



## STANDARD OPERATING PROCEDURE

FORM NO.HSE/CORP/4

	ACTIVITY	Issue, Receipt & Return of explosives from magazine		SITE	SMC	DEPARTMENT	Mining Operation
SOP NO.	IMFA/SOP/SMC/MINING/03	REVISION	00	EFF DATE:	19.6.14	NO. OF PAGES	Page 1 of 5

Step No.	Activity (WHAT)	Associated Requirements/ Hazards/ Impact	Process / tools / PPEs (HOW)	Responsibility (WHO)	Remarks / Reference
1	Sending blaster for issuing required amount of explosive from magazine as finalised by the Blasting Foreman	<b>Quality-</b> i) Requisition of explosive	i) Give the written requisition of explosives to the blaster. Then Blaster with helpers will proceed to bring explosives from the magazine.	Blasting Foreman	DOC NO.WI/OPRN/03
		<b>OH&amp;S –</b> Nil			DOCNO. HIRA/MINING/03
		<b>Environment –</b> i) Pollution	i) Excessive consumption of explosives shall be avoided. Before charging holes will be measured, explosives calculated and that quantity will be issued from the Magazine.	Blasting Foreman	Aspect No.1A
2	Entering to magazine premises	<b>Quality –</b> i) Persons to enter at a time.	i) Not more than four persons will be allowed to enter into Magazine.	Security Guard	DOC NO.WI/OPRN/03
		ii) Entry of persons to carry explosives from magazine	ii) Before entering to magazine the authorized person will put their signature in the register and the record will be maintained regularly.	Security Guard	
		<b>OH&amp;S –</b> i) Possible static charge due to metal objects.	i) Persons entering the magazine will be checked by security: a) mobile, ornaments and metal objects b) match box, lighter or open flames	Security Guard	DOCNO. HIRA/MINING/03
		ii) Possible static charge due to	ii) The person wearing cotton dresses will only be allowed to enter magazine.	Security Guard	



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		synthetic cloth.			
		<b>Environment - Nil</b>			
3	Entering to magazine room.	<b>Quality –</b> i) Prohibition to use other lighting device.	i) No other lighting device except torch shall be allowed in the magazine room.	Magazine Incharge/ Security Guard	DOC NO.WI/OPRN/03
		<b>OH&amp;S–</b> i) Possible static charge	i) Before entering into magazine room, the persons will first clean shoe with water then put palm on brass plate fitted on the wall.	Blaster	DOCNO. HIRA/MINING/03
		<b>Environment- Nil</b>			
4	Receiving of explosives	<b>Quality-</b> i) Issuing of explosive	i) Produce requisition to magazine in charge. Count the required explosives and load into the explosive van by explosive carriers.	Blaster	DOC NO.WI/OPRN/03
		ii) Explosives will be carried carefully.	ii) No explosive shall be issued except in a case or container of substantial construction and securely locked. In case of bulk use, package may be taken carefully.	Magazine Incharge	
		iii) Issuing of explosives to authorized persons only.	iii) Explosive shall be issued only to	Magazine Incharge	



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			persons duly authorized by the Mines Manager.		
		<b>OH&amp;S –</b> i)Explosion due to shock	i)Explosive material shall be handled carefully. No jerk or strike will be allowed during shifting.	Blasting Helper	DOCNO. HIRA/MINING/03
		ii)Skin Infection	ii)To avoid direct skin contact, the explosive material will be handled by wearing hand gloves.	Blasting Helper	
		<b>Environment -</b> i)Deterioration of explosive	i)a)Explosive will be issued in the same chronological order in which they were received. b)If any explosives are returned to the magazine, they will be reissued before fresh stock is used.	Magazine Incharge	Aspect No.2A  Reg.156(2)
5	Carrying of explosive to the van	<b>Quality –</b> i)Ensure safe carriage of explosives	i)Ensure no fall of explosives from the case while loading/unloading.	Blaster	DOC NO.WI/OPRN/03
		<b>OH&amp;S –</b> i)Possible explosion	i)Explosives and detonator will not be transported at a time in the explosive van.	Blaster	DOCNO. HIRA/MINING/03
		iii)Thunderstorm	ii)Whenever a thunderstorm appears to be imminent in the vicinity of the magazine, explosives will not be issued and every person engaged in or about the magazine shall be withdrawn to a safe distance.	Magazine Incharge/ Blaster	



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	<b>Environment –Nil</b>			
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6	Issuing of Detonator	<b>Quality –</b> i)Issuing of detonator	i)After completion of charging the holes, detonator will be issued.	Blaster	DOC NO.WI/OPRN/03
		ii)Detonator box should have lock and key arrangement.	ii)Detonator will not be issued if the box has no lock and key.	Magazine Incharge	
		<b>OH&amp;S–</b> i)Consequence of explosion is high	i)No detonator shall be kept in a case or container which contains explosives.	Blaster	DOCNO. HIRA/MINING/03
		<b>Environment- Nil</b>			
7	Return of Explosives	<b>Quality –</b> i)Return of explosives	i)After charging calculate the explosives and remaining explosives will be removed from the blasting site.  ii)After firing, return the balance explosives to the Magazine.  iii)Any person finding any explosives in or about the mine shall deposit the same in the magazine. Every such occurrence shall be brought to the notice of Manager in writing.	Blaster  Blaster  Blasting Foreman	DOC NO.WI/OPRN/03
		<b>OH&amp;S–Nil</b>			
		<b>Environment- Nil</b>			

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<b>Name</b> <b>Designation</b> <b>Signature:</b> <b>Date:</b>	<b>Prepared by</b>  <b>M.K. Samal</b> <b>Mines Manager</b>	<b>Approved by</b>  <b>S. Patni</b> <b>Sr. GM-SCM</b>
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**NOTE :****SIX DIRECTIONAL HAZARD IDENTIFICATION DURING JOB :**

In addition to the above SOP, a 6-directional hazard identification sheet shall be used before start of the job. While executing the job at site, any hazards from six directions (**NORTH, SOUTH, EAST, WEST, TOP, BUTTOM**) to be assessed based on physical observation, common sense & experience. Controls shall be taken for any hazards thus identified.

**TRAINING RECORD OF SOP :**

The Training on this SOP with six directional hazards is to be imparted to concerned employee and contract workers by Shift In-Charge / Deptt. Head as applicable. The Training Record to be maintained in a register with signature of the individual employees before starting of the job.