

EXPLOSIVES SECURITY PLAN

Revision Register

Revision	Page(s)	Date	Date	Entered
(Issue No./ Details)	Revised	Issued	Entered	Ву
Issue 1 / Rev 0	All	7/7/06	7/7/06	Paul Josling
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Author Taylor Approved Taylor Page 1 of 28
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Contents

Overview
Scope3
Site Details
Plan Submitted By3
Licensee Information4
Corporation Details4
Responsible Person4
Purpose of Storage4
Quantities of SSAN and explosives stored5
Number of Employees who will come into Contact with SSDS or Explosives
Site Size5
Security Risk Assessment
Sketch/Map of Site7
Unsupervised Access to Explosives10
Secure Storage12
Key Security
Key Access Register
Training23
Stock Control
Secure Transport of Explosives and/or SSDS25
Regulatory Requirements
Retention of Records
Review28

Author	Taylor	Approved	Taylor	Page 2 of 28



Overview

This Security Plan details how Milbrae Quarries manage the safe storage of Explosives, Explosive Precursirs and Ammonium Nitrate at the Colinroobie site.

Scope

This Explosives Security Plan details arrangements for the storage and security of explosives at the Colinroobie site located on Colinroobie Rd Leeton.

Site Details

The site is located at 609 Colinroobie Rd, Leeton NSW 2705. Mailing address is PO Box 225, Leeton NSW 2705 Contact number for site is 02 6953 4401 Email <u>Enquiries@Milbrae.com.au</u> Fax 02 6953 5055

Plan Submitted By

This plan has been prepared by and submitted by: Simon Taylor WHSE Manager Milbrae Business Group

Author	Taylor	Approved	Taylor	Page 3 of 28
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Licensee Information

Corporation Details

Milbrae Quarries Pty Ltd 609 Colinroobie Rd PO Box 225 Leeton NSW 2705 02 6953 4401 0438 615 256 ANZIC Code: 0911 Email: Enquires@Milbrae.com.au

Responsible Person

The responsible person for this plan is: David Giddings – Drill and Blast Manager. 02 6953 9500 0438 615 256 DGiddings@Milbrae.com.au

Purpose of Storage

Explosives are used for mining.

Author	Taylor	Approved	Taylor	Page 4 of 28



Quantities of SSAN and explosives stored

UN Number	Class	Units	Annual Volume	Shipping Name	Product Name	Normal Qty Stored	Max Qty Stored
0042	1.1D	Each	8,500	Boosters	Pentax H Booster	800	1,000
0349	1.45	Metres	16,000	Articles, Explosive, N.O.S	Excel Connectaline; Shockline	3,500	
0065	1.1D	Metres	550	Cord, Detonating	Primacord; Cordtex	3,000	8,000
0360	1.1B	Each	16,500	Detonator Assemblies, Non- Electric	Excel - Detonators	2,000	10,000
0500	1.45	Each	700	Detonator Assemblies, Non- Electric	Interdet; Megadet	750	1,000
1942	5.1	Kg	175,000	Ammonium Nitrate	Ammonium Nitrate	40,000	60,000
0082	1.1D	Kg	600	Explosive, Blasting Type B	Stope Charge	400	750

Number of Employees who will come into Contact with SSDS or Explosives

The following table outlines the number of employees who will come into contact with SSDS or explosives:

Full Time	Part Time	Casual
2	0	1

Site Size

The site at 609 Colinroobie rd is 563 Ha in size.

Author Taylor	Approved	Taylor	Page 5 of 28



Security Risk Assessment

Hazards are to be identified and risks assessed using MBG hazard identification and risk assessment policies and procedures including:

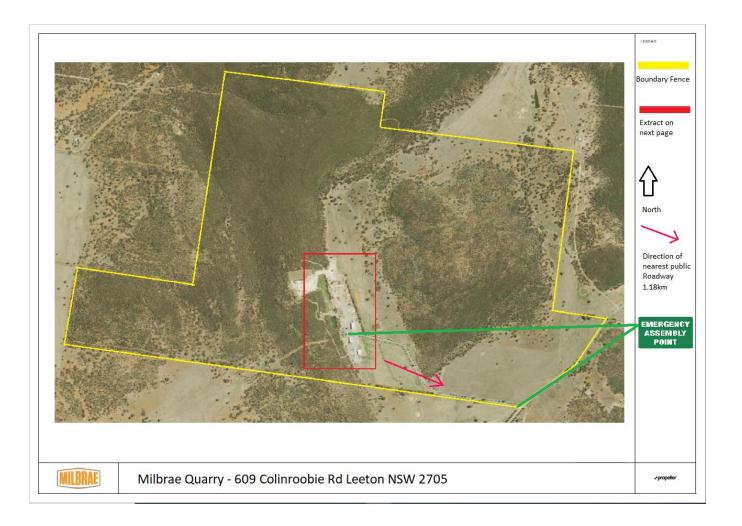
MBG.012.1.4	Hazard & Risk Management Policy
MBG.013.1.4	Hazard & Risk Management Procedure
Appendix 1	Explosive Risk Assessment

Security Risk Assessments are stored on the Milbrae Company Server and can be provided on request.

Author	Taylor	Approved	Taylor	Page 6 of 28

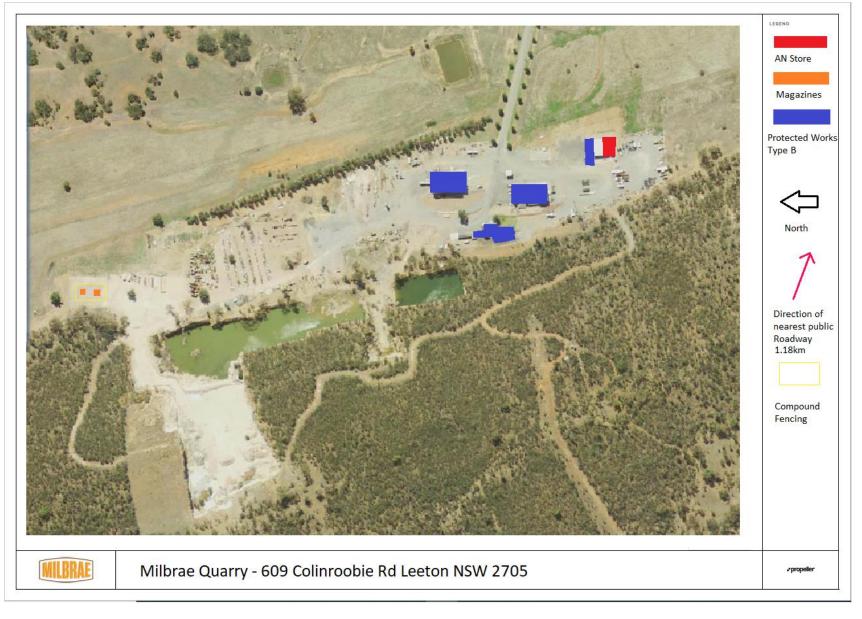


Sketch/Map of Site



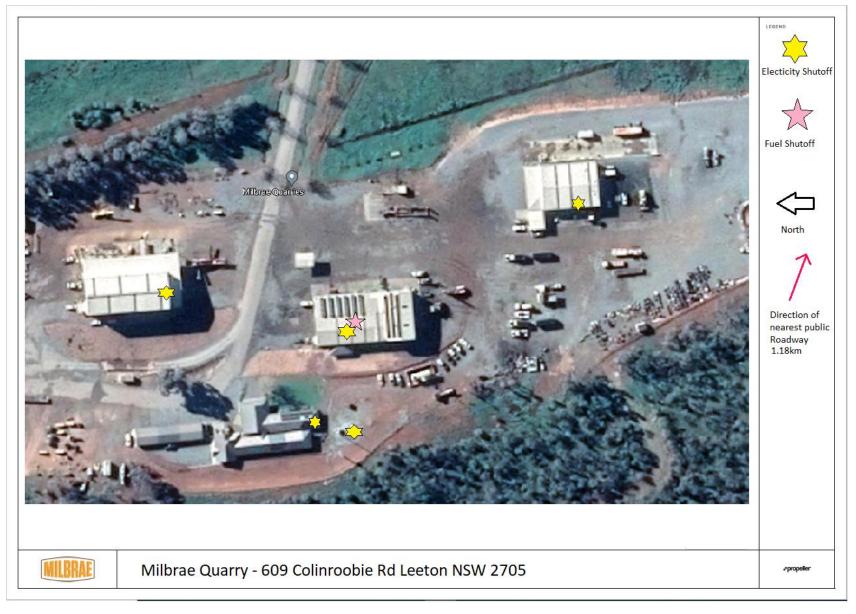
Author Taylor	Approved	Taylor	Page 7 of 28
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	Author	Taylor	Approved	Taylor	Page 8 of 28
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Author	Taylor	Approved	Taylor	Page 9 of 28
	- / -		- / -	-0



Unsupervised Access to Explosives

Only persons with a Security Clearance from SafeWork NSW shall have unsupervised access to explosives. All other employees wishing to access explosives must only do so under the direct supervision of a person who holds a Security Clearance from SafeWork NSW.

The Milbrae Quarries WHSE Manager shall maintain a register of employees who have obtained a Security Clearance from SafeWork NSW.

All Milbrae Quarries staff that will be present on-site at the Colinroobie Site shall be inducted, and made aware of the requirement to hold a Security Clearance, or to be in the presence of someone who holds a licence, if accessing explosives.

Any staff found in the presence of explosives without either a Security Clearance, or without a supervisor with a Security Clearance, shall be reported to the Milbrae Managing Director. The Milbrae Managing Director will then notify SafeWork NSW of the breach. If there was no reason for that staff member to be in the presence of the SSAN or explosives, then the incident shall also be reported to the NSW Police and the NSW Resources Regulator.

Only the individuals recorded in the key register will have key and alarm code access to the two explosives magazines. These people are recorded on the key register. Any other person found to have accessed, or tried to access, either or both of the explosives magazines, without reason, shall be reported to the Milbrae Managing Director, who will then notify the NSW Police, SafeWork NSW and the NSW Resources Regulator.

Regardless of the above, any staff member who discovers a security breach, or a person acting suspiciously, shall immediately notify the Milbrae Quarries Managing Director of the incident. If he is not available, the next person in the chain of command shall be informed. In the rare case where nobody of authority is available, the NSW Police, SafeWork NSW and the NSW Resources Regulator shall be immediately informed of the incident.

In the case of a serious security breach, the site shall not be disturbed. It shall be immediately sealed off until the NSW Police arrive. Any information that may be of value, such as number plates, vehicle descriptions etc. is to be written down as soon as possible.

List of Persons with Unsupervised Access to Explosives

The table below outlines all persons who have unsupervised access to SSDS or explosives.

The table shall be amended whenever a person is granted unsupervised access, and also whenever a person has their unsupervised access rights removed.

Author Taylor Approved Taylor Page 10 of 28



Name and Address	Position	SC Number	Issue Date	Date Added	Date Removed
				to List	from list
David Giddings	Drill and	UHL107465	1/1/2011	1/1/2011	Current
47 Demsey Rd Leeton	Blast				
2705	Manager				
Edward Holmes	Shotfirer	UHL203013	22/12/2019	22/12/2019	Current
302 Square Nob Rd,					
Narrandera NSW 2700					
Brett Woods	Director	UHL101177	21/12/2010	1/1/2011	Current
Farm 32, 94 Corbie Hill Rd					
Leeton NSW 2705					
Steven Tabain	Storeman	UHL107492	20/04/2016	20/04/2016	1/11/2020
14 Bringan St Yanco 2703					
Peter Sullivan	Operations	UHL101133	22/12/10	22/12/10	27/7/2018
Farm 1932 Almond Rd	Manager				
Leeton 2705					
Dwayne Matthews	WHS Co-	UHL201624	21/2/13	15/8/14	1/11/2015
188 Larmer St Narrandera	ordinator				
2700					

Author Taylor Approved Taylor	ge 11 of 28



Secure Storage

Milbrae Quarries is storing its high explosives and detonators at its Colinroobie site, on Collinroobie Rd, Leeton. This site has two alarmed concrete magazines, complying with Australian Standard AS 2187.1 - 1998.

An Ammonium Nitrate store is also on site next to the purchasing and transport office approximately 670 meters away from the two explosives magazines.

The details of the two concrete magazines are as follows;

Concrete Magazines

The two magazines are made from 150mm thick reinforced concrete pre-cast panels, with a 10mm thick steel door. Their internal dimensions are 2.2m by 2.2m. One magazine is used to store high explosives, and the other to store detonators.

The magazines have a two key locking mechanism in the steel door. One is an 11 pin 'restricted system' key, which cannot be cut without an accompanying letter from the Milbrae Managing Director. The other is a turning key used to turn the sliding bolts.

The magazines are both alarmed with a Concept 1000 alarm. The alarm reports to a central monitoring centre every 90 seconds via a GPRS dialler. If the alarm fails to report within 90 seconds, it is triggered. This includes events such as loss of phone connection, or loss of power. By using this system, the alarm is much more reliable than an alarm that only dials up if it has been triggered.

When triggered, the alarm notifies Milbrae's Security Contractor of the event. The Security Contractor then has a list of Milbrae personnel to ring to notify them of the alarm being triggered. If there is no response, or there is no accidental reason for the alarm being triggered, the NSW Police are notified of the situation.

The alarm security code is controlled by EACOM, in Griffith. The code shall be changed if it is believed that an unauthorised person is aware of the code. As a minimum, the code shall be changed on a biennial basis, or if one of the authorised staff leaves the employ of Milbrae Quarries.

The site is fenced with a man proof fence on all sides. The two magazines are 10m apart.

The site is located approximately 250m North of the Milbrae Head Office and Workshop area. The Colinroobie office is located 2km from Collinroobie Rd, on the Leeton / Narrandera Shire border (about 15km from the town of Leeton).

Author	Taylor	Approved	Taylor	Page 12 of 28
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Author Taylor Approved Taylor Page 13 of 23







Author	Taylor	Approved	Taylor	Page 14 of 28





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	Author	Taylor	Approved	Taylor	Page 15 of 28







Author Taylor Approved Taylor Page 16 of 2					
	Author	Taylor	Approved	Taylor	Page 16 of 28





Author Taylor Ap	proved Taylor	Page 17 of 28

EST. 1969





Author	Taylor	Approved	Taylor	Page 18 of 28



A Video Surveillance System has been set up around the Milbrae head Office area. There are four cameras which constantly film the entrance to the Quarry Site, as well as in the general direction of the storage. This is a digital system, which records to a computer hard drive.

For the majority of occasions the Quarry Site is occupied from 6.00am until 6.00pm. There are also trucks entering and leaving the site from 4.00am until 11.00pm. For this reason any unauthorised entry within these hours is likely to be noticed, and reported by Milbrae Staff.

During extended business breaks arrangements are made for a company representative to attend site and conduct a visual external check of the magazine compound for any signs of attempted entry.

Ammonium Nitrate Store

The Ammonium Nitrate Store is constructed of 150mm thick reinforced concrete pre-cast panels, with a internally lockable roller door. Its internal dimensions are 21m by 8.5m.

The store have a single key locking mechanism in the steel door. It is an 11 pin 'restricted system' key, which cannot be cut without an accompanying letter from the Milbrae Managing Director.

The store is alarmed with a Concept 1000 alarm. The alarm reports to a central monitoring centre every 90 seconds via a GPRS dialler. If the alarm fails to report within 90 seconds, it is triggered. This includes events such as loss of phone connection, or loss of power. By using this system, the alarm is much more reliable than an alarm that only dials up if it has been triggered.

When triggered, the alarm notifies Milbrae's Security Contractor of the event. The Security Contractor then has a list of Milbrae personnel to ring to notify them of the alarm being triggered. If there is no response, or there is no accidental reason for the alarm being triggered, the NSW Police are notified of the situation.

The alarm security code is controlled by EACOM, in Griffith. The code shall be changed if it is believed that an unauthorised person is aware of the code. As a minimum, the code shall be changed on a biennial basis, or if one of the authorised staff leaves the employ of Milbrae Quarries.

The site is located approximately 170m South East of the Milbrae Head Office area. The store is located 1.75km from Collinroobie Rd, on the Leeton / Narrandera Shire border (about 15km from the town of Leeton).

Author	Taylor	Approved	Taylor	Page 19 of 28
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A Video Surveillance System has been set up around the Milbrae head Office area. There are four cameras which constantly film the entrance to the Quarry Site, as well as in the general direction of the storage. This is a digital system, which records to a computer hard drive.

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During extended business breaks arrangements are made for a company representative to attend site and conduct a visual external check of the store for any signs of attempted entry.



Author	Taylor	Approved	Taylor	Page 20 of 28







Author	Taylor	Approved	Taylor	Page 21 of 28



All keys used to access the magazines or the Ammonium Nitrate store shall be kept in the key safe located in the Transport Office.

Keys shall only be issued each time a person on the unsupervised access list needs to access either the explosives magazines or the ammonium nitrate store, as soon as the store or magazine is secured the key must be returned to the key safe, and the return must be marked in the key register.

In the event of a key being lost or stolen, the person issued with the key must report the loss immediately to the Milbrae Drill and Blast Operations Manager. The Milbrae Drill and Blast Operations Manager must then report the loss to the Milbrae Managing Director. If the key has been destroyed, or lost where it can never be recovered, the person responsible for the key must sign a Statutory Declaration stating the events that led to the keys loss, and the fact that it can never be retrieved.

If the location of the key is unknown, or the key was stolen, then the lock shall be re-keyed and new keys replacing the previous keys. This shall take place as soon as possible after the loss of the key, and preferably within 24hrs of the discovery of the loss. If the key was stolen and there is some chance the store may be broken into, then measures must be taken to ensure there cannot be access to the store with the stolen key, or there is no product located in that store to steal.

The Milbrae key system is registered with Griffith Keys and Locks, Griffith. The keys used to access the magazines are classified as high security. As such they cannot be copied or cut by any other company other than Griffith Keys and Locks. Griffith Keys and Locks are also not permitted to cut a key unless they have written permission from the Milbrae Quarries Managing Director.

All Milbrae Quarries employees who have been issued with a key to the SSAN store will be inducted via rapid global, and made aware of the above requirements. They will also be asked to sign a set of Key Issue Rules. These rules highlight the importance of the security of the key, and specify the requirements of employees who have been issued with a key.

Author Taylor Approved Taylor Page 22 of 28



The Milbrae Drill and Blast Operations Manager shall be responsible for maintaining a key register for the explosives magazines.

The Key register will record the names of people who have keys to either the explosives or detonator magazines. Each key shall have a unique identifier number on it, and that number shall be recorded on the register, along with the date of issue and return of the key.

The register shall be kept in hard copy alongside the key safe.

Training

All staff that may be involved in the explosives process, including the ordering, delivery and use of explosives, shall be trained on the contents of this Plan. This includes the Purchasing Officer, Quarry Managers, Explosive Users and any staff that may be involved in helping with any of these processes.

As a minimum the following subjects shall be covered by the training process;

- Background introduction to the new SafeWork Licensing arrangements for SSAN.
- Detailed information regarding Unsupervised Handling Licence or Security Clearance requirements, and staff responsibilities in the presence of SSAN.
- Detailed information regarding the requirement for staff to look for possible security breaches, and the actions to be taken if a security breach is identified by any staff member.
- Detailed information regarding the issue of keys for the explosives magazines, and signing of the Key issue rules (if applicable).
- Detailed information regarding the control of incoming and outgoing stock.
- Detailed information regarding the safe transport of explosives.
- External training either;
 - Shotfirers Course; or
 - Safe and Efficient Blasting or equivalent

The site induction for Colinroobie for all persons on site will include:

- Designating explosive and explosive precursor stores as a no go area for any employee who is not authorised and sufficiently qualified to be there.
- Requirement to report suspicious activity around the explosive magazine and/or Ammonium Nitrate store.

Training activities shall be conducted via Rapid Global, the records of training completion will be kept electronically. Records of Training shall be kept for a minimum of five years.

Author Taylor Approved Taylor Page 23 of 2
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Stock Control

Receiving Stock

All incoming stock must be placed in the secure storage areas immediately upon delivery. The person accepting delivery must:

- Record the date received,
- The quantity of incoming explosives,
- The type of explosive or SSDS (Product name and UN no.),
- The License number of the person delivering the explosives,
- Signature and name and licence number of the person receiving the delivery.
- Sort and store stock by:
 - Sorting stock so that the same type of items are kept together
 - Older stock remains at the front/top to ensure it is used first
- Ensure explosive storage areas remain clean and free of rubbish
- Receipt new stock into the bound stock book kept with the magazine.

The following persons are the only persons who are authorized to receive stock:

- David Giddings
- Edward Holmes
- Brett Woods

Issuing Stock

All outgoing stock deliveries must be in the presence of, and controlled by, the Milbrae Drill and Blast Operations Manager or another authorised person. The Drill and Blast Operations Manager must:

- Ensure oldest stock is removed first
- record the date of supply,
- the quantity of explosives supplied,
- the type of explosive (Product name and UN no.),
- the license number, name and signature of the person supplying the explosives
- the license number, name and signature of the person receiving the explosives,
- the destination of the delivery
- reconcile and record the inventory in each magazines bound stock book whenever inventory is removed.

Recording Stock Movements

Bound stock books shall be used to record stock movements. The Drill and Blast Operations Manager is responsible for keeping these books current and will report any stock discrepancies to the Managing Director for further follow up, which may involve notification to regulatory authorities.

Each magazine or store shall have a separate stock book that is kept inside the store or magazine.

All stock records must be kept for a period of at least five years.

Author Taylor Approved Taylor Page 2



Auditing Stock

As well as the above requirements, an inventory audit of incoming and outgoing stock must be completed on a monthly basis. The audit will include:

- Full count of all stock present in the magazines
- Identification of stock coming within 6 months of expiry
- Reconciliation of stock movements with stock present
- Verification the stock levels are within maximum levels of explosives licence
- Verification the stock levels are within the maximum inventory usage levels

The Drill and Blast Operations Manager shall arrange for the monthly stock reconciliation to be undertaken by a person independent to the Drill and Blast Operational team.

This is to ensure that all explosives are accounted for. Any explained losses of explosives (e.g. damaged product etc.) must be recorded on the Outgoing Stock form in the comments section. The Drill and Blast Operations Manager and the WHSE Manager must be immediately notified if any losses cannot be explained. Any unexplained loss must also be reported to the NSW Resources Regulator, NSW Police and SafeWork NSW immediately.

All unexplained losses will be investigated as an incident using Milbrae's Incident Investigation Process.

Secure Transport of Explosives and/or SSDS

All Milbrae staff who Transport Explosives or SSAN shall have a Security Clearance from SafeWork NSW.

For all new routes of Transport, a Transport Risk Assessment shall be completed prior to transporting any explosives. This Risk Assessment shall detail the type of product to be transported, the quantity, the frequency of trips, and the type of vehicle to be used. It shall also detail the proposed route to be taken and identify any load security measures to be implemented. Any other risks the journey may have should also be identified.

Current transport route risk assessments are held on the company server.

The 'Emergency Procedure Guide' is to be located in all vehicles transporting Explosives.

When commencing the journey, the person in charge of the delivery shall complete the Milbrae Shipping Document and ensure the Document is signed upon delivery by the recipient of the product. Any product not used shall be recorded on the Special Instructions part of the Shipping Document, and the product returned to the point of origin.

Incoming and outgoing product shall be documented as per the Stock Control section of this Security Plan.

Author	Taylor Approved	Taylor	Page 25 of 28
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In the event of any storm activity within the local area, any work activities being undertaken at or near the magazines is to cease. Any explosive product which has been removed from the magazine is to be replaced in the magazine, magazine records are to be made to reflect this.

The magazine is to be closed and locked, the compound is to be secured and locked. All persons are to be withdrawn from the area until the Drill and Blast Operations Manager deems it safe to resume activity after the storm has passed.

Magazines are fitted with two earthed lightning rods each, on opposite corners of the magazines.

Other Controls

Loss of Explosives or SSAN

All losses of explosives or SSAN must be reported immediately to the WHSE Manager and the Managing Director.

Losses will be reported to the Police, Safework NSW and the Resources Regulator, Milbrae will classify the loss as an incident and conduct an in house incident investigation.

Security Incidents Involving Explosives or SSAN

Any incident where the security of explosives or SSAN is compromised will be reported immediately to the WHSE Manager and the Managing Director

The incident will be reported to the Police, Safework NSW and the Resources Regulator, Milbrae will conduct an in house incident investigation.

Some examples of security incidents may include:

- Access to explosives or SSAN by persons not holding a security clearance.
- Attempted forced entry to a store or magazine.
- Explosives or SSAN stored in breach of security plan.
- Failure to secure explosives or SSAN as per the security plan eg.
 - Failure to secure compounds/stores
 - o Failure to arm alarms
 - Suspicious activities around compounds/stores

Author	Taylor	Approved	Taylor	Page 26 of 28
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Spillage – Ammonium Nitrate

If a spillage or contamination of ammonium nitrate occurs on site, or product is present from other damaged bags the following process is to be followed:

- All work activities occurring within 15m of the spill are to cease.
- Any ignition sources are to be removed from the work area.
- If containment is required to stop run away, or to stop material entering drainage system, use earthen bunds.
- Consult SDS sheet of product for PPE requirements.
- Sweep up product and collect in waste storage bags/containers ensure bags/containers are clean and free of any foreign objects.
- Record quantity of product spilt in inventory books.
- Clearly label waste bags/containers with contents.
- Segregate waste bags/containers in store.
- Contact supplier immediately for advice on disposal of contaminated material.

Spillage – Explosives

If a spillage or contamination of explosives occurs on site, the following process is to be followed:

- Eliminate all ignition sources within a minimum of 20m.
- Any equipment used to handle product must be earthed.
- Do not touch or walk-through spilled material.
- Do not touch damaged containers, packages or spilled material unless wearing appropriate PPE.
- Contact supplier emergency contact for advice on cleaning up spill.

Author Taylor Approved Taylor F	28
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Regulatory Requirements

Comply with all relevant statutes, guidelines, Code of Practice, Australian Standards and other legislative requirements in an effort to establishing and maintaining a safe workplace

- WHS Legislation
 - Work Health and Safety Act 2011
 - Work Health and Safety Regulations 2011
 - Dangerous goods (Road & Rail Transport) Regulations 2014
 - Explosives Regulations 2013
- MHS Legislation
 - Work Health & Safety (Mines and Petroleum) Act 2013
 - Work Health & Safety (Mines and Petroleum) Regulations 2014
- Licencing
 - Blasting Explosives Users Licence
 - Security Clearance (formerly U.H.L)
 - o Security Sensitive Dangerous Goods
 - Store Explosives
 - o Transport Explosives
- Australian standards
 - o As 2187.0-1998 Explosives Storage, transport use. Part 0: Terminology
 - o AS 2187.1-1998 Explosives Storage, transport and use. Part 1: Explosive storage
 - AS 2187.2-2006 Explosives Storage, transport and use. Part 2: Use
 - o AS 4326-2008 The Storage and Handling of Oxidizing Agents
- Guides
 - SafeWork NSW: Security plan for storage and handling or explosives and/or security sensitive dangerous substances

Retention of Records

All records relating to this Explosives Security Plan are to be retained for a period of five years, all copies will be kept electronically, on the company server.

Review

This plan will be reviewed every year or:

- If an audit recommends changes in the plan,
- If an incident occurs and an incident investigation recommends a review
- If regulatory requirements are updated or renewed.

Author Taylor Approved	Taylor	Page 28 of 28
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