



Dangerous Goods Safety information sheet

Overview of Explosives Regulations

Introduction

This document is for guidance only and the definitive statutory requirements are contained in the Dangerous Goods Safety (Explosives) Regulations 2007 (the Explosives Regulations).

Security

A key feature of the Explosives Regulations is a focus on security. People must have a specific authority to possess explosives except for a select list of low risk explosives widely available to the community (e.g. emergency devices, cartridges for nail guns and safety devices, sparklers and various toy fireworks, and ammunition held by holders of a firearms licence issued by the WA Police).

There are three groups who have an authority to possess explosives:

- those who are licence holders
- “secure nominees” of licence or test permit holders
- those who are supervised by a licence holder or a “secure nominee”.

Licence holders and people with unsupervised access to explosives must be security cleared and hold a current dangerous goods security card (application form available from major Australia Post branches in Western Australia) or equivalent security clearance.

A secure nominee is an employee of a licence holder who:

- holds a current dangerous goods security card; and
- has authorisation from the licence holder that allows the individual to have unsupervised access to explosives as specified by the licence holder.

Secure nominees should have received training to handle explosives safely.

Risk management

An explosives management plan must accompany the following licence applications:

- explosives manufacture licence (for fixed plant)
- explosives manufacture (MPU) licence (mobile processing units only)
- explosives storage licence
- explosives transport licence
- explosives fireworks contractor licence.

The explosives management plans for each licence have different requirements but share core requirements for security and safety.

The regulations mandate compliance with the following documents:

- Australian Standard AS 2187.1:1998, *Explosives – Storage, transport and use, Part 1 – Storage* (AS 2187 Part 1)

- Australian Standard AS 2187.2:2006, *Explosives – Storage and use, Part 2 – Use of explosives* (AS 2187 Part 2)
- *The Australian Code for the Transport of Explosives by Road and Rail*, Third Edition, 2009 (AE Code)
- *Code of Practice - Safe use of outdoor fireworks in Western Australia* (Fireworks Code of Practice).

The regulations allow for “alternative safety measures” to certain mandated requirements provided they achieve a level of risk that is equal to or lower than the level of risk achieved by the primary codes. Any use of alternative safety measure must be documented and made available to Resources Safety on request.

The following documents are approved codes of practice:

- Australian Explosives Industry and Safety Group’s (AEISG’s) *Code of Practice for Mobile Processing Units*, Edition 3, 2014 (AEISG Code of Practice for MPUs)
- AEISG’s *Code of Practice – Elevated Temperature and Reactive Ground*, Edition 3, 2012
- AEISG’s *Code of Practice – Ammonium Nitrate Emulsions, Suspensions or Gels – ANEs (UN3375)*, Edition 2, 2012.

Compliance with an approved code is not mandatory but is encouraged and does provide a due diligence defence.

Explosives licensing system

Licence type	Scope of licence	Applicant requirements	Comments
Import/Export	Import and export of explosives from overseas by ship or air	Requires an explosives import notice at least 14 days before arrival and an explosives export notice at least 7 days before export	Overseas only, not to apply for interstate transport Any quantity or frequency of authorised explosives Authorises supply of explosives to customers
Manufacture Site specific licence	Allows manufacture of explosives at a fixed plant and associated storage Separate storage licence is required for magazine storage	Explosives management plan	For each fixed premises and central mixing point on a mine site Not required by shotfirers for mixing ANFO at the place of use Not required by unrestricted theatrical fireworks operators making flash powder by mixing proprietary materials as endorsed on their licence Authorises supply of explosives to customers

Licence type	Scope of licence	Applicant requirements	Comments
Manufacture (MPU) Mobile processing unit (MPU) licence Not site specific	Allows company to manufacture explosives on site and transport (SSAN) in fleet of MPUs Transport component relates to security of SSAN only Transport involves SSAN and driver requires licensing under Transport by Road and Rail of Non-explosives Regulations	Explosives management plan for the manufacture of explosives and the transport of SSAN Security clearance for drivers and operators apply Vehicles must comply with the AEISG Code of Practice for MPUs for design and operation or equivalent	Company to ensure appropriate training and security clearance for operators
Supply	Allows sale and supply only	Detailed sales records to be kept Must not sell to anyone who is not authorised by a licence or the regulations to purchase explosives	Must seek proof of identity of purchaser via photo ID and evidence of authority to purchase
Storage	Allows storage in registered magazines on licensed sites	Explosives management plan	Certain explosives in small quantities are exempt (see Schedule 6 of Explosives Regulations) Explosives to be stored in accordance with AS 2187 Part 1
Transport	Allows prime contractor to transport explosives by road, rail and water in a fleet of vehicles	Explosives management plan Vehicles need to comply with AE Code Prime contractor must ensure that consignee has authority to possess explosives	Certain explosives in limited quantities are exempt from this licence (see Schedule 7 of Explosives Regulations) Recognition of interstate transporters who are appropriately licensed in their state of origin Notification to Resources Safety for interstate import of fireworks
Explosives driver For individuals only Plastic photo ID card is issued as a summary of licence	For explosives only	Required for Category 2 and 3 loads Minimum 21 years old, vehicle licence, medical, traffic convictions, security clearance and explosives driver course certificate	Can only drive for a prime contractor with an explosives transport licence Shotfirers, fireworks contractors and fireworks operators are exempt for Category 1 and 2 loads for own use

Licence type	Scope of licence	Applicant requirements	Comments
<p>Shotfiring</p> <p>For individuals only</p> <p>Plastic photo ID card is issued as a summary of licence with endorsements</p>	<p>Applies to all types of blasting activities</p> <p>Allows mixing of ANFO at place of use</p> <p>Allows limited storage without a licence</p> <p>Allows transport of blasting explosives and SSAN for own use in Category 1 and 2 quantities</p>	<p>Minimum 18 years old, medical certificate, security clearance, shotfiring course and three-yearly refresher course</p> <p>Completion of course comprising national competencies for surface, underground or underground coal as relevant.</p>	<p>Town blasting requires a permit from the local government authority and public risk insurance of at least \$5 million</p> <p>Blast plan and records must be kept for all places including mine sites</p> <p>AS 2187 Part 2 applies</p>
<p>Fireworks contractor</p>	<p>Authorises the holder to organise a fireworks event and apply for a fireworks event permit and to purchase fireworks</p>	<p>Explosives management plan</p> <p>Minimum 21 years old</p> <p>Must be a licensed fireworks operator</p> <p>Event permit for a display or series of consecutive displays</p> <p>Public liability insurance of at least \$5 million</p>	<p>Displays to be in accordance with Fireworks Code of Practice</p>
<p>Fireworks operator</p> <p>For individuals only</p> <p>Plastic photo ID card is issued as a summary of licence with endorsements</p>	<p>Fireworks operator must work under the management of a fireworks contractor in association with a fireworks event permit</p> <p>Not allowed to apply for fireworks event permit</p> <p>Allows transport of Category 1 and 2 loads in connection with display permit</p> <p>Subcategories of outdoor displays (further restrictions apply):</p> <ul style="list-style-type: none"> • Ground fireworks • Aerial shells not exceeding 75 mm • Aerial shells not exceeding 150 mm • Ground, elevated platforms and unrestricted aerial shells 	<p>Medical certificate, security clearance and training course.</p>	<p>Displays to be in accordance with the Fireworks Code of Practice</p>

Licence type	Scope of licence	Applicant requirements	Comments
Fireworks event permit To be issued to licensed fireworks contractors only	For outdoor fireworks displays Separate permits required for each display or for a group of consecutive displays at the same venue where the intervening time is not greater than 48 hours	Subject to prior approval of local government, FESA and Swan River Trust (where applicable), with notification to WA Police (and airports where applicable) Application in approved form to be submitted at least 14 days prior to the display	May authorise contractor to store at site of display without storage licence
Pyrotechnics (special use) For individuals only	Allows purchase and use of special pyrotechnics and propellants for all purposes other than those under shotfiring or fireworks event permit Subcategories of pyrotechnics (special use) licences: <ul style="list-style-type: none"> • Theatrical fireworks • Cracker chains • Model rocketry • Special effects • Animal control 	Evidence of competency and legitimate need for use of the explosive Security clearance Use of specified model rocket motors allowed in association with approved model rocket clubs	No medical certificate required Cracker chain displays for ceremonial purposes require permission from local police and local government

Notes:

- All licences authorise the possession of explosives of the type allowed by the permit
- All holders of personal licences must be at least 18 years old except for the explosives driver and fireworks contractor licences, for which holders must be at least 21 years of age
- All licences require security clearance of individuals (i.e. current dangerous goods security card)

Import and export of explosives

Anyone importing explosives from or exporting explosives to overseas countries requires an explosives import/export licence. Only authorised explosives are allowed to be exported. All explosives for use in Western Australia must be authorised by the Chief Officer for their safety and effectiveness.

For explosives imports, an explosives import notice must be given to the Chief Officer at least seven days before arrival. For exports, an export notice is required at least seven days in advance.

Interstate imports and exports of explosives are not controlled except for fireworks. The holder of an explosives transport licence must notify Resources Safety of any consignment of fireworks before their arrival in Western Australia to allow the department to check that the receiver is an authorised person.

The Chief Officer has the power to authorise explosives on his or her own initiative. This is necessary to allow the generic authorisation of fireworks where the individual authorisation of many hundreds of new products is administratively impractical. Alternative quality control measures apply for fireworks to compel importers and fireworks contractors to test fireworks before their use in a display. In addition, specific fireworks deemed to be unsafe are put on a list of prohibited explosives.

Explosives manufacture licence

The manufacture of explosives (including ANFO) for supply to others may only proceed under an explosives manufacture licence. An explosives manufacture licence allows manufacture of authorised

explosives at a fixed plant and may be subject to conditions. An explosives management plan is required. A separate storage licence is required for any associated magazine storage.

This licence is not required for shotfirers mixing their own ANFO at the place of use, manufacture using mobile processing units (MPUs), and unrestricted theatrical fireworks operators mixing flash powder when endorsed on their licence.

Only authorised explosives may be manufactured and tested under an explosives manufacture licence. A test permit is required for the manufacture and use of unauthorised explosives. The only unauthorised explosives that may be used are certain developmental explosives intended to be introduced by the explosives industry into the market place. These experimental explosives may be used in special trials at nominated locations under set conditions as authorised by the Chief Officer under a test permit.

Explosives manufacture (MPU) licence

This licence applies to the manufacture and transport of ammonium nitrate based bulk explosives by MPUs. A company controlling a fleet of MPUs must hold an explosives manufacture (MPU) licence to manufacture explosives and transport the starting materials, which are normally security sensitive ammonium nitrate (SSAN). An explosives management plan is required.

The company holding the licence is responsible for the training of individual operators. Since operators are likely to drive SSAN on a public road, they require a dangerous goods driver licence. Drivers and operators also require dangerous goods security cards and need to be secure nominees of the licence holder.

The design and operations must be in accordance with the AEISG Code of Practice for MPUs or equivalent.

Supply

The holder of an explosives supply licence (or their secure nominee) may supply explosives to a person with an appropriate explosives licence (or their secure nominee). The person receiving the explosives must provide proof of identity and appropriate documentation showing that they are authorised to possess the explosives. Only authorised explosives can be supplied and the licensed supplier must record prescribed details of the supply and keep them for at least two years.

Holders of explosives import/export, manufacture, manufacture (MPU), transport and explosives driver licenses are authorised for limited supply under prescribed circumstances, and do not require an explosives supply licence in the course of their duties.

Storage

A licensed facility or premises storing explosives may have multiple magazines on-site. Certain low risk explosives (see Schedule 6 of Explosives Regulations) are exempt from a storage licence. Explosives must be stored in accordance with AS 2187 Part 1 or equivalent and an explosives management plan is required for licensed sites.

Transport

The transport of explosives by road and rail is subject to the AE Code. These requirements apply for prime contractors, even when transporting unrestricted explosives or explosives for which a transport licence is not required.

The prime contractor is required to hold an explosive transport licence whether transporting by road, rail or water. An explosives management plan is required.

The prime contractor requires an explosives transport licence when transporting any amount of explosives except small amounts of specifically listed explosives of low safety and security concern. The licence allows the prime contractor to manage a fleet of vehicles. Licence holders must ensure that they only transport from an authorised consignor to an authorised consignee.

Drivers of explosives vehicles require an explosives driver licence for Category 2 and 3 loads of explosives. However, shotfirers, fireworks contractors and fireworks operators are exempt for Category 1 and 2 licensing requirements.

It is possible for an unlicensed explosives driver to drive Category 1 loads of explosives under the management of a holder of an explosives transport licence provided the person has been trained and is a secure nominee.

Placarded explosives vehicles may not be driven through:

- the tunnel of the Graham Farmer Freeway
- the central business districts of Perth and Fremantle.

However, the delivery of explosives to a person in these central business districts is excluded from this prohibition.

Shotfiring

Application for a shotfiring licence requires a medical certificate issued by a medical general practitioner (GP) in accordance with current requirements used for commercial drivers (i.e. national criteria in *Assessing Fitness to Drive* published by Austroads, updated in March 2013). These are physical and mental fitness criteria that are not only suitable for driving, but also for other high-risk activities such as blasting and the initiation of fireworks.

Blasting must occur in accordance with AS 2187 Part 2 or equivalent, whether on or off mine sites.

Shotfiring is conducted by a licensed shotfirer working under a site specific blast plan. This is a written safety and security plan that the shotfirer and any assistants must comply with. A blast plan is required wherever shotfiring is performed, including mine sites. The following parties are jointly responsible for developing a blast plan:

- licensed shotfirer;
- person or company for whom the shotfirer is working at the time; and
- person or company who controls the work place or who contracts with the blasting company.

Shotfirers must keep records of explosives purchased and used in accordance with appendix A (or alternative safety measures) of AS 2187 Part 2.

Any blasting within a townsite requires a written permit from the local government authority and a demolition blast plan. Townsite blasting requires public risk insurance cover of at least \$5 million.

Licensed shotfirers, without an additional explosives storage licence, may store limited quantities and types of blasting explosives. Explosives must not be stored in a person's home or a shop.

Any storage of explosives under an explosives storage licence must comply with AS 2187 Part 1 and detailed inventories of explosives must be kept.

Licensed shotfirers may manufacture ANFO but only at the place of use.

Fireworks

The use of fireworks by the general public is prohibited except for toy fireworks defined as "unrestricted fireworks" as listed in Schedule 3 of the Explosives Regulations. The list includes very small fireworks such as party poppers, percussion caps for toy pistols, Christmas crackers and throwdowns.

There is also a list of prohibited fireworks (Schedule 2 of the regulations) that cannot be used by anyone, including licensed operators. This list includes various explosives, including large salutes, crackers and sky rockets.

Fireworks operators need to decide whether to work under a holder of a fireworks contractor licence or apply for a fireworks contractor licence themselves. The latter option is only open to licensed fireworks operators over 21 years of age who are experienced operators, understand the assessment and control of risks associated with fireworks, and can develop an adequate explosives management plan for the safety and security of the fireworks event. An explosives management plan template and application forms are available from the Resources Safety website.

Only holders of a fireworks contractor licence are allowed to apply for a fireworks event permit and purchase fireworks. Fireworks contractors are required to carry public risk insurance of at least \$5 million. Event permits may be authorised to allow for the storage of fireworks at an event site immediately before the display.

The fireworks contractor must ensure that the fireworks function properly before a fireworks event and the Explosives Regulations allow and require the testing of fireworks. Testing is permitted with the notification of the Department of Fire and Emergency Services (DFES) and the local government, as well as permission of the landowner.

Licensed fireworks contractors and operators, without an additional explosives storage licence, may store limited quantity and types of fireworks. Storage is not allowed in a person's home or a shop. Storage of fireworks under an explosives storage licence must comply with AS 2187 Part 1.

Pyrotechnics (special use) licence

The special use licence applies to the use of special explosives applications that do not involve either fireworks under a fireworks event permit or shotfiring. These explosives are typically pyrotechnics and propellants.

The licence controls the purchase and use of miscellaneous explosives applications, which are endorsed on the special use licence so it may only be used for a specific application. The explosives applications include the use of theatrical fireworks, cracker chains for ceremonial purposes, model rockets, special effects and animal control.

The only licence requirements are demonstrations of competence, a legitimate purpose and a security clearance.

To conduct cracker chain displays for ceremonial purposes, it is required that the WA Police and local government be notified. Ceremonial Fireworks Notices can be obtained from the Department's website.

Resources

More information and related documentation is available on the Resources Safety website at www.dmp.wa.gov.au/ResourcesSafety