furnace main line or else ensure individual three-way ball valve is opened to let eitherN2/CA flows to lance.
3. Open bypass line valve which directly connects injection tank outlet line to main silo
4. Now start injection in auto like normal procedure.
5. PCI will now go directly into main silo through by-pass line and the same will recirculate.
6. Ensure Mail-silo heater is in working condition and it is in auto as recirculation will bring down coal temperatures below permissible level.

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

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| 15.07.2022 | Procedure for unloading PCI bulker at PID1 | Change in format | 04 |
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