



Government of **Western Australia**
Department of **Mines, Industry Regulation and Safety**

Guide for an explosives management plan For all licence types

In accordance with the Dangerous Goods Safety (Explosives) Regulations 2007

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Introduction

All licence applications made under regulation 157(7) of the Dangerous Goods Safety (Explosives) Regulations 2007 (the Regulations) must be accompanied by a written explosives management plan (ExMP) that complies with regulation 161 and Schedule 10. The ExMP must be submitted in addition to the application form and any supporting documentation requested in that form.

This guide and accompanying self-audit templates will assist industry to prepare an ExMP. Use of the templates is not mandatory, but will ensure consistency in its application and streamline the review process.

The ExMP is a mandatory part of the approval process for a licence:

- to manufacture explosives
- to manufacture explosives for a mobile processing unit (MPU)
- to store explosives
- to transport explosives
- for a fireworks contractor.

The ExMP must demonstrate that risks have been adequately assessed in relation to safety, security and emergency response matters, and provide assurance that the measures in place to minimise those risks are adequate.

Under regulation 162(1)(d), the Chief Dangerous Goods Officer may ask for the ExMP to be amended and resubmitted if the ExMP requirements are not adequately satisfied.

Other than when making an application for a new licence, an ExMP is required to be reviewed:

- when there is significant change in the risk
- when a dangerous situation occurs
- within five (5) years.

The ExMP should contain the reviewer's name and the date of review to assist with version control.

Regulatory requirements

- Dangerous Goods Safety (Explosives) Regulations 2007
- Dangerous Goods Safety (Security Sensitive Ammonium Nitrate) Regulations 2007
- Mines Safety and Inspection Regulations 1995
- *Australian Code for the Transport of Explosives by Road and Rail*, 3rd edition (AEC)
- Australian Standard AS 2187.1 *Explosives – Storage, transport and use – Storage*
- Australian Standard AS 2187.2 *Explosives – Storage, transport and use – Use of explosives*
- Australian Explosives Industry Safety Group's (AEISG's) *Code of Practice for Mobile Processing Units*, 3rd edition
- *Safe use of outdoor fireworks in Western Australia – code of practice*
- *Safe use of close proximity fireworks in Western Australia – code of practice*

How to complete the self-audit templates

This guide covers the different licence types that require an ExMP. It provides information about the requirements for all licence types and the individual licences. It has links to templates for each licence type. Each template contains the required provisions for section 1 and the individual requirements of the licence applied for. It also lists any codes and standards that must be complied with.

It is recommended that applicants check the Regulations for any additional requirements for their situation.

- Section 1 – all licence types
- Section 2 – licence to manufacture explosives (fixed plant)
- Section 3 – licence to manufacture explosives (mobile processing unit)
- Section 4 – licence to store explosives
- Section 5 – licence to transport explosives
- Section 6 – licence for a fireworks contractor

Guidance is provided on the types of documents, procedures or actions that, when implemented, would be deemed suitable in addressing the requirement. In most instances, reference to such information is adequate. However, if the Chief Dangerous Goods Officer, or a dangerous goods officer, require further evidence then a request may be made for verification of the measures in place.

Authorised persons

Authorised person, in relation to an explosive, means a person who is authorised to possess the explosive under the *Dangerous Goods Safety Act 2004*, the Regulations or a law of the Commonwealth.

Assessment by the Department

For the Department to approve an ExMP, the Department must be satisfied that there is sufficient information to ensure that each item has been considered and that actions or procedures are implemented to address the risks posed.

The completion and submission of the self-audit templates used in conjunction with this guide will assist the applicant to determine the level of information required and provide a reference point when being assessed or reviewed by the Department.

Explosives management plan – guide to the self-audit templates

For all licence types

All licence applications made under the Regulations must be accompanied by an ExMP that complies with regulation 161 and Schedule 10. This guide and the self-audit templates are designed to assist applicants with preparing the ExMP and provide a reference point when being assessed or reviewed by the Department.

Regulation 6 allows for alternative safety measures provided they achieve the level of risk that is equal to or lower than the level of risk achieved by codes of practice and standards. This means that the new measure must be at least as safe as the measure being replaced. Any use of an alternative safety measure must be justified and documented.

For guidance on the individual templates, see below for each application type.

Type of licence	Section reference	Legislative reference
Explosives manufacture licence	Sections 1 and 2	r.161(2) and Schedule 10 clauses 2, 3A, 3 and 4
Explosives manufacture (MPU) licence	Sections 1 and 3	r.161(3) and Schedule 10 clauses 2, 3A and 4
Explosives storage licence	Sections 1 and 4	r.161(4) and Schedule 10 clauses 2, 3A and 4
Explosives transport licence	Sections 1 and 5	r.161(5) and Schedule 10 clauses 2, 3A and 4
Fireworks contractor licence	Sections 1 and 6	r.161(6) and Schedule 10 clauses 2, 3A, 3 and 4

Section 1 – for all licence types

1.1 General matters – Schedule 10 Clause 2

Item no.	Legislative reference	Requirements and guidance
1.1.1	Schedule 10 Clause 2(a)	<p>Procedures for reporting incidents to the Chief Dangerous Goods Officer</p> <p>Considerations:</p> <ul style="list-style-type: none">• procedures in place and chain-of-command in the company to report incidents and action taken• define reportable safety and security incidents• reports required within 21 days• Dangerous goods incident report – form• confirmation that the form has been received• procedures for reporting to WA Police
1.1.2	Schedule 10 Clause 2(b)	<p>Measures to ensure employees with access to an explosive are instructed about and comply with the Regulations</p> <p>Considerations:</p> <ul style="list-style-type: none">• training provided to cover competency in handling explosives and knowledge of the regulatory requirements• shot firer training where necessary• knowledge about the company's products and their chemicals• staff induction• security cards• supervision where unauthorised• information and resources on the Department's website

Item no.	Legislative reference	Requirements and guidance
1.1.3	Schedule 10 Clause 2(c)	<p>Measures to ensure employees with access to an explosive are instructed about and comply with the ExMP</p> <p>Considerations:</p> <ul style="list-style-type: none"> • staff assist in the development and review of the ExMP • the ExMP is accessible in different formats (e.g. intranet, print) • induction and refresher training • staff reviews • inform staff about requirement to comply with ExMP
1.1.4	Schedule 10 Clause 2(d)	<p>Measures to monitor and ensure compliance with the ExMP</p> <p>Considerations:</p> <ul style="list-style-type: none"> • qualified officer to be person responsible • internal audit and review • independent audit and review • register of training • process for identifying breaches
1.1.5	Schedule 10 Clause 2(e)(i),(ii) and (iii)	<p>Measures for reviewing and updating the ExMP:</p> <p>(i) when there is significant change in the risk</p> <p>(ii) when a dangerous situation occurs</p> <p>(iii) within five (5) years.</p> <p>Considerations:</p> <ul style="list-style-type: none"> • qualified officer to be person responsible • review date set • regular audits • corrective action reports (CARs) procedure and forms • communication of CARs and actions taken • communication to all staff of all updates

Item no.	Legislative reference	Requirements and guidance
1.1.6	Schedule 10 Clause 2(f)	<p>Ensure records are kept of measures taken under the ExMP</p> <p>Considerations:</p> <ul style="list-style-type: none"> • changes to an ExMP, version numbers, review date • security cards register, incident register, any other security, safety and emergency response matters that should be recorded • reviews and audits recorded • CARs and resulting actions recorded • secure nominees register • maintenance and updating office records • training • stocktakes

1.2 Emergency management plans (EMP) – Schedule 10 Clause 3A

Must comply with Australian Standard AS 2187.1 *Explosives – Storage, transport and use – Storage*

Item no.	Legislative reference	Requirements and guidance
1.2.1	Schedule 10 Clause 3A	EMP addresses response to and control of a dangerous goods incident or situation by addressing the matters below
1.2.2	Schedule 10 Clause 3A(a)	<p>EMP outlines equipment and facilities available</p> <p>Considerations:</p> <ul style="list-style-type: none"> • equipment and facilities that are available at the site or for the operation • maintenance schedule and contracts to ensure equipment is maintained to be in working order at the time of an incident • training provided to employees in the use of equipment or facilities • checks conducted on facilities to ensure they are operational at the time of an incident • drills and exercises conducted in the use of equipment and facilities to be prepared should a situation occur

Item no.	Legislative reference	Requirements and guidance
1.2.3	Schedule 10 Clause 3A(b)	<p>EMP outlines evacuation procedures and measures to be taken for sounding alarms and evacuating people</p> <p>Considerations:</p> <ul style="list-style-type: none"> • EMP accessible and available to all workers • drills conducted to familiarise staff and emergency services with actions • notification to DFES and DMIRS • training and fire equipment • notification to neighbours and actions to be taken • procedures prepared and communicated in the event of an emergency • DFES involvement • first aid
1.2.4	Schedule 10 Clause 3A(c)	<p>EMP has procedures in place to investigate the underlying cause when an incident occurs</p> <p>Considerations:</p> <ul style="list-style-type: none"> • persons responsible for the investigation and whether conducted in-house or independently • how the investigation is reported and follow-up actions • tools used to conduct the investigation • recording of incidents and actions taken • procedures for investigation and reporting of incidents • data collection on incidents or near misses
1.2.5	Schedule 10 Clause 3A(d)	<p>EMP shows the delegated roles and responsibilities in an emergency</p> <p>Considerations:</p> <ul style="list-style-type: none"> • licensee and qualified officer are identified to implement the emergency management plan • training is provided for persons in the conduct of response procedures in the emergency management plan • staff induction to include emergency management • in-house or external training in emergency response procedures for emergency management • regular conduct of scenarios and drills (6 and 12 monthly) to train people in emergency response procedures

Item no.	Legislative reference	Requirements and guidance
1.2.6	Schedule 10 Clause 3A(e)	<p>Measures taken to train people to execute the EMP</p> <p>Considerations:</p> <ul style="list-style-type: none"> • an EMP has been prepared and regular drills are conducted • training in emergency response and appropriate use of personal protective equipment (PPE) is provided, and fit-for-purpose PPE issued • identified key emergency response scenarios and actions to take (see AS 2187.1) • fire and non-fire situations and notification of neighbours • level of response appropriate to site operations and location, environmental considerations • inclusion of emergency response procedures in the staff induction process • evacuation plan and muster points identified and communicated
1.2.7	Schedule 10 Clause 3A(f)	<p>Emergency services and other people are given a copy of the EMP</p> <p>Considerations:</p> <ul style="list-style-type: none"> • emergency services such as DFES, WA Police and other responders included in the EMP, or consulted in its development, should have access to the latest version of the plan • neighbours and other persons or companies that could be affected by an incident or dangerous situation should be provided with a copy • accurate site plan of locations, type and quantity of explosives made available to key emergency services personnel

1.3 Security matters – Schedule 10 Clause 4

Must comply with AS 2187.1 *Explosives – Storage, transport and use – Storage* and *Australian code for the transport of explosives by road and rail*, 3rd edition (AEC)

Item no.	Legislative reference	Requirements and guidance
1.3.1	Schedule 10 Clause 4(2)(a)	<p>Details of the security risk assessment that has been conducted</p> <p>The process should be conducted in accordance with Australian Standard AS/NZS ISO 31000 <i>Risk management</i> and it is appropriate to the type of explosives operation, location and numbers of people involved.</p> <p>Considerations:</p> <ul style="list-style-type: none"> • an assessment of the risks of sabotage, theft, unexplained loss and unauthorised access (external and internal risk) • key outcomes identified from the risk assessment • names and positions of people involved in the process • stock control (to determine unexplained loss)
1.3.2	Schedule 10 Clause 4(2)(b)	<p>Measures to ensure the security risk assessment is reviewed regularly</p> <p>Considerations:</p> <ul style="list-style-type: none"> • prompts for revised risk assessment (e.g. when there are changes to the site) • audit periodically to prompt any revision of the risk assessment and measures in place • training of staff in security hazard identification • reporting mechanisms in the identification of security risks and how they are reviewed and measures put in place • review of authorised personnel with up to date security clearances • rigorousness of review • stock reconciliation
1.3.3	Schedule 10 Clause 4(2)(c) (i) and (ii)	<p>Measures to minimise the security risks and keep explosives secure</p> <p>Considerations:</p> <ul style="list-style-type: none"> • security measures in place (e.g. limit access to authorised people only, magazines built to AS 2187.1, security locks, key safe, key register, fencing, surveillance) • adequacy of measures • regularly review measures and keep records of checks

Item no.	Legislative reference	Requirements and guidance
1.3.4	Schedule 10 Clause 4(2)(d)	<p>Measures to ensure that structures and things used to keep explosives secure are inspected regularly and maintained</p> <p>Considerations:</p> <ul style="list-style-type: none"> • maintenance and inspection schedules • security for equipment maintenance such as cameras, fences and alarms • tag access for personnel and records maintained • security patrols or company employed for security • adequacy of security for magazine keys
1.3.5	Schedule 10 Clause 4(2)(e)	<p>Measures to control and monitor access to explosives</p> <p>Considerations:</p> <ul style="list-style-type: none"> • limit access to authorised persons only • key security for enclosures and safes • surveillance • physical security such as fences, security and locks • records of access • procedures to keep explosives supervised and secure once removed from magazine. • procedures to ensure that past employees do not retain access to explosives (e.g. changing codes, ensuring keys/cards are returned, updating records)
1.3.6	Schedule 10 Clause 4(2)(f)	<p>Measures to prevent unsupervised and unauthorised access and to ensure access is limited to authorised persons only</p> <p>Considerations:</p> <ul style="list-style-type: none"> • card access for authorised persons only • key control • records of access • procedures to keep explosives supervised and secure once removed from magazine • record of secure nominees • routine review and updating record • system of ensuring supervision for unauthorised people

Item no.	Legislative reference	Requirements and guidance
1.3.7	Schedule 10 Clause 4(2)(g)	<p>Measures to ensure unauthorised persons are supervised at all times</p> <p>Considerations:</p> <ul style="list-style-type: none"> • system of ensuring supervision for unauthorised people • accessible record of secure nominees • records of persons who do not have authorised access • induction information on access to explosives • control of supervised areas by card access or other means
1.3.8	Schedule 10 Clause 4(2)(h)	<p>Measures to ensure the name and address of every individual who has had access to the explosive is recorded</p> <p>Considerations:</p> <ul style="list-style-type: none"> • records – register of persons who have access to explosives (supervised and unsupervised) • address details of each person who has access to explosives • record of dangerous goods security card • regular review and updating of records (leave site, commence employment, etc.) • procedures to cover access to explosives and how records are made and maintained • induction information

Section 2 – Explosives manufacture licence

2.1 Safety matters – Schedule 10 Clause 3

Must comply with Australian Standard AS 2187.1 *Explosives – Storage, transport and use – Storage* and Australian Standard AS 2187.2 *Explosives – Storage, transport and use – Use of explosives*

Item no.	Legislative reference	Requirements and guidance
2.1.1	Schedule 10 Clause 3(a)	<p>Details of the safety risk assessment that has been conducted</p> <p>Considerations:</p> <ul style="list-style-type: none"> • how the risk assessment is conducted (use recognised risk assessment methods (HAZID, HAZOP, etc.) • identify hazards • identify risks • risk controls • people involved in the risk assessment process • key outcomes from the risk assessment <p>Australian Standard AS/NZS ISO 31000 – Risk Management and the Department’s <i>Risk assessment for dangerous goods – guide</i> may assist with this requirement.</p>
2.1.2	Schedule 10 Clause 3(b)	<p>Measures to ensure ongoing assessment of risks</p> <p>Considerations:</p> <ul style="list-style-type: none"> • staff feedback • change management (e.g. changes to manufacture process, suppliers, etc.) • audits, periodic review and update of risks analysis • prompts to revise risk assessment • training staff in hazard identification • health and safety person identified and trained • reporting mechanisms • incident learnings

Item no.	Legislative reference	Requirements and guidance
2.1.3	Schedule 10 Clause 3(c)	<p>Measures to minimise risks</p> <p>Considerations:</p> <ul style="list-style-type: none"> • use of control hierarchies • safety management system • change management system • procedures and work instructions to prevent or mitigate identified risks • staff training to identify and mitigate risks • actions to address outcomes from risk assessment
2.1.4	Schedule 10 Clause 3(d)	<p>Measures to ensure that structures and things used to minimise those risks are inspected and tested regularly and maintained</p> <p>Considerations:</p> <ul style="list-style-type: none"> • safety management system • maintenance schedules, contracts, visual inspections, quality assurance (QA) of products manufactured • regular audits • maintenance of mounds or other structures, testing of materials to ensure degradation or deterioration not occurring • housekeeping of high standard and maintained for manufacture • high temperature and high pressure gauges and cut-offs inspected and regularly maintained • technological measures – to hold product on-site, no run-off, automatic shut-downs • emergency control tested technology and design • adherence to quantity limitations during manufacture
2.1.5	Schedule 10 Clause 3(e)	<p>Measures to ensure any person handling an explosive is competent to do so (i.e. trained and qualified)</p> <p>Considerations:</p> <ul style="list-style-type: none"> • register of training, experience and qualifications • licensing for explosives use and handling • audits conducted to check competencies and compliance with procedures • authority to possess • written authorisation to perform task • appropriate supervision

Item no.	Legislative reference	Requirements and guidance
2.1.6	Schedule 10 Clause 3(f)	<p>Measures to ensure explosives or other non-compatible substances are adequately separated</p> <p>AS 2187.1 stipulates separation requirements</p> <p>Considerations:</p> <ul style="list-style-type: none"> • identify and separate non-compatibles • storage conditions and separate magazines • training and competence of staff • proper labelling • housekeeping • regular inspections to ensure adequate separation of non-compatible articles and substances

2.2 Records of manufacture, access and supply – regulation 161(2A) and (2)

“Explosive” includes a constituent of an explosive that is a security sensitive ammonium nitrate (SSAN) [r. 161(2A)].

Item No.	Legislative reference	Requirements and guidance
2.2.1	Regulation 161(2)(a)	<p>Explosives management plan (ExMP) contains site plan and address to which the licence relates</p> <p>Include:</p> <ul style="list-style-type: none"> • name of the operator of the site • address of the site. If on a mine site then details including name of the mine and its location in relation to nearest town site or main public road, and where the storage is at a mine, details of where the magazines are located on the mine site • date site plan was prepared or revised • scale to which the plan is drawn • accurate site plan showing <ul style="list-style-type: none"> – the sites boundaries – any buildings on the site with description – the location and description of the magazines – identification number and codes, with concentric circles around magazine at distance(s) of required separation in accordance with AS 2187.1 – legend for identification number and codes – show location of main entrance and other entry points, essential site services (including fire services and isolation points for fuel, gas, water and power), the manifest and all drains on site – description of adjoining land use areas such as workshops, accommodation blocks, other DG storage, schools and environmentally sensitive areas – show the direction of north
2.2.2	Regulation 161(2)(c)	<p>Measures to ensure explosives or SSAN received, manufactured or despatched are recorded and reconciled</p> <p>Considerations:</p> <ul style="list-style-type: none"> • record type and amount of explosive received and despatched • names and security details, including appropriate licences, of persons authorised to transport explosives • sales or supply book entries maintained • stocktake

Item No.	Legislative reference	Requirements and guidance
2.2.3	Regulation 161(2)(d)	Measures to ensure explosives are supplied to authorised persons only Considerations: <ul style="list-style-type: none"> • process to ensure explosives are only supplied to authorised persons, • ensure records of authorised persons are up-to-date • conduct regular security and licence checks • company policy for supply to persons with appropriate licences • allocating responsibility for assuring only authorised persons are supplied • reference copies kept for documents such as security checks and licences
2.2.4	Regulation 161(2)(e) (i) and (ii)	Records kept of authorised person details and explosives supplied Considerations: <ul style="list-style-type: none"> • procedure for record keeping (capture of information) • how records are maintained • register of authorised persons for supply, and details of explosives • procedure for checks of authorised persons • person responsible for checks and maintaining a register • sales or supply book entries are maintained

Item No.	Legislative reference	Requirements and guidance
2.2.5	Regulation 161(2)(f)	<p>Measures to investigate and report unlawful entry, attempted unlawful entry, unexplained loss or theft/attempted theft to the Chief Dangerous Goods Officer</p> <p>Considerations:</p> <ul style="list-style-type: none"> • procedures to identify reportable security situations, identify what is reportable (<i>Reporting dangerous goods incidents – guideline</i>) • preliminary investigation • phone call or email within 24 hours • follow up with complete and submit the incident reporting form (<i>Dangerous goods incident report – form</i>) • procedures and forms accessed to report and investigate • process for identifying loss (security breaches such as broken locks, stocktake, CCTV) • persons responsible for communication to the Department • reporting chain-of-command • investigation training and procedures • investigation team or person responsible to arrange • reporting to WA Police

Section 3 – Explosives manufacture (MPU) licence

A complying MPU must be used to transport the ingredients of a bulk AN-based explosive to a place where the explosive will be manufactured and used. However, in accordance with regulation 42(3), a person must not transport an explosive in an MPU on a public road.

Must comply with Australian Standard AS 2187.2 *Explosives – Storage, transport and use – Use of explosives* and Australian Explosives Industry Safety Group's (AEISG's) *Code of Practice for Mobile Processing Units*, 3rd edition

As per regulation 161(3) matters required by r. 161(5) are applied with any necessary changes as if any reference to an explosive were a reference to a constituent of an explosive.

3.1 Measures during transport to prevent unauthorised access – regulation 161(3) and (5)

Item no.	Legislative reference	Requirements and guidance
3.1.1	Regulation 161(5)(b)	<p>Measures to ensure loading and unloading locations are secure</p> <p>Considerations:</p> <ul style="list-style-type: none"> • security vetting of MPU operator, including dangerous goods transport licence and dangerous good security card • authorised personnel to receive and unloading explosives (e.g. shot firer) • security at the loading and unloading points to prevent entry from unauthorised personnel • authorised oversight of loading and unloading points (as identified in EMP route plan) • procedures to ensure unauthorised personnel are supervised during loading and unloading
3.1.2	Regulation 161(5)(c)	<p>Measures to ensure the location of explosives during transport is monitored</p> <p>Considerations:</p> <ul style="list-style-type: none"> • how the company keeps track of explosives vehicles (e.g. GPS tracking, log books). • communication with the driver, frequency and whether in place on vehicle • procedures for transport • parking security (e.g. securely locked vehicle, secure locations, security guard) • pre-planned route (as per EMP security) • training of drivers

Item no.	Legislative reference	Requirements and guidance
3.1.3	Regulation 161(5) (d)(i)	<p>Measures to investigate unlawful entry or unlawful use of vehicle used to transport explosives and report it to the Chief Dangerous Goods Officer</p> <p>Considerations:</p> <ul style="list-style-type: none"> • procedures to identify reportable security situations, identify what is reportable (<i>Reporting dangerous goods incidents – guideline</i>) • preliminary investigation • phone call or email within 24 hours • follow up with complete and submit the incident reporting form (<i>Dangerous goods incident report – form</i>) • procedures and forms accessed to report and investigate • process for identifying loss (security breaches such as broken locks, stocktake, CCTV) • persons responsible for communication to the Department • reporting chain-of-command • investigation training and procedures • investigation team or person responsible to arrange • reporting to WA Police

Item no.	Legislative reference	Requirements and guidance
3.1.4	Regulation 161(5)(d)(ii)	<p>Measures to investigate any theft, attempted theft or unexplained loss of any explosive while being transported and report it to the Chief Dangerous Goods Officer</p> <p>Considerations:</p> <ul style="list-style-type: none"> • procedures to identify reportable security situations, identify what is reportable (<i>Reporting dangerous goods incidents – guideline</i>) • preliminary investigation • phone call or email within 24 hours • follow up with complete and submit the incident reporting form (<i>Dangerous goods incident report – form</i>) • procedures and forms accessed to report and investigate • process for identifying loss (security breaches such as broken locks, stocktake, CCTV) • persons responsible for communication to the Department • reporting chain-of-command • investigation training and procedures • investigation team or person responsible to arrange • reporting to WA Police
3.1.5	Regulation 161(5)(e)	<p>Measures for recording and reconciling explosives</p> <p>Considerations:</p> <ul style="list-style-type: none"> • explosives (including SSAN) loading and unloading and during journey • shipping documentation in place – electronic and hardcopy • how reconciliation is done during journey – process for updating at each site • process for updating • developing procedures • training of MPU operators • signed despatch and delivery dockets

Item no.	Legislative reference	Requirements and guidance
3.1.6	Regulation 161(5)(f)	<p>Measures to ensure all explosives are consigned for transport by and to authorised persons</p> <p>Considerations:</p> <ul style="list-style-type: none"> • how checks are conducted • register of authorised personnel who can despatch and receive explosives • security vetting, including sighting and recording dangerous goods transport licence and dangerous good security card • procedures to cover situation (e.g. unloading truck, or on shot) • subcontractor policy • security to prevent entry from unauthorised personnel
3.1.7	Regulation 161(5)(g) (i) and (ii)	<p>Measures to ensure records are kept and maintained of consignor/consignee authority to possess and details of the explosive supplied</p> <p>Considerations:</p> <ul style="list-style-type: none"> • how records are maintained and updated • what information is recorded, such as contact details, address, contact persons and whether security checks in place, • explosives supplied, quantities and dates of supply • sufficient details of authorised person • procedures • signed despatch and delivery dockets • procedure for checks of authorised persons • person responsible for checks and maintaining a register

Section 4 – Explosives storage licence

- Must comply with *Australian Standard AS 2187.1 Explosives – Storage, transport and use – Storage*
- “Explosive” includes a constituent of an explosive that is a security sensitive ammonium nitrate (SSAN) [r. 161(2A)].
- As per regulation 161(4)(b), the ExMP must specify amounts equal to or more than those specified below are stored at the site.
 - 2.5 kg or more of explosives with a classification code of 1.1 or 1.2
 - 15 kg or more of explosives with a classification code of 1.3
 - 30 kg or more of explosives with a classification code of 1.4
 - 100 or more detonators

4.1 Measures taken for security and recording of explosives on site – regulation 161(2A) and (4)

Item no.	Legislative reference	Requirements and guidance
4.1.1	Regulation 161(4)(a)	<p>ExMP contains site plan and address to which the licence relates</p> <p>Include:</p> <ul style="list-style-type: none"> • name of the operator of the site • address of the site. If on a mine site then details including name of the mine and its location in relation to nearest town site or main public road, and where the storage is at a mine, details of where the magazines are located on the mine site • date site plan was prepared or revised • scale to which the plan is drawn • accurate site plan showing <ul style="list-style-type: none"> – the sites boundaries – any buildings on the site with description – the location and description of the magazines – identification number and codes, with concentric circles around magazine at distance(s) of required separation in accordance with AS 2187.1 – legend for identification number and codes – show location of main entrance and other entry points, essential site services (including fire services and isolation points for fuel, gas, water and power), the manifest and all drains on site – description of adjoining land use areas such as workshops, accommodation blocks, other DG storage, schools and environmentally sensitive areas – show the direction of north
4.1.2	Regulation 161(4)(c)	<p>Measures for recording receipt and despatch and reconciling explosives.</p> <p>Considerations:</p> <ul style="list-style-type: none"> • record type and amount of explosive received and despatched • names and security details, including appropriate licences, of persons authorised to transport explosives • sales or supply book entries maintained • stocktake

Item no.	Legislative reference	Requirements and guidance
4.1.3	Regulation 161(4)(d)	<p>Process to ensure explosives are supplied to authorised persons only.</p> <p>Considerations:</p> <ul style="list-style-type: none"> • process to ensure explosives are only supplied to authorised persons, • ensure records of authorised persons are up-to-date • conduct regular security and licence checks • company policy for supply to persons with appropriate licences • allocating responsibility for assuring only authorised persons are supplied • reference copies kept for documents such as security checks and licences
4.1.4	Regulation 161(4)(e)(i) and (ii)	<p>Records kept of authorised person details and explosives supplied.</p> <p>Considerations:</p> <ul style="list-style-type: none"> • procedure for record keeping (capture of information) • how records are maintained • register of authorised persons for supply, and details of explosives • procedure for checks of authorised persons • person responsible for checks and maintaining a register • sales or supply book entries are maintained

Item no.	Legislative reference	Requirements and guidance
4.1.5	Regulation 161(4)(f)	<p>Measures to investigate and report unlawful entry, attempted unlawful entry, unexplained loss or theft/attempted theft of explosives to the Chief Dangerous Goods Officer</p> <p>Considerations:</p> <ul style="list-style-type: none"> • procedures to identify reportable security situations, identify what is reportable (<i>Reporting dangerous goods incidents – guideline</i>) • preliminary investigation • phone call or email within 24 hours • follow up with complete and submit the incident reporting form (<i>Dangerous goods incident report – form</i>) • procedures and forms accessed to report and investigate • process for identifying loss (security breaches such as broken locks, stocktake, CCTV) • persons responsible for communication to the Department • reporting chain-of-command • investigation training and procedures • investigation team or person responsible to arrange • reporting to WA Police

Section 5 – Explosives transport licence

Must comply with Australian Explosives Industry Safety Group's (AEISG's) *Code of Practice for Mobile Processing Units*, 3rd edition

5.1 Measures during transport to prevent unauthorised access – regulation 161(5)

Item no.	Legislative reference	Requirements and guidance
5.1.1	Regulation 161(5)(b)	<p>Measures to ensure loading and unloading locations are secure</p> <p>Considerations:</p> <ul style="list-style-type: none">• security vetting of MPU operator, including dangerous goods transport licence and dangerous good security card• authorised personnel to receive and unloading explosives (e.g. shot firer)• security at the loading and unloading points to prevent entry from unauthorised personnel• authorised oversight of loading and unloading points (as identified in EMP route plan)• procedures to ensure unauthorised personnel are supervised during loading and unloading
5.1.2	Regulation 161(5)(c)	<p>Measures to ensure the location of explosives during transport is monitored</p> <p>Considerations:</p> <ul style="list-style-type: none">• how company keeps track of explosives vehicles (e.g. GPS tracking, log books).• communication with the driver, frequency and whether in place on vehicle• procedures for transport• parking security (e.g. securely locked vehicle, secure locations, security guard)• pre-planned route (as per EMP security)• training of drivers

Item no.	Legislative reference	Requirements and guidance
5.1.3	Regulation 161(5)(d)(i)	<p>Measures to investigate unlawful entry or unlawful use of vehicle used to transport explosives and report it to the Chief Dangerous Goods Officer</p> <p>Considerations:</p> <ul style="list-style-type: none"> • procedures to identify reportable security situations, identify what is reportable (<i>Reporting dangerous goods incidents – guideline</i>) • preliminary investigation • phone call or email within 24 hours • follow up with complete and submit the incident reporting form (<i>Dangerous goods incident report – form</i>) • procedures and forms accessed to report and investigate • process for identifying loss (security breaches such as broken locks, stocktake, CCTV) • persons responsible for communication to the Department • reporting chain-of-command • investigation training and procedures • investigation team or person responsible to arrange • reporting to WA Police
5.1.4	Regulation 161(5)(d)(ii)	<p>Measures to investigate any theft, attempted theft or unexplained loss of any explosive while being transported and report it to the Chief Dangerous Goods Officer</p> <p>Considerations:</p> <ul style="list-style-type: none"> • procedures to identify reportable security situations, identify what is reportable (<i>Reporting dangerous goods incidents – guideline</i>) • preliminary investigation • phone call or email within 24 hours • follow up with complete and submit the incident reporting form (<i>Dangerous goods incident report – form</i>) • procedures and forms accessed to report and investigate • process for identifying loss (security breaches such as broken locks, stocktake, CCTV) • persons responsible for communication to the Department • reporting chain-of-command • investigation training and procedures • investigation team or person responsible to arrange • reporting to WA Police

Item no.	Legislative reference	Requirements and guidance
5.1.5	Regulation 161(5)(e)	Measures for recording and reconciling explosives Considerations: <ul style="list-style-type: none"> • loading and unloading and during journey • shipping documentation in place – electronic and hardcopy • how reconciliation is done during journey – process for updating at each site • process for updating • developing procedures • training of drivers • signed despatch and delivery dockets
5.1.6	Regulation 161(5)(f)	Measures to ensure all explosives are consigned for transport by and to authorised persons Considerations: <ul style="list-style-type: none"> • how checks are conducted • register of authorised personnel who can despatch and receive explosives • security vetting, including sighting and recording dangerous goods transport licence and dangerous good security card • procedures to cover situation (e.g. unloading truck, or on shot) • subcontractor policy • security to prevent entry from unauthorised personnel

Item no.	Legislative reference	Requirements and guidance
5.1.7	Regulation 161(5)(g) (i) and (ii)	<p>Measures to ensure records are kept and maintained of consignor/consignee authority to possess and details of the explosive supplied</p> <p>Considerations:</p> <ul style="list-style-type: none"> • how records are maintained and updated • what information is recorded, such as contact details, address, contact persons and whether security checks in place, • explosives supplied, quantities and dates of supply • sufficient details of authorised person • procedures • signed despatch and delivery dockets • procedure for checks of authorised persons • person responsible for checks and maintaining a register

Section 6 – Fireworks contractor licence

Must comply with *Safe use of outdoor fireworks in Western Australia* and *Safe use of close proximity fireworks in Western Australia* codes of practice.

6.1 Safety matters – Schedule 10 Clause 3

Item no.	Legislative reference	Requirements and guidance
6.1.1	Schedule 10 Clause 3(a)	<p>Details of the safety risk assessment that has been conducted</p> <p>The code of practice sets out the requirements that must be met for a safety risk assessment conducted before, during and after an event. The risk assessment must be site-specific. It must cover:</p> <ul style="list-style-type: none"> • how the risk assessment is conducted (use recognised risk assessment methods such as HAZID, HAZOP, etc.) • identify hazards • identify risks • risk controls • people and positions involved in the risk assessment process • key outcomes from the risk assessment <p>Australian Standard AS/NZS ISO 31000 <i>Risk management</i> may assist with this requirement.</p>
6.1.2	Schedule 10 Clause 3(b)	<p>Measures to ensure ongoing assessment of risks</p> <p>Considerations:</p> <ul style="list-style-type: none"> • staff feedback • change management (e.g. change of supplier of fireworks) • audits, periodic review and update of risks analysis • prompts to revise risk assessments • random testing • staying up-to-date with industry information and experience with certain fireworks and procedures for firing • periodic review of operating procedures • training staff in hazard identification • incident learnings

Item no.	Legislative reference	Requirements and guidance
6.1.3	Schedule 10 Clause 3(c)	Measures to minimise risks Considerations: <ul style="list-style-type: none"> • use of control hierarchies • safety management system • change management system • procedures and work instructions to prevent or mitigate identified risks • job safety assessment (JSA) • staff training to identify and mitigate the risks • actions to address outcomes from risk assessment
6.1.4	Schedule 10 Clause 3(d)	Measures to ensure that structures and things used to minimise those risks are inspected and tested regularly and maintained Considerations: <ul style="list-style-type: none"> • safety management system • maintenance schedules, contracts, visual inspections • quality assurance (QA) of products manufactured • regular audits • housekeeping of high standard and maintained • adherence to quantity limitations • regular inspection, testing and maintenance of fireworks equipment (e.g. rack systems, delay change fusing)
6.1.5	Schedule 10 Clause 3(e)	Measures to ensure any person handling an explosive is competent to do so (i.e. trained and qualified) Considerations: <ul style="list-style-type: none"> • licence conditions are met • process to check competency, experience and qualifications of the operator and authority to possess • records of training and assessments • ongoing training • register of licensed operators and maintenance of the register • appropriate supervision • manufacturer's instructions communicated and followed

Item no.	Legislative reference	Requirements and guidance
6.1.6	Schedule 10 Clause 3(f)	<p>Measures to ensure explosives and other non-compatible substances are adequately separated</p> <p>The code of practice stipulates separation requirements.</p> <p>Considerations:</p> <ul style="list-style-type: none"> • identify and separate non-compatible substances (e.g. dangerous goods, batteries, packaging) • storage procedures • management of the incompatibles prior to an event, especially during transit • training of staff • housekeeping • regular inspections to ensure adequate separation of non-compatible articles and substances

6.2 Measures to ensure safe initiation of fireworks and conduct of the event – regulation 161(6)

Item no.	Legislative reference	Requirements and guidance
6.2.1	Regulation 161(6)(b) (i) and (ii)	<p>Measures taken by contractor and operator prior to the event to ensure fireworks and initiating equipment function correctly</p> <p>Considerations:</p> <ul style="list-style-type: none"> • inspection, testing and maintenance of initiation systems • knowledge of the fireworks • reliability of supplier of fireworks • mandatory prior testing of new fireworks • appropriate initiation systems used • operator training
6.2.2	Regulation 161(6) (c)(i)	<p>Procedures for when adverse weather conditions are likely to affect event preparations, the event and fireworks used</p> <p>Considerations:</p> <ul style="list-style-type: none"> • risk assessment • identifying potential adverse weather for fireworks • adjusting (change management) for adverse weather (e.g. storage, set up, operations, location) • event postponement or cancellation • communications (media, police, DFES)

Item no.	Legislative reference	Requirements and guidance
6.2.3	Regulation 161(6) (c)(ii)	<p>Measures to ensure spectators and unauthorised persons are kept at a safe distance before, during and after the event</p> <p>Considerations:</p> <ul style="list-style-type: none"> • site location and set up (e.g. compliance with spectator exclusion zones and clearance distances) • site security • crowd control (security, signage, fences) • procedures to prevent unauthorised access
6.2.4	Regulation 161(6) (c)(iii)	<p>Measures to prevent a misfire occurring</p> <p>Considerations:</p> <ul style="list-style-type: none"> • prior testing of fireworks • regular inspection of fireworks and equipment • reliability of supplier of fireworks • procedures for firing • competency of firework operator
6.2.5	Regulation 161(6) (c)(iv)	<p>Procedures for dealing with a misfire if it occurs</p> <p>Considerations:</p> <ul style="list-style-type: none"> • investigation methods for identifying misfires • procedures to be followed in the event of a misfire • training and competency of firework operator
6.2.6	Regulation 161(6) (c)(v)	<p>Measures for removal and collection of debris and uninitiated fireworks from event area prior to unauthorised entry</p> <p>Considerations:</p> <ul style="list-style-type: none"> • procedures for securing and clearing the event area • procedures for salvaging uninitiated fireworks • investigation methods for identifying misfires • procedures to be followed in the event of a misfire • training and competency of firework operator