



VUL-SWP-027- Magazine Management Rules

STANDARD WORK PROCEDURE (SWP)	
Description	Magazine Management Rules
Site	Vulcan Mine
Department	Drill & Blast Department
Purpose	To provide a standard work practice for the management of explosives within the surface magazines of Vulcan Mine.
PPE Required	
    	Head Protection as per site requirement Safety footwear Eye protection Rubber, chemical resistant gloves High Visibility clothing
Responsibilities	
It is the responsibility of all Vulcan Mine Shotfirer's/Magazine Keeper's to adhere to this Standard Operating Procedure to ensure that the security of our product is being managed and regularly inspected and audited. It is also the responsibility of the Site Supervisor to conduct periodical inspections and audit on the magazine to ensure they are at the standard required by legislation.	
Job Step Analysis Reference	
JHA Re-Load Bulk Operations	
Other Relevant Information - References	
Australian Code for the Transport of Explosives by Road and Rail (3rd Edition) (AEC3) Code of Practice: Segregation Barriers for Transporting Mixed Loads of Detonators and High Explosives Code of Practice Storage and Handling of Solid Ammonium Nitrate Code of Practice Storage and Handling Of UN3375 Explosives Information Bulletin 53 Storage requirements for security sensitive ammonium nitrate (SSAN) Explosives Act 1999 and Explosives Regulation 2017 VUL-PLN-035 – Emergency Planning and Response Plan VUL-FRM-16-19-Blast Crew Daily EOS Security Checklist VUL-FRM-16-24-Reload and Magazine Area Checklist VUL-FRM-16-09- Magazine Record VUL-FRM-16-12- Shotfirer Handover Form VUL-FRM-16-18-Shotfirer Daily Load Report & Manifest VUL-FRM-16-07-Explosive Magazine Stocktake Form VUL-TMP-013-WRAC-Emulsion Transfer and Storage Risk Assessment VUL-WRAC-Explosives In the Event of Lightning VUL-TMP-013-WRAC-AN Handling and Storage VUL-TMP-013-WRAC-Transport of Explosives Risk Assessment VUL-FRM-16-23-DBA Traffic Management Plan Vulcan Mine Traffic Management Plan(s)	



1. Magazine Management

1.1 Access to the Magazine Compound

No unauthorised personnel are permitted access to a magazine, or the product stored within, at any time. Access to the Magazine is strictly limited to Authorised Personnel or Personnell under the Supervision and accompanied by an Appointed Shot Firer.

Only vehicles powered by an internal diesel combustion engine may access the Magazine compound, whilst within the Magazine compound personnel shall comply with the following:

All vehicles shall be fitted with a dry-powder fire extinguisher with a rating not less than 40 B(E);

- All vehicles and equipment parked within 8 meters of a magazine must ensure the engine shuts down before the magazine door is opened.
- Vehicles shall not be refuelled, maintained or left running unattended within ten (10) metres of any explosive's storage and handling areas; and
- They shall be fitted with a battery isolation switch which provides total isolation of the vehicles' electrical and mechanical energies.

1.2 Safe Storage of IE & HE

- All magazines will display the licensed product class and capacity on the front of the magazine in accordance with Australian Standard 2187.1.
- Separation distances between magazines containing different class products, will be in accordance with Australian Standard 2187.1, and dependent on the maximum product holding capacity, as displayed on the magazine license.
- Magazines containing the same class of product will be considered using a net quantity calculation and shall be spaced in accordance with the licence approval conditions.
- Products shall be stored and transferred in their original packaging.

1.3 Stock Transfer and Stock Deliveries

- The Shotfirers / Magazine Keepers signature is required for all stock movements.
- If any variation is identified, the Shotfirer / Magazine Keeper is to sign and submit completed forms as evidence and then report the variation prior to any investigation into the unaccounted-for product.
- All explosives delivery dockets will be checked and aligned against the product delivered for product quantity prior to the Shotfirer/magazine keeper signoff. All explosives delivery dockets will be retained on site.

Stock Transfer:

- Any transfer of product between magazines must include the names of the source and destination of the products.
- The daily stock records of both magazines must be completed to show product out of the issue magazine and into the return magazine.
- The total stock count for each product is to be completed by the Shotfirer / Magazine Keeper at the start and end of each roster cycle.
- The actual stock by count is to be dated and recorded and any variance reported.

Stock Deliveries:

- All product deliveries will be counted into the magazine against the delivery documentation to ensure that the product totals align.
- The delivery docket will be recorded with the date and the updated stock total.

1.4 Reconciliation of Magazine Contents and Magazine Compliance

General Compliance:

- The requirement for accurate magazine stock control is specified in Regulations and in Australian Standard 2187 part 1.
- All magazines will display the licensed product class and capacity on the front of the magazine in accordance with Australian Standard 2187.1.
- The product holding must not exceed the magazine capacity at any time, unless an exemption is provided (under special circumstances) by the relevant regulatory authority.



- All Magazine Keepers must be identified to the blast crew by the Site Supervisor and will be accountable for the compliance and quality of the magazine stock records for any specific day, after the product has been withdrawn from the magazine.
- Where multiple Shotfirers/Magazine Keepers operate in various locations, each Shotfirer/Magazine Keeper will be accountable for the compliance and quality of the stock records for any products they have used, on the day.
- The Shotfirer/Magazine Keepers will be accountable for the compliance and quality of the Magazine Stock Records for all products returned to the magazine at the end of the shift.
- The responsibilities of the Shotfirer/Magazine Keeper is to ensure that stock count is accurate and conducted at the required intervals, and report any variances to the Management team, the Police and the relevant regulatory body.

General Contents Management:

- Daily magazine records for the start and end of roster stock counts will be completed and documented in the Magazine Record books found, within each magazine.
- All stock errors must be investigated and, if not immediately rectified, reported to the Site Supervisor and management team before the end of shift.
- The stock control system is based on records, each of which may be cross-referenced to the other to provide a complete and auditable record of explosives stock movements: -
 - **VUL-FRM-16-18-Shotfirer Daily Load Report & Manifest** - to be completed for each vehicle that carries product into or away from a magazine. (receival and withdrawal)
 - **VUL-FRM-16-09-Magazine Record** to be completed for all products coming into the Magazine and going out of the magazine. The product records will be 1 product per page and record all transfer details and the remaining product quantity within the magazine.
 - **VUL-FRM-16-07-Explosive Magazine Stocktake Form** (Stock takes) - to be completed at the start and end of each roster and reconciled monthly.

1.5 Maintenance & Housekeeping Activities

No Hot Work or Penetration shall be undertaken within the Magazine compound without prior approval from the SSE.

- Maintenance work must not be carried out on this magazine except with the approval of the relevant Area Manager.
- Any approved/authorised Hot Works or Penetrations shall be risk assessed and provide guidance on the removal and secure storage of the Magazine contents at an alternate location and prevent ignition of any internal fittings.
- All magazine maintenance work will be conducted in accordance with the requirements of Australian Standard 2187.1.
- All magazine maintenance work will be conducted in accordance with the requirements of Australian Standard 2187.1.
- General, regular maintenance activities will include:
 - Prevent any buildup of dirt or combustible materials in /under or around the magazine.
 - Dry undergrowth or combustible materials must not be allowed on the ground within 10 metres of the magazine.
 - Ensure adequate lubrication of door hinges (monthly).

1.6 Security Activities

- All magazines fenced and secured in accordance with the regulatory standards applicable to surface magazines, as per Australian Standard 2187.1.
- General Daily Magazine Compound Inspection shall include:
 - Remove any prohibited items from the magazines.
 - Magazine signage is correct, compliant and in good condition.
 - Magazine Doors are closed whenever the Magazine is not in use.
 - All security locks are functioning and used correctly.
 - All perimeter fencing is intact with no signs of damage or tampering is evident.
- Key registers will be maintained for all personnel holding a key to the magazine and / or reload facilities, which shall be completed and reviewed regularly and filed in the 'Registers - Keys' section of the project files.