

## DALMIA CEMENT (B) LIMITED – CEMENT PLANT DALMIAPURAM





Issue No. 02 Rev. No: 01 Effective Date: 22.05.2015 WI/Mines/01

Issued By: S & P Approved By: Head - Mines

## **Work Instruction for Blaster**

**Scope/Purpose**: This Work instruction applicable for Blaster

**Responsibility**: Mines Foreman/Asst. Manager

**Accountability**: Mines Manager

PPE:

1. Ear Plug

2. Safety Shoes

3. Gloves

4. Goggles

#### Tools:

1. Pricker

2. Wooden rod

## **Hazard Analysis:**

Risks associated Mitigating Measures

Dust generation Evacuating the workmen from the work place

## **Training needs:**

- 1. About explosives and Firing Accessories
- 2. Storage and transportation

### **Work instruction:**

- 1. The Blaster shall meet the Asst. Mines Manager / Blasting Foreman at the commencement of the shift and get the necessary instruction regarding the location where blasting is to be done.
- 2. The Blaster shall see that he and his helpers wear the appropriate Safety apparatus before going for Blasting.
- 3. The Blaster shall check the actual depth of the holes with the help of Bamboos / Wooden rod, and also for the presence of water if any. If water is found in the holes it should be bailed out first.
- 4. Blaster along with his helpers shall prepare the ANFO mixture and also receive the booster explosives, detonators etc issued from the Magazine.
- 5. He shall transport the Explosives under his personal supervision to the blasting site by Explosive Van approved by the Chief Controller of Explosives.



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- 6. He shall Charge holes in the presence of Foreman / Asst Mines Manager and connect all the holes indicated in the firing plan.
- 7. The Blaster along with the Blasting Foreman shall check the holes connected for the continuity and Resistance. If there is any fault it should be rectified immediately.
- 8. The Blaster shall see that all unused Explosive is returned to the Magazine.
- 9. The Blaster before commencement of the blasting along with his helpers shall ensure that all men and machinery are moved to a safe place from the vicinity of the blast well in advance.
- 10. He shall see that a one-minute warning siren three times with one-minute gap between each siren is given to prevent the inadvertent entry of the public to danger zone.
- 11. If in case any public road lies within the danger zone he shall see that two sentries are posted one in either directions at the extreme points of roads provided with Permanent Iron Gates for closing the gates before blasting and also opening the same after blasting.
- 12. The blaster shall also ensure that the public road gates are closed and no persons or vehicles are approaching the danger zone before firing.
- 13. The blaster along with his helper shall take proper shelter while blasting. Sequential Blasting Machine, Exploder and Kai piece will be used for firing the shot.
- 14. After the blasting operations are over the Blaster and his helper along with the Foreman shall personally inspect the site of blasting to ensure that all holes are blasted and shall give an "All Clear" signal if condition of the site is found safe.
- 15. If any misfire is noticed in the site, re blasting shall be done in accordance with the Regulalations Stipulated in 167 of MMR 1961 along with the above said precautions.
- 16. At the end of the shift the blasters shall record, in blaster's diary kept for the purpose, the quantity of explosive taken, used and returned, the places where shots were fired and the number of shots fired by him, and misfires, if any. Every such entry shall be signed and dated by him.

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

1. If there is any emergency Call Emergency number 9865165316 / 9865277805 / 9865150893 / 9865277806

#### Records/Annexure:

- 1. Refer Log book.
- 2. JSA is enclosed below.



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

Job Safety Analysis	Job: Work Instruction for Blaster	Date: 14.09.12	Analysis by:	Reviewed by:
Title of employee doing job: Blaster/Helper	Supervisor: Mines Foreman/shift incharge	Department: Mines	Section:	Approved by:
Req'd/recommended PPE: Safety shoes, goggles, ear plug				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Evacuating Men and Machinery at the time of Blasting.	Fly Rock	Proper Centeries	Centeries within the Danger zone	Effective Communication
misfires	Un exploded explosives	Inspected the blasted area after shot firing	Un noticed MisFire	Proper Checking of misfire