

Learnings from recent incidents

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A caveat to start



Dangerous goods transport is complex. While very similar across Australia, it's still important that you're across all relevant requirements.

The information in this presentation is a general overview, focusing on land transport.

The detailed provisions are found in:

The Dangerous Goods (Road and Rail Transport) Act 2008 (NSW)

- The Dangerous Goods (Road and Rail Transport) Regulation 2022 (NSW)

- The Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th edition (The ADG Code)

There may be other legislation you need to consider.

In NSW, the regulation of dangerous goods transport is shared between the EPA and SafeWork NSW.

Topics

- Prohibited routes
- Leaking tankers
- Tanker unloading safety



Prohibited routes



A tale of two approaches

1. Xpress Transport Solutions

- Ongoing breaches by multiple drivers
- Situation not rectified when EPA investigated
- Convicted on six counts of *fail to ensure safe transport of DG*
- \$52,000 in fines and costs
- Drivers convicted and fined, one driver had DGD licence cancelled

2. Operator with systematic approach to safety and compliance

- NorthConnex and nowhere safe to pull over
- Driver self-reported to company which then immediately self-reported to the EPA
- **Investigation reveals unusual route for driver and client**
- Company-wide safety notice and toolbox

Prohibited routes

All Depots LEARNING ALERT		LA-040
Transportation of placarded Dangerous Goods - Prohibited Routes		
Placard Loads Prohibited in Tunnels		
Who this is for (the scope)		
Area Managers, Depot Managers, Driver Trainers, Schedulers, Heavy Vehicle Drivers		
What this is about?		
<p>Our Company had a recent event in Metropolitan Sydney where one of our dangerous goods placarded road tankers travelled through the North Connex tunnel. The driver missed the sign shown in the adjacent column. He was on an unfamiliar route and was relying on GPS navigation to travel to his destination. The driver self-reported the event to his depot manager. The NSW EPA (Competent Authority for DG transport) were advised by the Company of the event.</p>		
<p>The transport of Dangerous Goods (Placard Loads) through road tunnels is prohibited in all jurisdictions where we operate, and warning signs are displayed on the approach to tunnels advising drivers to detour onto surface roads. Failure to comply can result in prosecution.</p>		
<p>An incident involving dangerous goods in the confines of a road tunnel can have severe consequences including multiple fatalities as has been evidenced in events reported in the media.</p>		
<p>NSW - Information for drivers on approach to a tunnel by mistake</p> <p>If you are driving a vehicle that is transporting a placard load of dangerous goods and you have passed the last exit</p> <ol style="list-style-type: none"> 1. Pull over and STOP as soon as it is safe. DO NOT proceed further along the prohibited route. 2. Switch on your hazard lights. 3. Immediately call the Transport Management Centre on 131 700 and report your situation and position. 4. Follow any instructions provided. 5. Report the incident to your manager or scheduler. <p>Similar requirements apply in QLD & Victoria.</p>		

All persons involved in the Dangerous Goods Transport task have a duty to ensure the safe and compliant transport of dangerous goods. The PCBU, Depot Managers, Schedulers and Drivers have an individual and collective responsibility to ensure they carry out their tasks safely and lawfully.			
What we learned			
<ol style="list-style-type: none"> 1. The driver was tasked with travelling along an unfamiliar route. 2. Driver was relying on GPS navigation. 3. A journey management plan was not provided. 4. Breach of ADG7 Section 13.14 'Routes' 			
How can we reduce the risk of a similar incident?			
<ol style="list-style-type: none"> 1. Journey Management Plans for placarded vehicles per ADG7 Section 13.14 provided to drivers. 2. Geo-fencing of tunnels in MTDATA system to provide in-cabin audible alert for drivers on approach to tunnels where placard loads are prohibited. 3. Route shall always be planned before the trip commences and verified with the driver so, there is clear understanding of the route the driver must take to complete their journey. 4. When using GPS navigation, apply settings to exclude prohibited routes and road tunnels. 			
Actions			
Action	Who Is Responsible	By When	Initial when complete
Table for discussion at next toolbox meeting (record in minutes of the meeting)	Depot Manager / Depot Supervisor	17 th March 2023	
Implement geo-fencing in MTDATA to audibly alert the driver of prohibited routes and instruct exit strategy	Fleet Manager	31 st March 2023	
Where to go for additional advice			
For additional information – Please contact: Head of Fleet & Compliance			
Authorized by		Date of issue	
Manager – Safety & Operational Risk		February 16, 2023	

Tanker leaking incidents

- Continuous uncontrolled leak from API
- Foot valve, API and dust cap seals all failed
- Other failures of vehicle condition
- FRNSW required return to terminal – compartment contents disposed as slops



Tanker leaking incidents

- Failed repair weld
- Images suggest there was a weep before it developed into a significant drip – should have been spotted
- Roadside decant required
- If in doubt, **don't load**



Unloading must be done in accordance with Chapter 10.2 of ADG Code:

PREVENTING FIRE DURING A TRANSFER OPERATION

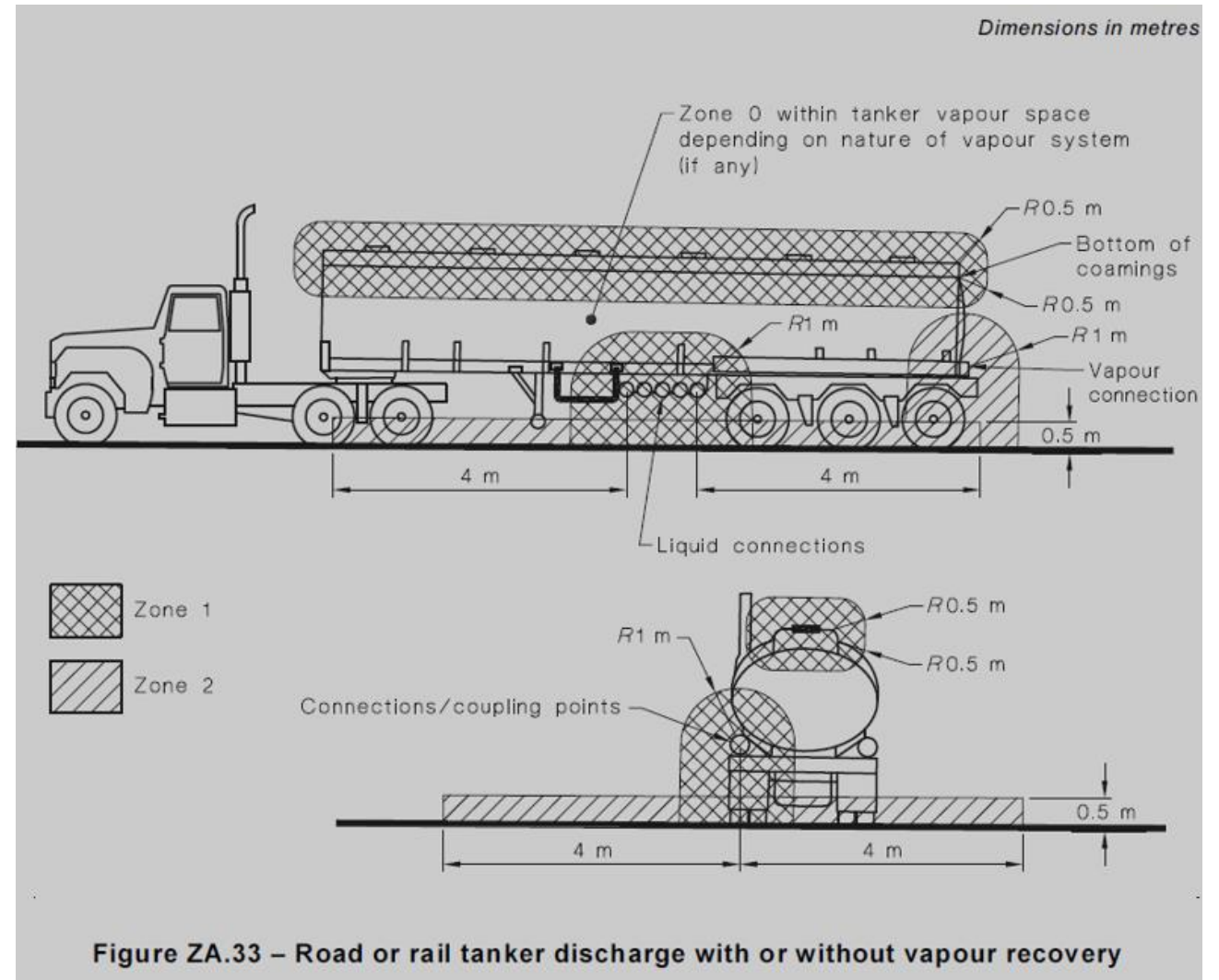
10.2.2 Distance from ignition sources

- 10.2.2.1 During a transfer operation into or out of a vehicle, there must be no source of ignition; within any hazardous area determined in accordance with AS/NZS 60079.10.1¹

Tanker unloading safety



Hazardous area around tanker when unloading



Tanker unloading safety



Hazardous area around petrol bowzers when filling cars

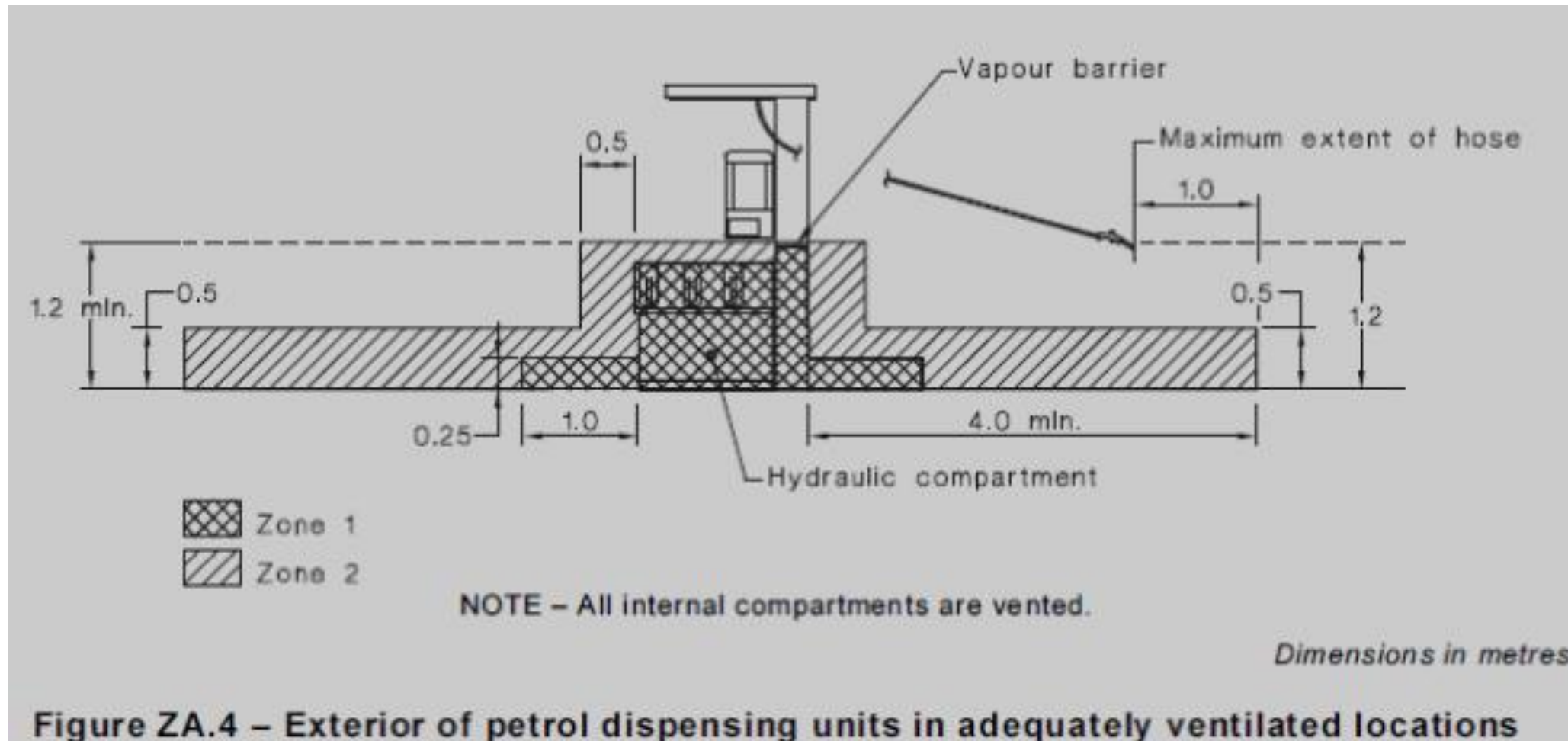


Figure ZA.4 – Exterior of petrol dispensing units in adequately ventilated locations

Tanker unloading safety



- Minimum exclusion zone 4m in all directions from the APIs while unloading
- Minimum 4m exclusion zone around a vehicle filling up
- Exclusion zones are added when they intersect – therefore car cannot be filled within 8m of tanker unloading (APIs) and tank inlets



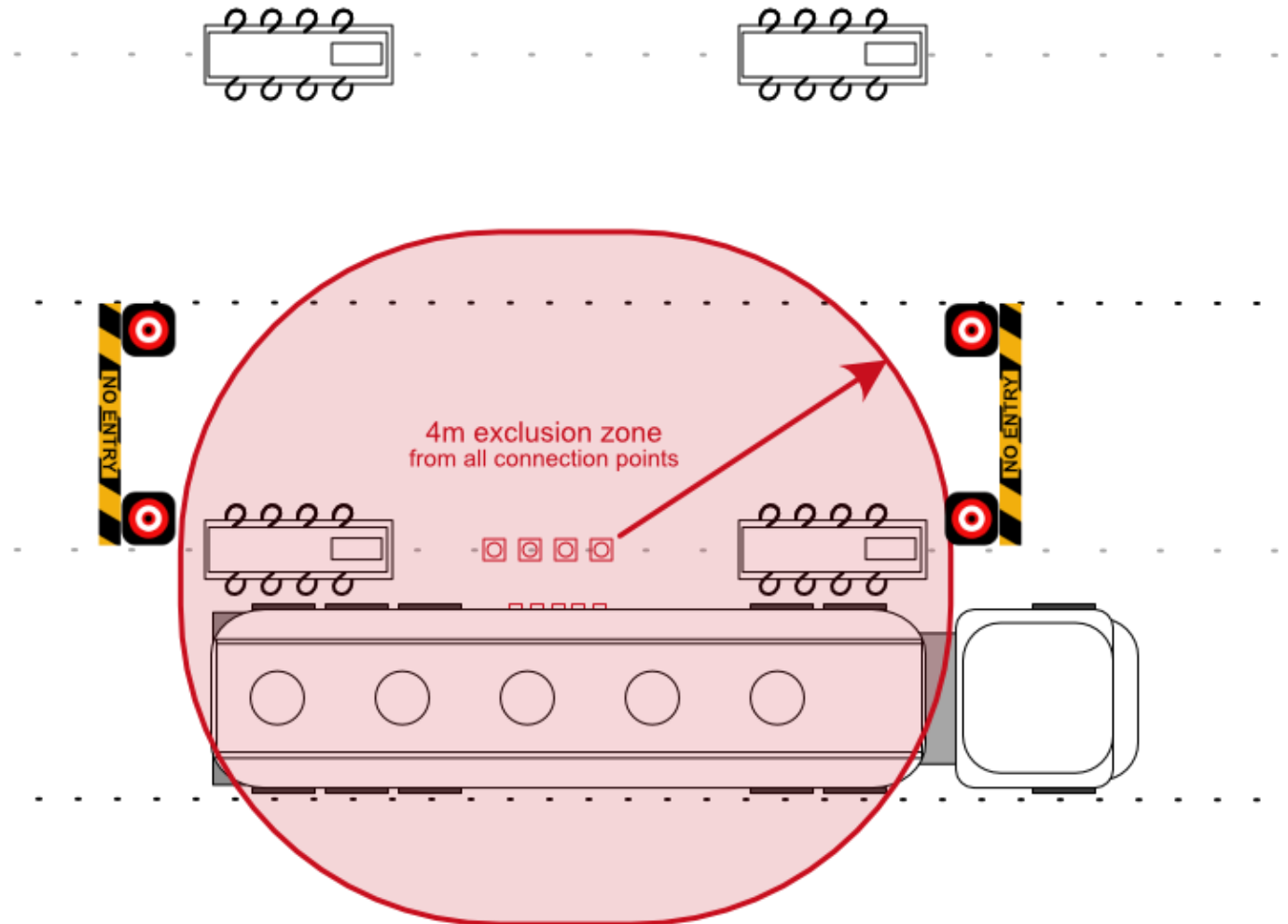
Tanker unloading safety

Minimum – closure of the lane next to the near side of an unloading tanker

Breach of Dangerous Goods Regulation

- \$400 for driver (transferrer)
- \$4000 for occupier (corporation)
- \$800 for occupier (individual)

Education of petrol station owners and compliance operation pending



Questions?



Environment Line: 131 555 or info@epa.nsw.gov.au