Dangerous Goods

Security sensitive substances

Ammonium nitrate – transport >

This information bulletin is designed to provide information for businesses that transport Security Sensitive Ammonium Nitrate (SSAN). It should be read in conjunction with information bulletin 04.07.01 – glossary of terms.

General

This bulletin is designed for businesses that transport SSAN. This may include manufacturers, the mining industry, agricultural and mining suppliers, importers and exporters.

This bulletin addresses security issues. Transport of SSAN must also meet safety requirements outlined in the Australian Dangerous Goods Code or Occupational Health and Safety requirements, as appropriate. You should also take note of relevant material safety data sheets.

These guidelines refer principally to transport by road and rail. For transport by sea, Australian flagged ships are likely to have a security plan under the *Commonwealth Maritime Transport Security Act* 2003 (MTSA) and foreign flagged ships should have a security plan under the International Ship and Port Facility Security Code and Safety of Life at Sea Convention. While these and any other existing *Acts* and regulations must be observed, transport of SSAN by sea (or air) will nevertheless require authorisation and in the Northern Territory NT WorkSafe should be contacted for further details.

Requirements

To obtain a licence to transport SSAN, a security plan must be submitted to the regulatory authority for approval.

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:

1) precautions to ensure the SSAN is secure for the duration of the entire journey
   a) as a minimum, SSAN must be transported in a locked or sealed container or vessel or be under constant surveillance by an authorised person
   b) where possible quality security locks should be used. However, in the case of bulka bags or other instances where locks are not practical, substantial tamper-proof seals can be used as an alternative
2) procedures for checking and authorising persons

3) designation of a responsible person/security manager to maintain the security plan. In the case of a company or other entity, training, audits and ongoing maintenance of the plan must be confirmed regularly by the owners and senior officers

4) record keeping to reconcile any stored, incoming and outgoing quantities of SSAN and to ensure that SSAN is obtained from an authorised person and supplied to an authorised person

5) procedures for reporting to authorities any loss, theft, attempted theft or any other security incident involving SSAN

In cases where a sub-contractor operates under the licensed transporters security plan, the licensed transporter must clearly identify this in the security plan.

In all cases, the driver of any consignment of SSAN must operate under a security plan.

- the driver of a road vehicle will usually be an authorised person (unless an authorised person is also present during the entire journey) and must have undergone security checking.
- the driver of a rail engine will not usually have unsupervised access to SSAN and therefore will not need to be an authorised person.

The security plan

Security risk assessment

A security risk assessment is a necessary preamble to developing a security plan. The 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 (terrorists, criminals, protest groups) and also the security risk from staff or contractors who have access to your vehicles and SSAN. The risk assessment will document the transport routes to be used and consider the security risks the routes represent. You should consider whether current security arrangements leave the SSAN vulnerable to theft or sabotage, and consider security improvements to manage the assessed risk. Security assessments should be reviewed periodically, particularly after a security incident.

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 four main elements:

1. *personnel management*

2. *site security*

3. *load security*

4. *procedures*

1. *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, and will usually include all drivers of road vehicles. These people will be required to undertake a security check and, after clearance by the regulatory authority will be authorised to have unsupervised access to SSAN.

Minimum requirement 2: Staff recruitment
The security plan should 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 security 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 should also detail the checks that will be made to confirm the identity of new workers who will have unsupervised access to SSAN. Identification checks against a driver's licence, birth certificate or passport, and credit card is recommended. 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.

2. Site Security

Minimum requirement 4: Transport must be from one secure location to another
The licensed transporter must ensure that any site used for loading or temporarily storing SSAN during the loading or transport process is secure. A secure location is one that is identified in the security plan and includes an area that has, as a minimum, security perimeter fencing, lockable gates and access controls.

- the level of security required will be determined by such issues as the period and frequency of SSAN storage at the site, the amount of SSAN held at the site, and the population density in the area around the site.
- continuous surveillance may be necessary at locations identified as high risk.

3. Load security

Minimum requirement 5: Details of your secure transportation arrangements
The security plan must contain details of your secure transportation arrangements. At all times SSAN must be transported under lock and key or with substantial tamper-proof seals or be under constant surveillance (refer definition).

This means that SSAN will usually be transported in either a locked vessel, freight container, explosives magazine or tank (in the case of Ammonium Nitrate emulsions) or be under constant surveillance when the freight container, magazine or tank is unlocked. For bulka bags, substantial tamper-proof seals may suffice.

- quality security locks are to be employed. They must be of sufficient security rating to ensure they can only be opened with a designated key or by breaking. 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.
- seals should be numbered and tamper-proof so as to assist in the detection of theft or attempted theft. They should be robust enough to withstand accidental snapping or breaking.

- the security plan should take account of the variations in journeys and type of vehicles, such as:
  - > long haul journeys;
    - → during meal breaks on long haul road journeys, ideally the truck and load should be in a position that allows constant surveillance to be maintained;
  - > non stop journeys;
  - > transport using enclosed (pan) trucks;
  - > transport using prime movers with open trailer(s);
  - > prime movers with containerised consignments;
  - > prime movers with enclosed lockable trailers; and
  - > all of the above with tanks (conveying emulsions).

Minimum requirement 6: Road vehicles left unattended in transit
When SSAN is left unattended for extended periods, such as road train aggregation yards and sites, it must be left in a secure location and the load must be locked down with quality security locks or substantial numbered seals that will easily detect any tampering.

During short breaks, such as meal breaks, the truck and load should be in a position that allows constant surveillance to be maintained.

Minimum requirement 7: Rail transport
The transport of SSAN by rail must be in locked and sealed containerised units or in locked rail cars with substantial seals.

- wherever possible, the doors of containers should be placed facing each other.
- all openings to these containers are to be sealed with substantial tamperproof seals that will require forceful breakage with bolt cutters to enter the container.
- rail consignments of SSAN must have a schedule whereby the location of the wagon is continually monitored. This schedule is to be checked and signed by authorised responsible persons for the duration of the transport.

For rail transport where the containers, tanks or vessels are continually locked and/or sealed as prescribed and are transported in accordance with the rail transport schedule and procedures, the presence of an authorised person is not required for the duration of the entire journey. However, an authorised person should be present at dispatch and receipt of the SSAN, and should containers need to be opened en route or if the SSAN is transported in open rail wagons then an authorised person should be present.

- in the case of rail transport, containers tanks or vessels that are continually locked or sealed with substantial tamper proof seals or locks will be deemed to meet the requirements of a secure location. These containers are to be received, loaded, transported and delivered in a manner clearly detailed in the rail transport regulations and procedures.

4. Procedures

Minimum requirement 8: Access control procedures

- Authorised persons:
  persons having unsupervised access to consignments of SSAN should be clearly identified in the security plan (refer minimum requirement 1). These people are required to undergo

security checking, and once cleared, will be authorised for unsupervised access to SSAN. They may supervise the access of others to SSAN.

- Locking and sealing procedures:
  locking and sealing authorities and procedures must be well defined in the security plan and checks put in place to monitor their effectiveness.
- Key plan:
  a key plan should exist that identifies who has access to keys and where the keys are securely kept. The key plan is a confidential document and its contents should be restricted to those managing the keys and/or the security plan.

Minimum requirement 9: Monitoring of the consignment's location while in transit
The security plan must include a system to monitor the location of the consignment and instruction of workers in emergency procedures.

- this might entail the installation of duress alarms and Global Positioning Systems with tamper alarms.
- for rail transport, monitoring of the consignment's location is satisfied by compliance with planned and monitored set schedules.

Minimum requirement 10: Record keeping and inventory/consignment procedures
There must be systems and procedures in place to record:

- that SSAN is supplied by authorised persons and only delivered to authorised persons;
  - > where persons are authorised to pick up or receive deliveries on behalf of a third party, photo identification and written authority must accompany the receiver of these consignments;
- that vehicles conveying SSAN are suitable to meet security requirements (i.e. vehicles on which seals can be fitted to detect removal of product) and protocols are in place to refuse loading of any vehicle not equipped for that purpose;
- details of consignments, including:
  - > seal numbers, and any changes in seals necessary for part-load deliveries. Seals should be numbered and robust enough to withstand accidental snapping or breaking;
  - > accurate weight measurement or other reconciliation (e.g. number of bags) of all SSAN at loading and unloading;
  - > confirmation on a load-by-load basis that the load was/was not delivered with seals/locks intact; and
  - > a system to ensure that product returns of both merchantable quality and spillage recovery are accurately documented and appropriately accounted for;
- security incidents, including thefts, attempted thefts, sabotage or attempted sabotage, break-ins, attempted break-ins, unexplained losses or any other security incidents:
  - > these incidents, including any unexplained loss, must be recorded, investigated, and reported immediately to the police and the regulatory authority;
- explained loss:
  - > a means of reconciling the loss must be in place, and these reconciliations must be checked and countersigned by persons responsible and appointed to do so by both the consignor and receiver:
    - → it is accepted that significant monthly discrepancies can and do occur. It is essential that the consignor, consignee and the transporter fully agree and sign off on all reconciliations; and
  - > any product unaccounted for must be followed up and reported.

Additional voluntary measures

The above minimum requirements may need to be complemented with additional measures, depending on the security risk. While theft of part of a load is one risk, consideration should also be given to the risk of the vehicle itself being stolen or commandeered. Additional measures to manage this risk could include improved cabin security and procedures, and advanced communication systems to monitor the movement of vehicles.

You should consider any measures that would usefully improve the security of your business.

Further information

For further information please contact

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