



Security plan for storage and handling of explosives and security sensitive dangerous substances

September 2013

Disclaimer

This publication may contain work health and safety and workers compensation information. It may include some of your obligations under the various legislations that WorkCover NSW administers. To ensure you comply with your legal obligations you must refer to the appropriate legislation.

Information on the latest laws can be checked by visiting the NSW legislation website legislation.nsw.gov.au

This publication does not represent a comprehensive statement of the law as it applies to particular problems or to individuals or as a substitute for legal advice. You should seek independent legal advice if you need assistance on the application of the law to your situation.

©WorkCover NSW

Contents

About this guide	2
Overview	2
Compliance activities conducted by WorkCover	2
Definitions	3
Instructions for completing the site security plan	4
Section 1: Licensee information	4
Section 2: Security risk assessment	5
Section 3: Sketch/map of site	6
Section 4: List of persons with unsupervised access to explosives or SSDS	6
Section 5: Secure storage	7
Section 6: Key security	8
Section 7: Key register – employees access to explosives or SSDS store	8
Section 8: Instructing employees and contractors	8
Section 9: Stock control – receiving	9
Section 10: Supply details	9
Section 11: Secure transport of explosives or SSDS	10
Security plan cover sheet	11
Security plan template	12
Section 1: Licensee information	12
Section 2: Security risk assessment	14
Section 3: Sketch/map of site	15
Section 4: List of persons with unsupervised access to explosives or explosives precursors	16
Section 5: Secure storage	17
Section 6: Key security	17
Section 7: Key register – employees access to explosives or SSDS store	18
Section 8: Instructing employees and contractors	18
Section 9: Stock control – receiving	19
Section 10: Supply details	20
Section 11: Secure transport of explosives or SSDS	21

About this guide

This guide and security plan (SP) template may be used by anyone who wishes to apply to WorkCover NSW for an explosives licence that includes the storage of explosives or security sensitive dangerous substances (SSDS) (one of which could be security sensitive ammonium nitrate (SSAN)). The SP must be consistent with the template provided from page 11 and also be compliant with the below listed Australian Standards, the codes and WorkCover Conditions.

- Australian Standard AS 2187 *Explosives-storage, transport and use*
- Australian Standard AS 4326 *The storage and handling of oxidizing agents*
- Australian Standard AS 4145 *Locksets and hardware for doors and windows*
- Australian code for the transport of explosives by road and rail (Australian Explosives Code)
- Australian code for the transport of dangerous goods by road and rail (Australian Dangerous Goods Code)
- WorkCover – *General explosive licence and security clearance conditions under the NSW Explosives Act and Regulation* (catalogue no. WC04685)
- WorkCover – *Guide for secure and safe handling of explosives and security sensitive dangerous substances* (catalogue no. WC04676).

Further information regarding these publications and the NSW Explosives Regulation can be obtained from workcover.nsw.gov.au or by telephoning **13 10 50**.

Overview

- Most explosives licences allow the licence holder to store SSDS (including SSAN), therefore a SP must be submitted with these licence applications.
- An SP is not approved until the application for an explosives or SSDS licence has been granted by WorkCover.
- The licensee is required to review the SP annually and update, if needed.
- There is no requirement to submit a SP for a blasting explosives user's licence, provided certain limits are not exceeded as per below.

A blasting explosive's licence holder can only store and keep overnight unused explosives or SSDS up to the following amounts:

- Blasting explosives, including boosters – 2.5kg
- Detonators – 125
- Detonating cord – 5kg NEQ (eg 500 metres of 10g/m detonating cord equates to 5kg NEQ)
- SSAN – 50kg.

If any of these limits are exceeded, a blasting explosives user's licence with special provision to store is required. In this instance a SP is required to be submitted.

Compliance activities conducted by WorkCover

WorkCover inspectors will conduct verification inspections of all sites to confirm the security arrangements detailed in the SP. Inspectors will notify applicants of the date and time of the inspection and any associated documentation requirements prior to the inspection being conducted.

In addition to the planned verification process, all WorkCover inspectors, as part of their normal duties, will conduct random verification processes on sites.

Definitions

Explained loss – any loss caused by such things as: product density changes, spillage, calibration variances, effects of humidity, etc.

Nominated responsible person – a person (in addition to the licence holder) who is nominated by a corporation and is responsible for managing the implementation of the SP. This person must hold a security clearance.

Secure by lock would normally include one of the following:

- a locked building
- a secure shed with lockable entrances, and if there are windows, that they are locked or barred
- a secure and lockable freight container or explosives magazine
- in the case of ammonium nitrate emulsions a lockable tank.

Quality security locks must be employed. Electronic type locks may be acceptable.

Secure store – a physical place where explosives or SSDS are kept secure by lock or constant surveillance and where procedures for the following are in place:

- control of access
- control of keys (if any)
- documentation of the movement in to and out of the secure store of explosives and/or SSDS.

Security clearance (previously called an unsupervised handling licence (UHL)) – a security clearance confirms that the person has been issued a clearance by law enforcement agencies and/or WorkCover to work around explosives. It does not, by itself, authorise a person to handle explosives or SSDS, unless the holder is acting under the authority of another licence issued under the NSW Explosives legislation.

Security plan (SP) – a plan that has been put in place to effectively manage all security risks relevant to the storage of explosives and/or SSDS.

Security risk – risk of:

- theft of explosives and/or SSDS
- unexplained loss of explosives and/or SSDS
- possible sabotage of explosives and/or SSDS
- unauthorised access to explosives and/or SSDS.

UN number (in relation to dangerous goods) – the identification number shown in the Australian Dangerous Goods Code for Transport by Road and Rail (7th edition), in relation to those goods. The UN number in relation to explosives means the number listed in the Australian Explosives Code.

A copy of the Australian Dangerous Goods code is available from ntc.gov.au and Australian Code for the Transport of explosives by road and rail (3rd edition) is available from safeworkaustralia.gov.au

Unexplained loss – any loss that cannot be explained. If there are reasonable grounds to believe that an explosive or SSDS has been stolen or lost, this is a matter to be reported to the local police and WorkCover as soon as reasonably practical.

Unsupervised access – access to explosives or SSDS in circumstances where no other person who is authorised under a licence to store or handle explosives or SSDS is present and includes:

- access to the secure store
- access to the keys to the secure store
- access to explosives or SSDS while it is being transported.

Instructions for completing the site security plan

If explosives or SSDS are stored at more than one site, a separate SP must be submitted for each location.

The following sections must be included in a SP. A SP template is provided on page 11.

Section 1: Licensee information

Applicant details	Provide the full name of the person making the application in the case of an individual application. For corporations, the corporation name must be provided.
Residential/business address	Enter the residential (individual application) or business address (corporation application). This address cannot be a PO Box.
Mailing address	The mailing address may be a PO Box.
The address where the explosives or SSDS are stored	The storage address must be a physical address.
Telephone	Individual or corporation contact telephone number(s), preferably both landline and mobile numbers.
Fax and email contact	Fax number including the area code and email address.
Nominated responsible person details Corporations only please record contact details (a 'nominated person' must have a management role, and the authority to develop, implement and maintain a security plan)	Corporation applicants only: List the 'nominated responsible person' (responsible for the development, implementation and maintenance of the SP). Details must include: <ul style="list-style-type: none"> • Name • Phone • Mobile • Email • Fax
The purpose(s) for storage and handling of explosives and SSDS eg for agricultural, mining, construction, civil engineering or seismic work, for supply and use	List the reasons for using explosives and SSDS on the site eg trade, own use, stock, farm use – such as pasture improvement.
Amount and type(s) of explosives and SSDS to be stored and handled	List the types of explosives stored and handled on site, including: <ul style="list-style-type: none"> • UN number • Proper shipping name • Class • Product or common name • Units Plus list the annual volume expected to be handled, normal quantity stored and maximum amount stored at any time in kilograms. Create a table and include it with this form if needed.
The number of employees on site who may come into contact with SSDS or explosives (full-time, part-time, or casual employees)	Detail the number of: <ul style="list-style-type: none"> • Full-time employees • Part-time employees • Casual employees

The total size in hectares of the site for which explosives or SSDS are to be stored and handled

NB: if there is more than one site, a separate security plan must be completed for each location). If the SP is for the purpose of SSAN storage, list the size of the property (in hectares) on which SSAN is to be used.

List the size of the site.

Section 2: Security risk assessment

A security risk assessment is a necessary first step to developing a SP. This assessment will describe existing security measures and examine the level and type of security risks to your particular business. In clarifying those risks it is necessary to consider outside threats and also the security risk from staff or contractors who have access to your premises and explosives or SSDS.

You should consider whether current security arrangements leave the explosives or SSDS vulnerable to theft or sabotage, and consider security improvements appropriate to manage the assessed risk. Security risk assessments should be reviewed periodically, particularly after security incidents.

The SP must at least ensure that:

- Explosives and SSDS are kept in a secure building or store.
- There are procedures for checking and authorising persons with unsupervised access to explosives or SSDS, including:
 - Designating a responsible person to maintain the SP.
 - Instruction of workers on the SP procedures.
 - Ensuring people with unsupervised access to explosives or SSDS hold a WorkCover 'security clearance'.
- There is record keeping to reconcile incoming and outgoing quantities of explosives or SSDS and to ensure that the goods are obtained from an authorised person, removed by an authorised person, and received by an authorised person.

There are procedures for reporting to authorities any unexplained loss, theft, attempted theft, or any other security incident involving explosives or SSDS.

Important note: the secure storage and handling of explosives must at least comply with the requirements in the Australian Standard AS 2187 *Explosives – storage, transport and use*. The storage and handling of SSDS must comply with AS 4326 *The storage and handling of oxidising agents*.

Record your security risk assessment and then complete the following sections.

Section 3: Sketch/map of site

- Sketch a map of your site on A4 or graph paper, showing where the explosives or SSDS will be stored or handled in relation to the site boundaries and main buildings.
- If there is more than one explosives or SSDS storage location on the site, make a sketch showing all of the storage locations. If an applicant operates more than one site, a separate SP must be lodged for each site.
- For all maps:
 - show the property’s boundaries with an arrow indicating the direction of north
 - show the direction and distance to the nearest public road with a pointing arrow
 - the nature of any nearby public buildings or infrastructure should be recorded and shown with a directional arrow. The number of metres in distance should also be included.
- Record the physical address of the site on each map cover sheet.
- Record if the boundary of the site is secure from unauthorised access by fencing or constant surveillance.
- Record if the compound where explosives or SSDS are stored is secured by fencing or by constant surveillance.

Section 4: List of persons with unsupervised access to explosives or SSDS

- Any person given ‘unsupervised access’ to explosives or SSDS must hold a current ‘security clearance’. Staff who do not require ‘unsupervised access’ are not required to hold a ‘security clearance’.
- All persons holding a ‘security clearance’ must be listed on the SP. The details recorded must include the person’s name and their security clearance number.
- There must be at least one person listed on the SP with a ‘security clearance’. At a minimum, if one person is listed it must be the licensee. If the person is listed for a corporation, the person shown must be the same person as the ‘nominated responsible person’ under the licence. This is a person who is engaged in the management of the corporation.
- Site security is the responsibility of the licensee. The licensee must establish and maintain controls to ensure the security of goods held on that site.
- The following table should be used to submit details of persons holding a ‘security clearance’.

Name and address of person	Position in company	SC number	Issue date	Date added to list	Date removed from list

Section 5: Secure storage

- A SP cannot be approved without providing details of the secure storage area to store or handle explosives or SSDS.
- A SSAN area may be shared between farmers provided all other SSAN requirements are met. The SSAN licence must ensure that any SSAN users meet all of the security obligations and are listed on the plan for 'unsupervised access'. The co-users must also hold a security clearance.
- The secure storage area must be secure at the time of completing the plan.
- Show the secure storage area and make sure it is clearly marked on the site security plan sketch.
- For non-agricultural sites, site management must appoint a 'magazine keeper' whose task is to ensure the secure storage of explosives and SSDS, and to manage the movement of stock in and out of secure storage.
- Explosives or SSDS must be kept in a magazine, or a secure building or store.
- There must be procedures for controlling access to this magazine, or secure building or store.
- Including photographs will help with reviewing the SP. This is not a compulsory requirement. If it is practical and safe, take photographs of the storage area from both ends and both sides and include these with the SP. If photographs can be taken, try to include additional photographs of the store from each corner.
- Record the secure store details in the following table.

The 'secure store'	Description
The construction of the building, store, container or magazine	State the main construction eg brick, metal, wire cage etc
The size of the building, store, container or magazine	State the dimensions such as length, height and width in metres
Locks or controls for the store	Describe the types of locks on the door(s), and any electronic security
Windows and window security	Record if there are any windows and if these are locked, barred and/or alarmed
Warning signs	Show any warning signs such as 'authorised access only'
Security precautions	Record any security precautions eg alarms, patrols, guard dogs, extra lighting etc
The amount of SSAN to be stored (in kilos)	Record how much is kept (in kilos) under normal conditions, and the maximum stored
Other chemicals or hazards	Record the distance to any other chemicals in metres eg if explosives are kept near a flammable liquid tank
The length of time you store ammonium nitrate	Record the period SSAN would be stored (eg up to 2–3 weeks before it is used)

Section 6: Key security

- The security plan must show how security will be maintained, and access to explosives or SSDS controlled. If more than one person will have access to the storage area, a security control for access keys and/or codes is required.
- Each store for explosives must be able to be locked in a way, which complies with AS 4145 *Locksets and hardware for doors and windows*, and meets the security requirements set out in the Australian Explosives Code.
- There must be a person responsible for keeping a key register. The person must have unsupervised access, hold a WorkCover security clearance and be recorded on the SP.

Security access	Details
Types of secure locking	Record the type of locks used eg padlocks, complying with AS 4145 to a standard that is at least the level described in the Australian Explosives Code.
How many people will have access to the secure store	Record all persons with access to the store.
How a key or code will identify each individual key	Record the method eg numbered keys.
The person responsible for the key register	Show the person responsible for the register.

Section 7: Key register – employees access to explosives or SSDS store

- If there is more than one employee, the licensee must decide which employees will be allowed unsupervised access to the explosives or SSDS store.
- A list of employees who have a key, or access to a code to a lock (eg the number permitting the opening of a padlock using numbered dials instead of a key), or any other form of security must be kept up to date.
- Ensure the 'key register' is kept up to date and is easily accessed.

Key number	Name of person	Date and time issued	Signature of register keeper	Date and time key is returned	Signature of register keeper

Section 8: Instructing employees and contractors

- Maintain a record for explosives or SSDS security plan training and any instructions given to employees on restrictions with explosive and explosive precursor use (include any contractors or temporary employees).
- Record if instructions are given to employees on safe and secure handling of explosives or SSDS during their work.
- Ensure that there are instructions about who may access the explosives or SSDS storage.

Employee (or contractor's) name	Type of training provided	Date	Licensee or supervisor's signature

Section 9: Stock control – receiving

- All explosives or SSDS must be kept within the secure storage area.
- Explosives or SSDS stock added to or removed from the storage area must be accounted for with a stock control system (the control must provide a basic record of adding or removal). The magazine log must be completed in accordance with the Australian Standard for Explosives (AS 2187.1 Section 4). This record must be kept for a period of at least five years.
- The licensee or an employee with a security clearance must keep a record of explosives or SSDS being added to the storage area.
- Any explained losses of explosives or SSDS must be recorded (for eg if a bulk bag split by accident leading to a loss of security sensitive ammonium nitrate on the ground, record this in 'comments').
- Any unexplained loss must be reported to the NSW Police and WorkCover immediately.
- Incoming stock must list where stock is obtained from.

Date received	Type of explosive or SSDS	Quantity received	Name and licence no. of supplier	Licensee's name	Signature of recipient	Any comments
	Product name UN number					

Section 10: Supply details

- The SP must include provision to check the licences of persons who are being supplied with explosives or SSDS, and/or if transport is arranged for delivery.
- A record must be kept of the name and licence number of persons supplied with all explosives or SSDS.
- If a transport company is used for delivery of explosives or SSDS, the details of their licence must be recorded.
- A magazine record, as a register of use, must also be kept.

Outgoing stock – a record of supply and use

Date of supply	Type of explosive or SSDS	Quantity received	Name and licence no. of customer	Customer's address	Signed out by (licence no. and signature)	Any comments
	Product name UN number					

Section 11: Secure transport of explosives or SSDS

- This section is required to be completed if you intend to self-transport explosives or SSDS.
- An applicant wishing to transport explosives or SSDS must record which employees (if any) will transport goods. These people will have 'unsupervised access' and therefore require a 'security clearance'.
- The details of the vehicle to be used must be supplied.
- The proposed routes from the place where the explosives or SSDS have been purchased to the place where these would (normally) be used must be supplied.
- These route requirements also apply if the explosives or SSDS are transported from a supplier's location to a customer's location where the explosives or SSDS are to be used.
- Primary producers must seek approval to transport SSAN, which they purchased for their own use. This provision will not be automatically granted.
- The maximum amount of SSAN allowed for transport in any single journey is five tonnes (5000kg).
- The driver must keep the load under the watch and the load must be secure against tampering.
- When transporting explosives or SSDS, the applicant must comply with additional requirements of the Australian Explosives Code which stipulates that a transporter must have a security plan for 'high security risk loads'. This requirement may include emergency communication in the event of an emergency, that the locks are of a certain standard, there are monitoring systems and so forth.

Note: The authorised vehicle driver under the WorkCover licence to transport by vehicle or vessel must comply with the requirements of the Australian Explosives Code, and in the case of SSAN the ADG Code.

Transport	Details
The type of explosives or SSDS to be transported	Record type of explosives or SSDS to be transported (UN number, Class number, AN, CAN, CAN blends etc)
The quantity of explosives or SSDS expected to be transported	Record the amount of explosives or SSDS to be transported (in kg)
The location of the explosive or SSDS supplier	Record the town or city of the supplier
The main roads to be used for the journey	Record the main roads
Load security	Record the way the load will be secured against tampering or theft
Drivers	Record who will drive vehicle eg any employees expected to pick up and deliver explosives or SSDS load
The frequency of transport	Record how often explosives or SSDS will be transported (eg once per month)

Security plan cover sheet

Site security plan for the storage and handling of explosives and/or SSDS (SSAN).

Individual or corporation applicant name:

Security plan for site name:

Site address:

Submitted by (name): _____ Date: _____

Security plan template

You may:

- complete the below template, attaching additional pages as required, or
- use your own format for the site security plan provided all the information outlined in this guide is included. The following sections must be included in any SP that you submit.

Section 1: Licensee information

Applicant details	
Individual applicant or corporation name	
a. Residential/business address	a.
b. Mailing address	b.
c. Storage address	c.
Telephone	
Fax and email contact	
Nominated responsible person (corporation applicants only). Nominated person must have a management role and the authority to develop, implement and maintain the plan.	
The purpose(s) for storage and handling of explosives or SSDS eg SSAN for agricultural use, mining, construction, civil engineering or seismic work, pasture improvement for dairy farming	

Amount and type of explosives or SDS to be stored and/or handled	UN no: Proper shipping name: Class: Product or common name: Units: Annual volume: Normal quantity stored: Max quantity stored:
	UN no: Proper shipping name: Class: Product or common name: Units: Annual volume: Normal quantity stored: Max quantity stored:
	UN no: Proper shipping name: Class: Product or common name: Units: Annual volume: Normal quantity stored: Max quantity stored:
	UN no: Proper shipping name: Class: Product or common name: Units: Annual volume: Normal quantity stored: Max quantity stored:
The number of employees on site who may come into contact with SDS or explosives eg full-time, part-time or casual	Full-time: Part-time: Casual:
The total size in hectares of the site for which explosives or SDS are to be stored and handled	

Please photocopy this page if more space is required.

Section 2: Security risk assessment

Briefly describe the security risks identified and controls put in place to eliminate or minimise those risks.

- a. Theft of explosives or SSDS.

- b. Unexplained loss of explosives or SSDS.

- c. Possible sabotage of explosives or SSDS.

- d. Unauthorised access to explosives or SSDS:

- boundary fencing/surveillance
- compound fencing/lock-up/surveillance
- store security
- farm.

- e. Other risks.

Section 3: Sketch/map of site

Include north orientation

Section 4: List of persons with unsupervised access to explosives or explosives precursors

Name and address of person	Position in company	SC number	Issue date	Date added to list	Date removed from list

Section 5: Secure storage

If practical and it does not compromise the safety of the magazine, attach photographs of the store from both ends and both sides. If photographs are included, try to provide photographs of the store from each corner.

The 'secure store'	Description
The construction of the building, store, container or magazine	
The size of the building, store, container or magazine	
The amount of explosives or SSDS to be stored (in kg)	
The entry to the store	
Locks or controls for the store	
Windows and window security	
Warning signs	
Security precautions	
Other chemicals or hazards	

Section 6: Key security

Security access	Details
Types of secure locking	
How many people will have access to the secure store	
How a key or code will identify each individual key	
The person responsible for the key register	
The length of time ammonium nitrate is stored	

Section 7: Key register – employees access to explosives or SSDS store

Key number	Name of person	Date and time issued	Signature of register keeper	Date and time key is returned	Signature of register keeper

Security access	Details
Types of secure locking	
How many people will have access to the secure store	
How a key or code will identify each individual key	
The person responsible for the key register	

Section 8: Instructing employees and contractors

Employee (or contractor's) name	Type of training provided	Date	Licensee or supervisor's signature

Section 9: Stock control – receiving

Date received	Type of explosive or SSDS	Quantity received	Name and licence no. of supplier	Quantity removed out of storage	Signature of recipient or licence holder (signed in or out)	Any comments/date removed

Section 11: Secure transport of explosives or SSDS

Transport	Details
The type of explosives or SSDS to be transported	
The quantity of explosives or SSDS expected to be transported	
The frequency of transport trips	
The location of the explosive or SSDS supplier	
The distance travelled, using most direct route	
Travel time from supplier to directly on-site for use	
The main roads to be used for the journey	
Load security	
Drivers names	<ol style="list-style-type: none"> 1. 2. 3. 4.

Catalogue No. **WC04688** WorkCover Publications Hotline **1300 799 003**
WorkCover NSW, 92–100 Donnison Street, Gosford, NSW 2250
Locked Bag 2906, Lisarow, NSW 2252 | Customer Service Centre **13 10 50**
Website workcover.nsw.gov.au
ISBN 978 1 74341 389 0 © Copyright WorkCover NSW 0414
