

# AMMONIUM NITRATE GUIDANCE NOTE No. 2

## STORAGE

### 1. PURPOSE

On 25 June 2004 the Council of Australian Governments (COAG) agreed to a national licensing system to limit access to security sensitive ammonium nitrate (SSAN) . Each state and territory has introduced legislation and/or regulations to give effect to the COAG agreement.

These guidance notes outline the minimum requirements to obtain a licence to store SSAN. While they give an outline of national standards, precedence should be given to the specific requirements of state or territory legislation.

### 2. SCOPE

These guidance notes are designed for businesses that store any quantity of (SSAN). This may include manufacturers, the mining industry, agricultural and mining suppliers, importers and exporters. Primary producers who store for personal use should consult a separate guidance note on Agricultural Use.

Educational, research and analytical laboratories storing less than 3 kg may be exempted from the new security regulations and not require licensing. Check with the regulatory authority in your state or territory.

These guidance notes address security issues. Storage of SSAN must also meet safety requirements as outlined in state and territory based dangerous goods legislation and you should also take note of relevant product safety data sheets.

### 3. DEFINITIONS

**security sensitive ammonium nitrate (SSAN)** means—  
ammonium nitrate, ammonium nitrate emulsions and ammonium nitrate mixtures containing greater than 45% ammonium nitrate, excluding solutions and ammonium nitrate products classified as class 1 explosives.

(Note: This includes substances such as calcium ammonium nitrate that are not classified as dangerous goods and dangerous goods with UN numbers 1942, 2067, 2068, 2069, 2070, 2071, 2072, 3375 and 3139 where applicable. Explosives of Class 1 are excluded.)

**secure** means secure from—

- a. detectable theft
- b. unexplained loss
- c. sabotage
- d. unauthorised access

**security risk** means risk of—

- a. theft of security SSAN; or
- b. unexplained loss of SSAN; or
- c. possible sabotage of SSAN; or
- d. unauthorized access to SSAN.

**Security plan** means –

a plan that has been put in place to effectively minimize all security risks relevant to the storage of SSAN.

**The authority holder, or licence holder** means –

the person who has applied for and received a licence to store SSAN from a regulatory authority. This person will have undergone police and PMV checking.

**An authorised person** means-

a person (in addition to the authority holder) who is named in the security plan and authorised by the regulatory authority under that plan to have unsupervised access to SSAN. This person will have undergone police and PMV checking.

**Unsupervised access means** –

access to SSAN when no other person with authorised access is present or has control over the SSAN. This includes:

- access to the secure store; and
- access to the keys to the secure store.

All those with unsupervised access to SSAN will need a police and PMV check.

**Supervised access** means –

where access to SSAN by a worker occurs under the supervision of an authority holder or authorised person, or when working in a defined supervised area as detailed in the security plan.

**Under lock and key** would normally include one of the following -

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

Quality security locks must be employed; electronic type locks may be acceptable.

**Constant surveillance** means –

the presence of an alert and authorised person or the continuous monitoring by video or electronic surveillance.

**Secure store** means –

a physically secure place where SSAN is kept under lock and key or constant surveillance, and where there are procedures for:

- controlling access;
- secure control of keys; and
- documenting the receiving and dispatching of measured quantities of SSAN.

**PMV (politically motivated violence) check** means -

a security assessment in respect of a person, issued by ASIO.

**Explained loss** means -

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

**Unexplained loss** means -

any documented loss that cannot be explained.

If there are reasonable grounds to believe that SSAN has been stolen or lost, this is a matter to be reported to the local police and the regulatory authority.

**Regulatory Authority** means -

in each state or territory the regulatory authority is the authority that issues the licence or permit.

**UN number** means -

the identifying number assigned to dangerous goods by the United Nations Committee of Experts on the Transport of Dangerous Goods, and outlined in the Australian Dangerous Goods Code.

The UN number should be on the packaging of bagged fertilizer products that are classified as dangerous goods, and fertilizer suppliers should be able to provide UN numbers where applicable. (Note: Some SSAN products, such as calcium ammonium nitrate, will not have a UN number).

#### **4. REQUIREMENTS**

To obtain a licence to store SSAN, a security plan must be submitted to the regulatory authority for approval. (The licence to store may also authorise the purchase, sale or use of SSAN, depending on the nature of the business.)

The security plan will begin with a security risk assessment, to provide information to the regulatory authority about current security measures and about the risk of theft, unexplained loss, sabotage and unauthorised access.

The security plan will provide information to the regulatory authority about how you will meet security requirements. The minimum security requirements are:

- i. SSAN must be kept in a secure store;
- ii. there must be procedures for controlling access to this secure store;
- iii. there must be procedures for checking and authorising persons with unsupervised access to SSAN, including:
  - a. designating a responsible person to maintain the security plan,
  - b. instruction of workers on the security plan procedures; and
  - c. ensuring people with unsupervised access to SSAN have had police and PMV checks;
- iv. record keeping to reconcile incoming and outgoing quantities of SSAN and to ensure that SSAN is obtained from an authorised person and removed by an authorised person; and
- v. procedures for reporting to authorities any unexplained loss, theft, attempted theft or any other security incident involving SSAN.

#### **5. THE SECURITY PLAN**

##### **Security risk assessment**

A security risk assessment is a necessary preamble to developing a security plan. 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 SSAN. You should consider whether current security arrangements leave the SSAN 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.

##### **Security plan**

The security plan will describe how you will meet the minimum requirements and any other security measures to be introduced.

The security plan will have three main elements:

- personnel management;
- site security; and
- procedures.

## Personnel management

### **Minimum requirement 1: List of authorised persons**

The security plan must contain a list of all those who will have unsupervised access to SSAN. This will include the licence applicant. These people will be required to undertake a police and PMV check and, after clearance by the regulatory authority, will be authorised under the security plan to have unsupervised access to SSAN.

### **Minimum requirement 2: Staff recruitment**

The security plan must include the provision for adding new workers to the list of authorised persons. Should the licence holder wish to add new workers to the list these persons will be required to undertake a police and PMV check and, when cleared, can be added to the security plan in the form of a dated amendment to the list of authorised persons.

The security plan must also detail the checks that will be made to confirm the identity of new workers who will have unsupervised access to SSAN. Identification must be confirmed using the 100 points identification system\*, and checks should also be made with the applicant's referees and previous employers.

### **Minimum requirement 3: Maintaining the security plan**

The security plan must include the nomination of a responsible person/security manager to implement and maintain the security plan, including the instruction of workers in the relevant access controls, recording procedures and reporting of security incidents.

## Site Security

### **Minimum requirement 4: Details of your secure storage arrangements for SSAN**

The security plan must contain details of your secure storage facility, including type and dimensions of structure, number and type of doors and windows, type of lock etc. SSAN must be in a secure store under lock and key or constant surveillance (refer to definitions).

Ideally, a suitable padlock should be pick protected and shackle protected (e.g. concealed shackle using case hardened steel body with raised shoulders) and not be re-keyable. Ideally a padlock should also be bolt cutter resistant and have protection against the lock being drilled out. Further information regarding padlock specifications and locksets for doors in buildings can be found in Australian Standards AS 4154.4 – 2002 and AS 4154.2 – 1993 respectively.

### *IBCs in the open*

As an exception to the above requirement, Intermediate Bulk Containers (IBCs) are permitted in open-air/uncontained/outdoor compounds as long as:

- the IBCs are sealed with tamper-proof seals so that theft of product is easily detectable; and
- a security fence is in place. (The chain wire part of the fence should be at least 2000 mm high and separated from the nearest IBCs by at least 3000 mm. It should be galvanised with both selvages twisted and barbed, capped with three rows of barbed wire at 150 mm spacing. Further information on construction details can be obtained from AS 1725 – 2003: “chain-link fabric security fences and gates”).

---

\* The 100 point identification system is generally used by financial institutions to confirm identity. A summary is at [http://www.aussiemigrant.com/your\\_finances/f.htm](http://www.aussiemigrant.com/your_finances/f.htm)

## Procedures

### **Minimum requirement 5: Controlling access to the secure store**

Procedures for supervised and unsupervised access to the secure store of SSAN must be developed and checks put in place to monitor the effectiveness of these controls.

- Persons having unsupervised access to the secure store must be clearly identified in the security plan. These people will require a police and PMV check. They may supervise the access of others to the secure store.
- A 'key plan' must exist that identifies who has access to the keys to the secure store and where the keys are securely kept.

### **Minimum requirement 6: Record keeping and inventory procedures**

Records must be kept for a minimum of five years and there must be systems and procedures in place to record:

- purchases/acquisitions and sales/supply of SSAN, to ensure that changes in custody occur only between licence holders;
- movements of SSAN into and out of the secure store, so that reconciliation is possible; and
- security incidents, including thefts, attempted thefts, unexplained losses, sabotage or attempted sabotage, break ins, attempted break-ins and any other security incidents, so that these incidents are recorded, investigated and reported to the regulatory authority and the police.

*The information contained in this document is provided to offer guidance. It is not to be taken as a statement of law and must not be construed to waive or modify any legal obligations.*

## Additional measures

Licence holders may be required by the regulatory authority to implement other security measures in addition to the *minimum* requirements outlined above.

One important factor will be the location of the facility. If the location is in close proximity to population centres or critical infrastructure, so that a potential explosion caused by sabotage could lead to a disaster, consideration will need to be given to:

- reducing storage quantities and/or stack sizes; and/or
- increasing security measures beyond the minimum requirements, so as to deter, detect and prevent after-hours intrusion.

On the other hand, there may be some flexibility within minimum requirement 4 for equivalent security outcomes to be achieved by alternate measures. This will most likely be in exceptional circumstances such as very remote locations. In this case the security plan must justify the departure from the minimum requirements.

Additional measures could improve perimeter protection, stopping intruders at the edge of a facility's property long before they reach vital assets and operational areas. Measures to control the movement of people within the general facility can also greatly enhance security.

Additional measures could include:

### *Physical security*

- Post "No Trespassing" and "Authorized Access Only" signs;
  - Note: In some jurisdictions it will be mandatory to post "Authorized Access Only" signs at each secure store;
- Upgrade fences with barbed wire;
- Install bollards and trenches that prevent vehicles from driving into the site at points other than official entrances;
- Vehicle gates with retractable barriers;
- Personnel gates and turnstiles;
- Lighting that makes it easier for employees and even passers-by to observe and possibly identify intruders;
- Employ natural surveillance by arranging reception, production, and office space so that unescorted visitors can be easily noticed;
- Install appropriate locks on exterior and interior doors;
- Install appropriate, penetration-resistant doors and security hinges;
- Install secure windows with appropriate locks; and
- Install electronic security measures such as motion sensors, monitored alarms and CCTV.

### *Procedures*

- Establish a system for determining which cars, trucks or rail cars may enter the site, through which gates, docks or other entrances, and under what conditions. Such a system may be part of the pedestrian access control system, relying on access cards carried by vehicle operators, or it may be an independent system relying on staffed security posts;
- Require visitors to be signed in and escorted; and
- Pay close attention to access control at loading and unloading areas.

The appropriate level of security can vary significantly from facility to facility. It depends on the number of employees, the level of pedestrian and vehicular traffic into and out of the facility, the attractiveness of the facility as a target of various threats, the proximity of the facility to populated areas, and many other factors.