

CEN-HSE-PRO-931







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### 1. INTRODUCTION AND PURPOSE

The purpose of this Dangerous Goods (DG) and Hazardous Chemicals Management Procedure is to reduce and manage the risk to workers, the general public and the environment, whilst involved in dangerous goods or hazardous chemical handling, storage or transport.

#### 2. APPLICATION AND SCOPE

This procedure applies to all Centurion workers including Managers, Supervisors, sub-contractors and contractors.

For Class 5 bulk Ammonium Nitrate transport and Class 1 Explosives refer to:

- CEN-OPS-PLN-1132 Transport Security Plan Explosives and SSAN
- CEN-HSE-PLN-1096 Explosives Management Plan WA
- CEN-HSE-PLN-1353 Explosives Management Plan QLD

For Class 7 Radioactive Materials transport, refer to:

- CEN-HSE-PRO-005 Transport Radioactive Materials; and
- CEN-HSE-PLN-008 Radioactive Transport Management Plan

### 3. APPLICABLE STANDARDS/ LEGISLATION

Legislative provisions for dangerous goods and hazardous chemicals vary between states and territories; Refer to Act(s), Regulations, Standards and Codes relevant to your jurisdiction and/or scope of work.

Note: As many hazardous chemicals are also classified as dangerous goods, both sets of requirements apply.

- ANZ Emergency Response Guide Book (www.ntc.gov.au)
- Australian Dangerous Goods Code 7.8 (www.ntc.gov.au)
- International Maritime Dangerous Goods Code
- Marine Orders Part 41 (Carriage of Dangerous Goods) 2017 (Commonwealth)
- Safe Work Australia Code of Practice for Labelling of Workplace Hazardous Chemicals
- Dangerous Goods Safety Act 2004 (WA)
- Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007 (WA)
- Dangerous Goods Safety (Road and Rail Transport of Non-explosives) Regulations 2007 (WA)
- Dangerous Goods (Storage and Handling) Act 1985 (VIC)
- Dangerous Goods (Storage and Handling) Regulations 2022 (VIC)
- Dangerous Goods Safety Management Act 2001 (QLD)
- Transport Operations (Road Use Management Dangerous Goods) Regulation 2018 (QLD)
- Dangerous Goods (Road and Rail) Act 2008 (NSW)
- Dangerous Substances Act 1979 (SA)
- Work Health and Safety Act/ Regulations (Various)

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- AS 1940-2017 The storage and handling of flammable and combustible liquids
- AS 2187.1-1998 Explosives Storage transport and use Storage
- AS 2714-2008 The storage and handling of organic peroxides
- AS 4326-2008 The storage and handling of oxidising agents



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- AS 4332-2004 The storage and handling of gases in cylinders
- AS 3780-2008 The storage and handling of corrosive substances
- AS NZS 4452-1997 The storage and handling of toxic substances
- AS/NZS 5026-2012 The storage and handling of Class 4 dangerous goods

### 4. ROLES AND RESPONSIBILITIES

The responsibilities of the roles affected by the procedure are:

0 " /0	
Operations/ Branch Manager	<ul> <li>Hazardous chemicals and dangerous goods are handled, stored and transported in accordance with the requirements of this procedure and applicable legislative provisions</li> </ul>
	<ul> <li>All workers receive required training in the storage, handling and transport of hazardous chemicals and dangerous goods</li> </ul>
	<ul> <li>New Dangerous Goods and Hazardous chemicals to be used/ stored onsite are risk assessed, approved and details entered into ChemAlert Register</li> </ul>
	Sufficient controls are in place so that workers are not exposed to a
	hazardous chemical in excess of its exposure standard
	Dangerous Goods Manifests are maintained, where manifest quantities are stored
	Compliance with DG storage licenses/ approvals
	<ul> <li>Compliance with bd storage itemsesy approvals</li> <li>Compliance with transit or minor storage requirements.</li> </ul>
Area Supervisor	Hazardous Chemical and Dangerous Goods Risk Assessments are completed in ChemAlert and current
	Hazardous Chemical and Dangerous Goods Registers are established and maintained
	<ul> <li>Workplace HSE inspections are completed and hazardous chemicals and dangerous goods compliance requirements verified, as listed</li> </ul>
	<ul> <li>Safety Data Sheets (SDS) for hazardous chemicals and dangerous goods used and stored are not more than 5 years old</li> </ul>
	<ul> <li>SDS's, DG and Hazardous Chemical Risk assessments and the Register are readily available to workers.</li> </ul>
Workers	Hazardous chemicals and dangerous goods are correctly handled, stored,
	loaded, restrained and transported
	SDS are read and understood prior to handling (using) any hazardous
	chemical or dangerous good.
	<ul> <li>Incidents or hazards identified that relate to dangerous goods or</li> </ul>
	hazardous chemicals are reported.

### 5. TRAINING AND EDUCATION

Centurion provides workers with relevant information, training and instruction as related to the task requirements of their positions, a record of training is maintained by the Training Department or in the Learning Management System (Centurion Connect).



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Workers who receive, handle or transport dangerous goods as part of their job role are to complete Centurion's Dangerous Goods Awareness Training Package. The training package covers DG quantities, Classes, required documentation and knowledge for personnel not required to hold a DG Licence.

Workers who are involved in in-transit handling and storage dangerous goods and hazardous chemicals are also required to complete CEN-PCT-PRE-1646 – Dangerous Goods and Hazardous Chemicals – Safe Use, Handling and Storage.

All drivers who are required to hold a DG licence, are to complete TLILIC001 Licence to transport dangerous goods by road.

Workers involved in the handling (including marking, labelling and placarding) and packing of dangerous goods for sea transport and preparing transport documents shall be trained in a function specific AMSA (Australian Maritime Safety Authority) approved Dangerous Goods by Sea course, for example:

- IMDG Code Packing, preparing and accepting Dangerous Goods (Hazmat) consignments for freight forwarders, consolidators, cargo agents, and shippers
- IMDG Code Preparing non-bulk dangerous goods/hazmat consignments for shippers, consignors, manufacturers and exporters
- IMDG Code Packing and loading/unloading dangerous goods/hazmat consignments into cargo transport units

### 6. DANGEROUS GOODS HANDLING

### 6.1. Dangerous Goods Loading onto Vehicle/Trailer(s)

Loading Guidelines - Loader:

- 1. Check the suitability of packaging and load bearing equipment.
- 2. Check the trailer is licensed to carry bulk Dangerous Goods (where in bulk quantities).
- 3. Check compatibility with other DG products to be loaded onto the trailer/vehicle.
- 4. Prepare appropriate DG placards prior to loading commencing, refer to Appendix B.
- 5. Ascertain that load can be correctly segregated as per the Segregation Chart (Appendix A Dangerous Goods Transport Placarding Requirements/ Table 9.1 of ADG Code), prior to loading commencing.
- 6. Load DG on the vehicle in a position where it is not likely to be damaged or move during transit and does not project beyond the sides of the vehicle; restrain as per the NTC Load Restraint Guide.
- 7. Use dunnage (carpet, tyres, ply, etc.) to protect dangerous goods from freight with sharp edges or protrusions from load restraint equipment.
- 8. On completion of loading, place appropriate placards (diamonds and/or EIPs) onto the trailer.
- 9. Check the fire extinguisher on trailer to ensure it is the correct size, type and within the date of service.

On completion of loading the Area Supervisor is to inspect the load for compliance to DG and Chain of Responsibility requirements.

### 6.2. Dangerous Goods Receivals

Receivals Guidelines - Receiver:

1. Check DG against Supplier paperwork e.g. Delivery Docket, Invoice.

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- 2. For Class 1 or 7, the DG Coordinator or appropriate person is to be contacted prior to the DG being accepted.
- 3. Ensure correct packaging for particular DG (i.e., bulky, cartons, drums, etc.).
- 4. Unload DG in "Receivals" area
- 5. Check placards (diamonds and/or EIPs) are correct on the packages
- 6. For Off Site Receipting (OSR), OSR receiving person to:
  - Check DG against Supplier's paperwork
  - Remove shrink wrap from mixed pallets
  - If deemed necessary, open the package to count items within
  - Check paperwork is correct for DGs received in containers or boxes with instructions stating 'not to open', which can only be opened by the DG Coordinator/Supervisor/Team Leader if the paperwork is deemed to be incorrect.
  - Check the items after the boxes have been tampered with or damaged.
  - Enter DG receipt details on the computer
  - Repackage items of DG and or chemicals
  - Place package on pallet, in cage, crate or frames, etc., for transit.
- Scan and barcode goods for tracking purposes, ensure they are not placed over DG labelling.
- 8. Send DG to Loading Bay for dispatch.

### 6.3. Dangerous Goods Transit Storage

Dangerous Goods transit storage shall comply with the requirements detailed in the relevant Australian Standard (based on the DG Class); these include:

- The total quantity of a dangerous good held in each transit storage area shall not exceed 200t.
- Where a dangerous good is held in one area with other dangerous goods, the aggregate quantity shall not exceed 200t.
- Dangerous goods that are not permitted by the ADGC to be stowed together on the same vehicle, shall be segregated by a minimum distance of 5m whilst held in a transit storage area.
- Access, egress and escape routes shall be clearly defined and kept clear.
- All dangerous goods shall be marked in accordance with the ADGC.
- Transport documentation in accordance with the ADGC shall be available.
- Stacks of pallet banks, packages and IBCs (excluding freight containers), in a transit storage area shall:
  - Each not exceed 25t

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- Be accessible from all sides
- Be segregated from each other by at least 5 m.
- Dangerous goods shall not remain in transit storage for more than 5 days. After this time dangerous goods shall be stored in accordance with relevant storage provisions. Refer to Section 8.
- Bunding or spillage containment system is impervious and equal to 110% of the capacity of the largest container.

Areas used for transit storage of dangerous goods shall be deemed to be separate areas if apart from each other and from other storage areas by at least 15m.



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### 7. DANGEROUS GOODS TRANSPORT

### 7.1. Dangerous Goods for Transport - General

Driver's transporting DGs in receptacles greater then 500L or kg hold a Dangerous Goods Driver Licence and have an appropriate in-date medical.

Note: Drivers transporting IBCs do not require licensing if the total capacity on the vehicle is no more than 3,000 litres and receptacles are not filled or emptied on the vehicle.

DG transport requirements are essentially classified into 'Packaged' and 'Placardable':

- Packaged Dangerous Goods: DGs provided in a single vessel/item with a capacity of not more than 500 litres or kilograms net weight.
- Placardable Dangerous Goods: DGs in a package capable of holding more than 500 litres or kilograms. Generally, these are items such as IBCs (bulkies, bulka bags) and 920kg chlorine cylinders.

### 7.2. Dangerous Goods Pre-Departure Checks - Driver

Drivers picking up loaded trailers that contain a placard load of DGs for transport, must ensure:

- 1. Mandatory safety equipment is held, including:
  - a. First Aid Kit
  - b. 250ml bottle of Eye Wash (either located in driver's door or in a position readily accessible)
  - c. Ancillary equipment (wheel chocks, emergency triangles, spare restraint equipment) correct and stowed for journey in designated location (toolbox, cab)
     Note: Equipment, including dunnage is not to be left unrestrained in the prime mover cab, as
    - they present missile hazards and can foul brake, clutch and accelerator pedals).
  - d. Prime Mover fire extinguisher, of correct Class, secured, fully charged and in date
  - e. PPE and Safety Equipment e.g torch, breathing apparatus as detailed in Section 7.7. Note: Mandatory PPE and Safety Equipment is usually provided to drivers in a DG kit, which is issued by Transport Operations, Manager or Security.
  - f. Sufficient drinking water is held for journey.
- 2. ANZ Emergency Response Guide Book and Vehicle Fire card must be located in the Emergency Information Holder, attached to the Driver's door.
- 3. Required documentation is received from Transport Operations:

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- a. Centurion Trip Sheet (includes Dangerous Goods Transport Document)
- b. Journey Management Plan, for all linehaul journeys and where required by the Customer
- c. Copy of Centurion's Transport Emergency Response Plan (TERP) extract and contacts list
- d. Load Plan.
- 4. They approach Transport Operations (either by phone or in person at the Operations Office) to be given the allocated trailer numbers for transport.
- 5. Combination (prime mover and trailing equipment) pre-start and load restraint inspection completed, including:
  - a. Inspect dollies to ensure no immediate defects are present. All issues are to be recorded in the defect book and reported.
  - b. Inspect trailer to ensure no immediate defects present. Flat top gates are correctly seated in trailer pockets, head and tail boards if used correct and serviceable.

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- c. Inspect all flat top applied load restraint equipment to ensure serviceable, in good condition and free of wear and tear. All damaged/unserviceable restraint equipment is to be removed, isolated and reapply new equipment prior to acceptance and departure.
- d. Equipment with defects identified is tagged out and reported as required.
- 6. Trailers are coupled as per Coupling and Uncoupling Safe Work Procedure.
- Confirm trailer placards are correct against details provided on the Load Plan. All non-conformances (DG
  incompatibility, damages, incorrect placards) are to be immediately reported to the Area Supervisor or
  Transport Operations.
- 8. Confirm Prime Mover placard reflects trailer DG load/placards.
- 9. Confirm required fire extinguisher/s are fitted to the trailer; it is the correct Class, fully charged and has a valid inspection date.
- 10. On departure, for Perth Airport operations, all outbound prime movers and trailers are to proceed over the weighbridge. Driver Vehicle Audit Checklist Declaration form is completed at the weighbridge and this form is verified by Transport Operations prior to departure. All non-conformances to sections notated as 'Requirements by law' are to be rectified prior to prime mover departing site.

Note: Additional information for drivers, to support the safe transport of dangerous goods can be found in the relevant Driver's Manual:

- CEN-PCT-MAN-488 Driver's Manual WA & NT
- CEN-PCT-MAN-489 Driver's Manual HVNL

#### 7.3. Out of Business Hours Routine

For all requirements outside of normal working hours, Linehaul/ Transport Operations is to be contacted by phone.

### Note:

- All/any detected DG non-conformances are to be immediately notified and all delivery action ceased until rectified.
- For security purposes, dangerous goods loads are not to be left unattended under any circumstances, this includes dog runners who must not leave placard loads unattended at road-train assembly areas. If in doubt, or uncertain about any issue, stop. Drivers are empowered to say 'no' and are to immediately report all issues through to management for appropriate action.
- If picking up loaded trailers from a client, awareness of loaded DG is to be held. Driver is to ensure prime mover and trailer placards, DG safety equipment, and paperwork reflect loaded dangerous goods prior to departure from site.
- All interceptions by Authorities are to be undertaken in a polite manner and full co-operation provided.

### 7.4. Dangerous Goods Placarding

Placards must be affixed to the exterior surface of transport units that contain a placard load of dangerous goods as determined by the Table below to provide a warning that the contents of the unit are dangerous goods (DG) and present risks (Table 5.3 of ADGC):



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Dangerous Goods in Cargo Transport Unit	Placard Load Quantity
<ul><li>(a) Any DG in a receptacle with a:</li><li>Capacity &gt; 500 L; or</li><li>Net mass &gt; 500 kg</li></ul>	One or more such receptacles (i.e. one or more placardable units)
<ul> <li>(b) Includes any quantity of:</li> <li>Division 2.1 (except Aerosols); or</li> <li>Division 2.3; or</li> <li>Packing Group I of any Class or Division</li> </ul>	Aggregate quantity of all DG (other than LQ) in the cargo transport unit ≥ 250 kg / L (see Note 5)
(c) Division 6.2 Category A	All quantities
(d) Division 6.2 (other than Category A)	≥ 10 kg / L
(e) All loads where placarding is not required by any of the above	Aggregate quantity of dangerous goods (other than LQ) ≥ 1,000 kg(L) (see Note 5) - unless the load is a Fumigated Unit (UN 3359 –see Note 3)
placarding thresholds are separate to and in addit	/or domestic consumable dangerous goods. Note: these ion to the above placarding thresholds. In practice, this may with both a placard for the fully regulated DG in the load
(f) Limited quantities dangerous goods and / or domestic consumable dangerous goods*  * Domestic consumable dangerous good means party poppers; sparklers and bon-bons (UN0337), domestic smoke detectors (UN 2911), lighters and lighter refills (UN1057) or portable fire extinguishers with compressed or liquefied gas up to 23kg gross weight) (UN 1044).	The load includes limited quantities dangerous goods and/or domestic consumable dangerous goods that includes an aggregate quantity of any one UN number from a single place of consignment of ≥ 2,000kg(L)
(g) Loads where (f) does not apply Limited quantities dangerous goods and / or domestic consumable dangerous goods	The gross mass of the limited quantities dangerous goods and/or domestic consumable dangerous goods is > 8 tonnes (see Note 5)

### **Table Notes**

Note 1: For placarding quantities of Class 1, see the Australian Explosives Code.

Note 2: For placarding quantities of Class 7, see the Code of Practice for the Safe Transport of Radioactive Substances.

Note 3: A Fumigated Unit (UN 3359) complying with Chapter 5.5 that does not contain any other dangerous goods is not a placard load and should not be included in the aggregate quantity of dangerous goods when determining a placard load.

Note 4: For land transport wholly within Australia, this Code requires placards to be displayed on cargo transport units if they contain a placard load, as determined from Table 5.3. It should be noted that cargo



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transport units containing lesser quantities may need to be placarded in accordance with the IMDG Code before they are acceptable for transport by sea, even within Australian waters.

Note 5: When transporting a load that contains dangerous goods specified in (b) or (e) of Table 5.3.1 and dangerous goods specified in (g) of Table 5.3.2, each of which are below a placard load, the combined quantity of dangerous goods in the load must be calculated and the result assessed against the relevant threshold in Table 5.3.1. Calculation of combined quantity (i) If the relevant threshold for the dangerous goods in Table 5.3.1 is (b) - the combined quantity = the aggregate qty regulated DG + 10% of the Gross weight of the LQ/DC; or (ii) If the relevant threshold for the dangerous goods in Table 5.3.1 is (e) - the combined quantity = the aggregate qty regulated DG + 25% of the Gross weight of the LQ/DC.

### 7.5. Emergency Information

A vehicle carrying DG in receptacles greater than 500L or kg must be placarded with a Class or Division label and subsidiary risk label as well as Emergency Information Panels (EIP) on both sides and at the rear.

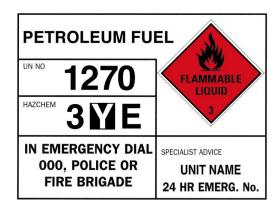
Providing and displaying the EIP is the joint responsibility of the driver, client and the carrier. The following information is to be displayed on the EIP:

- Correct shipping name of material
- Class Label and Subsidiary Risk Label (if any)

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- UN Number
- HAZCHEM Code
- Emergency Phone Number
- Name of organisation for providing specialist advice and their phone number.

A typical EIP panel looks like:



On completion of loading at a Supplier's site, and prior to departure for transit, the correct placards are to be affixed to the vehicle.

Workers shall ensure that EIP's are affixed for the laden product; and they are clearly visible, clean and legible. Empty containers also require placarding in accordance with the ADGC.



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### 7.6. Dangerous Goods Transport Documentation

Drivers are to ensure they check they have the correct paperwork prior to despatch. This will include the Dangerous Goods Transport Document or the equivalent, as per the ADGC, ANZ Emergency Response Guide Book/ EPG and Vehicle Fire Card with emergency numbers.

Centurion produces a DG online manifest for all dangerous goods loads using Loading Handheld vs D3 (scanner).

### 7.7. Personal Protective Equipment (PPE) and Safety Equipment

Minimum Personal Protective and Safety Equipment on Road Vehicles transporting a Placard Load are:

		Class, Division or Subsidiary Risk of Dangerous Goods in Load										d
Minimum Equipment Required	2.1 [a]	2.2	2.3	3	4	<b>5.1</b> (solids)	5.1 (liquids)	5.2	6.1	6.2	8	9
Respiratory protection equipment for escape purposes	No	No	[b]	No	No	No	No	No	[b]	No	[b]	No
Gas tight goggles or full face shield as appropriate	[c]	[c]	Yes	No	No	No	Yes	Yes	Yes	No	Yes	No
Eye-wash kit [d]	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Chemically resistant gloves or gauntlets	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Thermally insulated gloves or gauntlets	Yes	Yes	Yes	No	No	No	No	No	No	No	No	[e]
Chemically resistant suit or coveralls	No	No	No	No	No	No	Yes	Yes	Yes	No	Yes	No
Chemically resistant boots	No	No	No	No	No	No	Yes	Yes	Yes	No	Yes	No
Any electric torch	No	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes
Electric torch complying with AS/NZS 60079.11 or other recognised Code	Yes	No	No	Yes	Yes	No	No	Yes	No	No	No	No

#### Table notes:

- a) A vehicle transporting unodourised LP Gas, Butane or Propane must additionally be equipped with a gas detector suitable for detection of LP Gas, in accordance with AS 1596.
- b) The minimum requirement is air supplied short term breathing apparatus suitable for escape purposes, except when, even in an emergency, the dangerous goods will not give rise to harmful vapours, gases or dust. Note that where a driver attends to the loading or transfer of goods, SCBA with a duration of greater than 15 minutes may be required by other (e.g. health and safety) legislation. The minimum requirement is a compressed air or compressed oxygen self-contained breathing apparatus, or chemical oxygen self-contained self-rescuer, certified to comply with AS/NZS 1716 and providing breathable air for not less than 15 minutes. Respiratory protection equipment is not required where the dangerous goods will not give rise to harmful vapours, gases or dust, even in an emergency,
- c) Yes if the goods are in receptacles with a capacity > 500 L or the goods are cryogenic liquids. No otherwise "Gas tight goggles" means face hugging goggles with increased facial seal. PART 12: SAFETY EQUIPMENT FOR ROAD VEHICLES Australian Dangerous Goods Code, 2020, Edition 7.8 Page | 1209



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d) Where an eyewash kit is required, it must be of at least 250 mL capacity, filled and ready for use. [e] Yes – if the goods are elevated temperature substances or dry ice. No – otherwise.

Note 1: Where an item of Personal Protective or Safety Equipment is required based on the primary hazard or subsidiary hazard of any item of dangerous goods in the load, that item must be carried, except that where thermally insulated gloves or gauntlets are required and carried, any requirement for chemically resistant gloves or gauntlets may be ignored.

### 7.8. Dangerous Goods Transport by Sea

Dangerous goods to be transported by sea shall be packed and labelled in accordance with the Marine Orders Part 41 – Carriage of Dangerous Goods (Commonwealth) and the IMDG Code.

#### 8. DANGEROUS GOODS AND HAZARDOUS CHEMICALS STORAGE

### 8.1. Approval, Risk Assessment and Register

Approval is required for all new dangerous goods/ hazardous chemicals that are to be stored or used on a Centurion site; the chemical must be entered into the Dangerous Goods/ Hazardous Chemicals (Chemical)Register, risk assessment completed and SDS obtained. Note: ChemAlert is used to document and manage all dangerous goods and hazardous chemicals on Centurion sites. ChemAlert meets legislative requirements to provide access to Dangerous Goods/ Hazardous Chemical Registers, risk assessments, Safety Data Sheets (SDS) and labels.

A Chemical Register shall be kept for all DGs/ Hazardous Chemicals, except consumer products, used or stored in the workplace. The Chemical Register must include as a minimum, the name of the substance, corresponding SDS and whether a risk assessment has been completed.

A risk assessment is to be completed for dangerous goods and hazardous chemicals listed in the Chemical Risk Register and a record kept of the assessment. Refer to CEN-HSE-WIN-338 - Creating a Risk Assessment in ChemAlert – User Guide.

The risk assessment must be revised:

- Every 5 years
- If any changes occur e.g. to SDS
- If a health monitoring report indicates that a worker has been exposed to a hazardous chemical
- Following a dangerous goods incident.

The assessment of such chemicals should include:

- The nature of the chemical
- Potential harmful effects to personnel and the environment
- · Amounts to be handled and stored
- Flammability, volatility and potential reaction to other substances
- Statutory and regulatory requirements
- Site ability to provide emergency first aid/response
- Spillage disposal procedures
- Safer alternatives.



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Note: Dangerous goods in transit are not required to be included in the Chemical Register and a risk assessment is not required to be completed.

The Chemical Register, risk assessments and SDS's must be readily available to workers.

Workers must refer to a SDS:

- Prior to storing or handling a dangerous good or hazardous chemical
- When completing a chemical risk assessment/implementing controls
- In response to an incident/ emergency involving a dangerous good or hazardous chemical.

Note: SDS's must not be more than 5 years old and must have an Australian address and contact numbers.

### 8.2. Containing and Labelling

All containers of dangerous goods/hazardous chemicals on Company property, including those delivered/ in transit shall:

- Be labelled in accordance with the Code of Practice for Labelling of Workplace Hazardous Chemicals
- Be in a sound condition
- Safely contain the chemical
- Be compatible with the chemical
- Comply with the ADGC, where required.

Note: A person must not be able to mistake the container for food or drink.

Dangerous goods/ hazardous chemicals contained in enclosed systems such as a piping system or vessel shall be labelled for the information of persons likely to be exposed to such substances.

### 8.3. Storage

Handling and storage of Dangerous Goods/ Hazardous Chemical must be in accordance with relevant codes of practice and regulatory provisions. Requirements include but are not limited to:

- Incompatible DGs and foodstuffs are segregated.
- Good housekeeping and best management practices are applied, including clean and organised storage and legible labelling of containers.
- Adequate access and egress routes are established and kept clear.
- Clearly marked areas are designated and used solely for storage of damaged containers and dangerous goods awaiting disposal.
- Bunding or spillage containment system is impervious and equal to 110% of the capacity of the largest container.
- Close chemical containers (including empties) when not in use.
- Use the appropriate Personal Protective Equipment and Clothing (PPE) as per the SDS.
- Fire extinguishers for the chemical being stored are readily available.
- Immediately clean up spills and leaks.
- Spill kits to be regularly inspected and maintained.
- Incidents and hazards reported.



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All Dangerous Goods/Hazardous Chemical storage areas are to comply with the requirements detailed in the relevant Australian Standard. Requirements include maintenance of:

- Required separation distances to ensure substances are stored with the appropriate buffer zone between the storage depot and protected works and other onsite facilities.
- Required segregation distances to ensure that substances of different Classes and non-compatible substances of the same Class are segregated to ensure safe storage.
- Bunds within the storage area to ensure that the integrity of bunds and that containment capacity is maintained.
- Ventilation requirements within structures and around external storage areas.
- Filling and/or unloading facilities.
- Electrical equipment within areas.

For dangerous goods storage segregation requirements, refer to Appendix C. The chart is to be used as a guide only, to assist with general segregation considerations for each class; This does not replace SDS's or Risk Assessments, which must be referred to when segregating chemicals.

CEN-HSE-FRM-491 – Chemical Storage Segregation Chart must be displayed where chemicals are handled or stored. Note: This segregation chart is not to be used for Transport Operations.

#### 8.4. Manifest Quantities - Western Australia

A dangerous goods site is required to be licensed if dangerous goods are stored or handled at the site in quantities that exceed manifest quantities, as defined in the Dangerous Goods (Storage and Handling of Non Explosives) Regulations; see Table (extract) below. As per sub-regulation 25(2) there are circumstances where a dangerous goods site may store and handle dangerous goods in quantities that exceed manifest quantities and does not need to be licensed:

- a) The dangerous goods are stored in more than one storage area; and
- b) The quantity of dangerous goods stored in each storage area is less that the manifest quantity; and
- c) Each storage area where fire risk goods are stored
  - i. Is outdoors; or
  - ii. Is in a separate building in which only those goods are stored
  - iii. Is an underground storage and handling system in which only those goods are stored; and
- d) Each storage area is separated from every other storage area by a distance that is sufficient to ensure that a dangerous goods incident in one storage area cannot cause a dangerous goods incident in another storage area.

A dangerous goods site is also not required to be licensed if –

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- a) Dangerous goods are intended to be stored or handled at the site for not more than 6 months; and
- b) The dangerous goods are not manufactured or processed on the site; and
- c) The quantity of dangerous goods does not exceed 3 times the manifest quantity; and
- d) The dangerous goods site is not a major hazard facility; and
- e) The Operator of the site is in possession of a risk assessment in relation to the dangerous goods site; and



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- f) The Operator of the site notifies the Chief Officer in writing of the Operator's intention to store or handle the dangerous goods at the site; and
- g) The Operator of the site complies with any directions given by the Chief Officer in relation to the storage or handling of dangerous goods.

Item	Description of dangerous goods	Packing group	Placarding quantity	Manifest quantity
1.	Division 2.1 except aerosols	N/A	500 L	5 000 L
2.	Division 2.2 except aerosols	N/A	1 000 L	10 000 L
3.	Division 2.3	N/A	50 L	500 L
4.	Division 2.1 and 2.2 aerosols	N/A	5 000 L	10 000 L
5.	Any one of	I	50 kg or L	500 kg or L
	Class 3, Division 4.1, 4.2 or 4.3.	II and III (aggregate)	1 000 kg or L	10 000 kg or L
	Division 5.1 or 5.2, Division 6.1, Class 8 or Class 9, or any combination of those classes or divisions	I, II and III (aggregate) where quantity of goods in packing group I does not exceed 50 kg or L	1 000 kg or L	10 000 kg or L
6.	Goods too dangerous to transport	N/A	5 kg or L	50 kg or L

Item	Description of dangerous goods	Packing group	Placarding quantity	Manifest quantity
7.	combustible liquids with fire risk dangerous goods	N/A	1 000 L	10 000 L
8.	Other combustible liquids	N/A	10 000 L	100 000 L

### 8.5. Manifest Quantities – Queensland/ Northern Territory/ New South Wales

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A manifest quantity workplace (MQW) refers to a workplace which stores, handles or uses hazardous chemicals in quantities that exceed or are likely to exceed the prescribed manifest quantities in column 5, Schedule 11 in the WHS Regulation.

The WHS Regulation does not require licensing for the storage of hazardous chemicals. Where hazardous chemicals exceed the manifest quantities defined in Schedule 11, the Regulator (NT - NT Worksafe; QLD – Work Health and Safety QLD, SafeWork NSW) is required to be notified in writing.



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### 8.6. Manifest Quantities - Victoria

WorkSafe must be notified when quantities of dangerous goods stored and handled at a workplace exceed the quantities specified in Schedule 2 of the Dangerous Goods (Storage and Handling) Regulations 2022. Notification is required to be completed every 2 years.

### 8.7. Dangerous Goods/ Hazardous Chemicals Manifest

Where a Site stores quantities of DGs (WA and VIC) or hazardous chemicals (NSW, QLD, SA) that meet or exceed manifest quantities, a Dangerous Goods/ Hazardous Chemicals Manifest is required. The Manifest provides information on DG/ hazardous chemical quantity, classification and location, the site plan and emergency contact details. The Manifest is to be stored in a red HAZMAT box at the front entrance to the workplace.

For Perth Airport refer to CEN-HSE-MAN-943 - Dangerous Goods Site Manifest – Perth.

#### 8.8. Placard Quantities

Placards shall be displayed if dangerous goods are stored in bulk, or in packages exceeding placard quantities as listed in the Dangerous Goods/ WHS Regulations. There are three placard types:

- An outer warning "HAZCHEM" placard, on all outside approaches to the site
- Placards at each location of dangerous goods in bulk (e.g. tanks)
- Placards at each location where packages are stored and handled.

Note: Additional placard is required for C1 combustible liquids.

### 8.9. Health Monitoring

Health monitoring is to be provided to workers carrying out ongoing work at a workplace using, handling, or storing hazardous chemicals and there is a risk to the worker's health because of exposure to a hazardous chemical referred to in the WHS Regulations or where identified through the risk assessment process.

Note: At time of publishing of this procedure there is no requirement to complete health monitoring for hazardous chemicals handled, used or stored by Centurion workers.

#### 9. DANGEROUS GOODS AND HAZARDOUS CHEMICALS INCIDENTS/EMERGENCIES

All incidents must be reported and investigated in accordance with CEN-HSE-PRO-148 - Incident Management and Investigation Procedure.

### 9.1. Site Dangerous Goods or Hazardous Chemical Incident/Emergency

In the event of an incident/emergency involving a DG or hazardous chemical on a Centurion site, the Supervisor and the Emergency Response Team are to be notified. Reference is to be made to the Dangerous Goods Initial Emergency Response Guide/ EPG's, Emergency Information Panels, SDS and other available information for handling the incident

For spill response actions, refer to CEN-HSE-PRO-842 – Spill Response Procedure.

For other emergency response actions, refer to the Site Emergency Response Plan.

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### 9.2. Transport DG Incident/ Emergency

Transport emergencies are to be reported and managed in accordance with CEN-HSE-PLN-284 - Transport Emergency Response Plan (TERP).

#### 10. DANGEROUS GOODS AND HAZARDOUS CHEMICALS COMPLIANCE

### 10.1. Transport

At Perth Airport DG Audit Checks include daily report, completed by Security, which is sent to applicable personnel, any non-complying loads identified are rectified prior to transit.

At all other locations DG checks are completed by Drivers as per the Trip Sheet documentation which includes the Dangerous Goods Transport Document.

### 10.2. Storage

DG and hazardous chemical storage requirements are verified through monthly workplace HSE inspections and assurance audits which are completed as per Audit and Compliance Schedule.

#### 11. REFERENCED DOCUMENTS

Document Reference
CEN-HSE-FRM-491 – Chemical Storage Segregation Chart
CEN-HSE-PLN-008 – Radioactive Transport Management Plan
CEN-HSE-PLN-284 – Transport Emergency Response Plan (TERP)
CEN-HSE-PLN-1096 – Explosives Management Plan - WA
CEN-HSE-PLN-1353 – Explosives Management Plan - QLD
CEN-HSE-PRO-005 – Transport Radioactive Materials
CEN-HSE-PRO-148 – Incident Management and Investigation Procedure
CEN-HSE-PRO-842 – Spill Response Procedure
CEN-HSE-WIN-338 – Creating a Risk Assessment in ChemAlert – User Guide.
CEN-OPS-PLN-1132 - Transport Security Plan – Explosives and SSAN
CEN-PCT-MAN-488 – Driver's Manual – WA & NT
CEN-PCT-MAN-489 – Driver's Manual – HVNL
CEN-HSE-MAN-943 - Dangerous Goods Site Manifest – Perth

### 12. TERMS AND DEFINITIONS

Term	Definition	
Aggregate Quantity	The total of:	
	the number of kilograms of:	
	<ul><li>solid dangerous goods; and</li></ul>	
	<ul><li>articles (including aerosols), in the load; and</li></ul>	
	<ul><li>the number of litres or kilograms, whichever is used in the transport</li></ul>	
	documentation for the load to describe the goods, of liquid	
	dangerous goods in the load; and	
	the total capacity in litres of the receptacles in the load containing	
	dangerous goods of UN Class 2 (other than aerosols)	
AMSA	Australian Maritime Safety Authority	



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Term	Definition
Australian Dangerous Goods	The Australian Code for the Transport of Dangerous Goods by Road & Rail,
Code (ADGC)	commonly known as the Australian Dangerous Goods Code (ADGC). sets out
	the requirements for transporting dangerous goods by road and rail.
Class	Substances (including mixtures and solutions) and articles subject to the
	ADGC are assigned to one of nine Classes according to the hazard or the
	most predominant of the hazards they present. Some of these Classes are
	subdivided into divisions
Consumer Product	Dangerous good/ hazardous chemical used at the workplace in:
	Quantities that are consistent with household use
	In a way that is consistent with household use
	In a way that is incidental to the nature of the work carried out by a
	worker using the hazardous chemical.
Dangerous Goods (DG)	Substance or article that poses an immediate risk to people, property or the
, ,	environment
DG in Transit	Dangerous goods that are:
	<ul> <li>supplied to a dangerous goods site in containers that are not opened at</li> </ul>
	the site; and
	are not used at the site; and
	are kept at the site for a period of not more than 5 consecutive days
EIP	Emergency Information Panel
EPG	Emergency Procedure Guide
GHS	Globally Harmonised System of Classification & Labelling of Chemicals.
Hazardous Chemical	Substance, mixture or article classified under a hazard category in
	the Globally Harmonized System (GHS) of Classification and Labelling of
	Chemicals. The classification system is based on the adverse effects to
	health following exposure.
Hazard Class	The nature of a physical, health or environmental hazard under the GHS.
	Note: This includes dangerous goods.
International Maritime	International code for the maritime transport of dangerous goods in
Dangerous Goods Code	packaged form, developed in order to enhance and harmonise the safe
(IMDG)	carriage of dangerous goods and to prevent pollution to the environment.
Limited Quantities (LQ)	DGs are packed in accordance with the ADG Code (7.5 edition) Chapter 3.4;
	and
	The quantity of dangerous goods in each inner packaging or in each article
	does not exceed the quantity specified, or referred to, in column 7 of the
	Dangerous Goods List for those goods.
Minor Storage	Storage of dangerous goods in quantities conforming with the criteria
	specified in Australian Standards for storage and handling of dangerous
	goods.
Packaged DG	DGs provided in a single vessel/item with a capacity of not more than 500
	litres or kilograms net weight.
Placardable DG	DGs in a package capable of holding more than 500 litres or kilograms.
	Generally, these are items such as IBCs and 920kg chlorine cylinders.
Safety Data Sheet (SDS)	A document that provides health and safety information about products,
	substances or chemicals that are classified as hazardous chemicals or
	dangerous goods.



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### **13. DOCUMENT CONTROL**

#### 13.1. **Summary Information**

Aspect	Details
Document Name	Dangerous Goods and Hazardous Chemicals Management Procedure
Document Reference	CEN-HSE-PRO-931
Document Owner	Sharon Huzzard
Published Date	17/04/2024
Next Revision Date	17/04/2027
Classification	19
Developed by	Sharon Huzzard, Harry Callaghan, Rob Mills

#### 13.2. **Revision History**

Revision	Date	Changes
1.0	14/07/2014	Issued for use
1a	29/12/2015	Converted to Procedure Merged with SWP 206 and 098
2.0	29/12/2015	Issued for use
3.0	14/06/2021	Document reviewed.
4.0	23/12/2022	Combined CEN-HSE-PRO-010 Dangerous Goods Management Procedure and
		CEN-HSE-PLN-005 Hazardous Substances Management. Updated to reflect
		current requirements, legislation, definitions and scope
5.0	15/04/2024	Included DG Transport by Sea, transit storage requirements, included NSW
		provisions, referenced DG & Hazardous Chemical Storage training and updated
		HB76 references to ANZ Emergency Response Guide Book



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### **14. APPENDICES**

### 14.1. Appendix A – Dangerous Goods Transport Segregation Chart

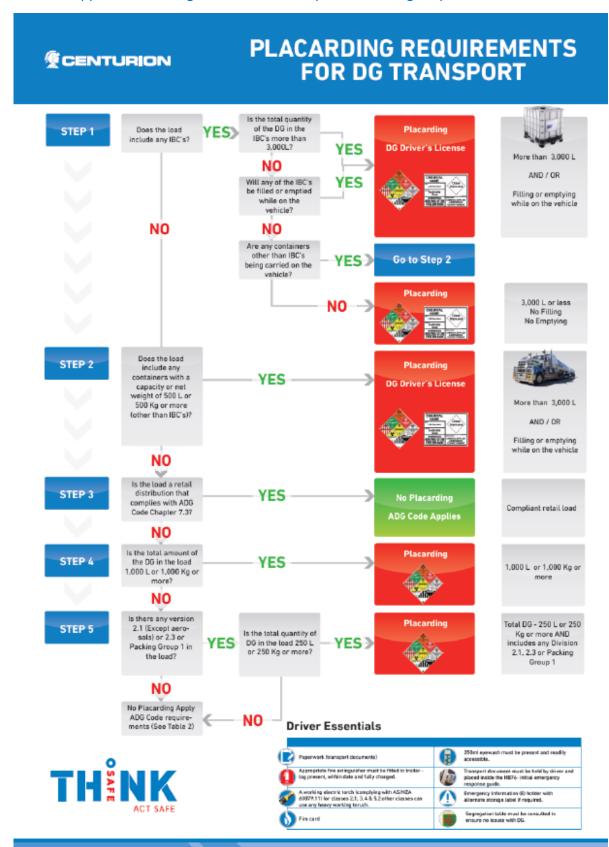
₩	FIRE RISK SUBSTANCE AND COMBUSTIBLE UQUES	INCOMPATIBLE (A)								INCOMPATIBLE	INCOMPATIBLE				
<b>1</b> 2	FOOD DMPTRS AND FOODSTUFFS	INCOMPATIBLE (A)			INCOMPATIBLE ( H )							INCOMPATIBLE ( H )	INCOMPATIBLE ( H )	INCOMPATIBLE ( H )	
\$	6	(v)	>	<b>\</b>	>	>	>	>	>	(E)	(E)	>	>	>	<b>&gt;</b>
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(increase)	7	(v)	×	>	>	×	×	×	×	×	×	1	>	×	1
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#	4.1	(A)	×	>	>	>	>	×	>	×	×	1	X	1	1
•	3	(A)	(8)	>	×	>	>	×	>	×	×	(F)	×	>	>
	2.3	(A)	>	(a)	>	×	>	×	>	×	×	>	>	>	>
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DG TRANSPORT SEG CHART	CLASS / DIVISION	EXPLOSIVES	FLAMMABLE GAS	NON FLAMMABLE NON TOXIC GAS	TOXIC GAS	FLAMMABLE LIQUID	FLAMMABLE	SPONTANEOUSLY COMBUSTIBLE	DANGEROUS WHEN WET	OXIDISING AGENT	ORGANIC	TOXIC LIQUID	RADIOACTIVE	CORROSIVE	MISCELLANEOUS DG
OG TRA	ᄀ	1	2.1	2.2	2.3	æ	4.1	4.2	4.3	5.1	5.2	6.1	7	80	6



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### 14.2. Appendix B – Dangerous Goods Transport Placarding Requirements





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### 14.3. Appendix C – Chemical Storage Segregation Chart

Chemical Storage Segregation Chart

KEY	Ok to store together	Segregate at least 3M	Segregate at least 5M	ISOLATE in dedicated store	Check SDS before storing	Could be incompatible or react dangerously. Check SDS before storing.
	УЮ	3	9	NO	*	

DEDICATI (L	ED COM	TED COMPRESSED GAS (UNDER AS/NZS 4332)	DEDICATED COMPRESSED GAS STORE (UNDER AS/NZS 4332)	w
CLASS / SUB-RISK	<b></b>	<b></b>	oþ.	(a)
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2.2	OK	ð	ŏ	Ŏ
2.2/5,1	3	ŏ	yo	3
2.3 or 2.3/8	3	ð	3	OK

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	9	<b>◇</b>		es	*	13	8	33	*	ю	ю	ОК	*
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