# **Dalmia**BHARAT CEMENT

## **DALMIA CEMENT (B) LIMITED - Ariyalur**

#### **MECHANICAL SOP**

Issue No. 02 Rev. No: 00 Effective Date: 01/11/2019 SOP/MEC/050

Issued By: Approved By:

**Mechanical Maintenance of Equipments** 

#### **SILO EXTRACTION GATE CEMENT LUMPS REMOVAL WORK**

Scope: to remove the cement lumps from silo extraction gate

**Responsibility:** Maintenance Technician

**Accountability:** Mechanical-Section Engineer

#### PPE:

- 1. Safety helmet
- 2. Safety shoe
- 3. Mask
- 4. Gloves
- 5. Goggles

#### TOOLS:

- 1. D Spanner Set.
- 2. Ring Spanner set.
- 3. Poking Tools.

#### **Hazard Analysis:**

Risks associated: Mitigating Measures

**Rotation of the Equipment** 

Electrical Hazard: Can be operated from remote

**Engagement of clutch:** Inter lock to be ensured

#### **Training needs:**

- 1. Usage of tools and Nature of Hazards
- 2. Usage of PPE's

#### **Procedure:**

- 1. LOTO to be taken for the whole silo extraction system and main dozing valve in open condition.
- 2. Check & Confirm the aeration from each gate and close all the related valves.
- 3. Close manual slide gate fully.
- 4. Take the pneumatic gate in local operation mode and keep the gate in open condition.
- 5. Open the inspection door of the air slide.

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- 6. Open the manual shut off gate gradually and remove the lumps. After the lumps get cleared fully and starts flashing, close the pneumatic gate.
- 7. Close the inspection door.
- 8. Reposition all the manual slide gate & aeration valves.
- 9. Reposition the Pneumatic gate and put in remote operation mode.
- 10. Return the line clearance.

### **Emergency / Emergency Shut OFF:**

If any injury takes place, provide First aid and inform to the Safety department or Call Emergency number 3108/9865152222

#### Records/Annexure:

- 1. Silo Extraction Gate Cement Lumps removal procedure.
- 2. JSA is enclosed below.

SL No	Activity		<b>Isolation Matrix for Packing Plant</b>				
				Isolation Type			
			Electri	Electrical Energy		Other Energy	
8	EXTRACTION GATE CEMENT LUMPS REMOVAL	Name and Tag for the Equipment	All Extraction Dousing valves(in Open condition)				



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## **JOB SAFETY ANALYSIS: (JSA)**

Job Safety Analysis	Job: Silo Extraction Gate Cement Lumps removal	Date: 01/09/2014	Analysis by: Section Engineer	Reviewed by: Section Head.
Title of employee doing job:	Supervisor: Section Supervisor	Department: Mechanical	Section: Packing House	Approved by: HOD Mechanical.

Req'd/recommended PPE: Safety helmet, Safety shoe, Nose mask & Goggle

Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Opening of inspection door	Flashing of cement.	1)Manual gate should be in closed condition.	1)Eye irritation	1) Use Safety goggles & Nose mask
		2)To ensure the Pneumatic gate should be in local mode operation and bag filter group are running condition.	2)Dust may flash	2) Silo Bag filter fan in running condition. When jam removal job doing exhaust fan always running condition.
Removal of lumps	Hand/Leg injury	1) Ensure the size of lumps while breaking	Bigger size lumps may fall down.	Before removal of lumps confirm the size of lumps
		2) Handle the poking tool with care.	Poking tool may fall down.	Use appropriate tool handling technique.