

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

Dangerous Goods Safety Guide

Route selection, vehicle stopping and bulk transfer

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Introduction

When dangerous goods are transported by road or rail, certain duties and obligations apply under the Dangerous Goods Safety (Road and Rail Transport of Non-explosives) Regulations 2007 and the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG) to ensure the goods are transported safely.

This guide assists prime contractors and drivers of vehicles transporting dangerous goods on Western Australian roads to comply with the relevant safety requirements regarding:

- restricted routes
- route selection
- vehicle stopping and parking
- bulk transfer locations.

It does not override the lawful directions of a police officer or an authorised person directing traffic or lawful road signs (including detours and deviation signs). Where a vehicle transporting dangerous goods is also a heavy vehicle, then the rules and restrictions imposed by Main Roads Western Australia also apply.

Restricted routes

Placard loads of dangerous goods (including explosives) must not be driven through the Graham Farmer Freeway tunnel.

For further information, see Dangerous Goods Safety's <u>Route restrictions for the transport of</u> <u>explosives: Guide</u>.

Route selection

General principles

The prime contractor and driver of a road vehicle transporting dangerous goods are required to observe any requirements or restrictions on the selection of routes or times of travel that have been determined by the Chief Officer.

Pre-plan routes when possible and identify suitable routes by applying all of the following principles:

- as far as possible, keep to freeways and highways
- avoid town centres, central business districts and known congested routes (particularly at times of peak activity)
- avoid shopping centres, schools and health care facilities at the times when they are most active (typically 8.30 am to 5.30 pm)
- avoid underground water protection areas, water catchment areas for potable water and sensitive environmental areas
- avoid residential areas.

Note: A vehicle is not precluded from using minor roads entering these locations for deliveries to premises situated in the area (end of journey routes) or if there is no other practicable route. However, congested locations must be avoided during peak periods.

Select major roads

Routes for transporting dangerous goods should use the most suitable major roads. If the vehicle or combination being used is a restricted access vehicle (RAV), the route will be in accordance with the applicable operating conditions of the permit.

The best routes for transporting dangerous goods will change from time to time to take into account changes in the status of roads or amendments to the RAV road networks.

Avoid heavily populated or congested areas

Avoiding heavily populated or congested areas is particularly applicable when transporting toxic gases, or for those dangerous goods that might evolve toxic gases in the event of a spill or a fire.

The following locations should be avoided when setting routes:

- at all times, the central business districts of Perth and Fremantle
- regional cities and towns
- areas of roads when congested during certain times of the day (e.g. during peak hours freeways, Leach Highway, Canning Highway, Orrong Road)
- medical centres, hospitals, nursing homes and homes for the elderly
- schools at start and finish times, shopping centres during opening or peak hours
- for the bulk transfer of Class 3 or Division 2.1 dangerous goods, congested locations such as service stations during peak hours.

Avoid water resource catchments and environmentally sensitive areas

Public drinking water source areas (PDWSAs) and environmentally sensitive areas may be particularly vulnerable to vehicles carrying toxic Division 6.1 or Class 9 dangerous goods.

Avoid routes that pass through PDWSA surface water catchments, e.g. catchment areas of Canning Dam, Wungong Dam, Mundaring Weir and North Dandalup Dam.

Avoid routes that pass through underground water pollution control areas (UWPCAs), e.g. Jandakot and Gnangara Mounds.

Acceptable routes

An acceptable route could be practical or complex.

If, for example, the most practical route for a petrol tanker to deliver fuel to a service station in the metropolitan area is for the tanker to leave a main highway, pass two primary schools, two sporting complexes and a shopping centre to get to its destination, then delivery should be conducted outside of peak times.

If the delivery must be conducted during peak hours then a more complex route that bypasses areas of congestion should be adopted.

Vehicle stopping (parking or detaching a trailer)

A vehicle may not be parked or left standing:

- in a built-up area with public access
- within 15 m of a building or other place where there is or may be a concentration of people (except to load or unload)
- within 8 m of another vehicle that is transporting a placard load.

Exceptions are:

- for the purpose of loading and unloading dangerous goods onto or from the vehicle
- when the vehicle has broken down
- when there is a dangerous situation involving the vehicle
- to comply with the requirement of a law
- for a brief rest or refreshment break.

A trailer containing dangerous goods may only be detached:

- at designated vehicle marshalling areas
- at transport yards
- · for immediate exchange of trailers, provided this is carried out off road
- in an emergency in the interest of safety
- on a road or street if the vehicle becomes disabled.

A vehicle transporting dangerous goods of Division, Class or Subsidiary Hazard 2.1, 3, 4 or 5 must not be parked or left standing within 15 m of a naked flame.

Placard load vehicles must not be parked and left unattended at a Main Roads operated Road Train Assembly Area.

Bulk transfer locations

To transfer dangerous goods, vehicles must be parked in a designated transfer location (where available).

To transfer Division 2.1 or Class 3 dangerous goods, vehicles should be off public roads, and must both:

- be positioned so they can be driven away either in a forward direction or otherwise with minimal manoeuvring
- have their exit paths kept clear.

Dangerous goods must not be transferred into or out of a vehicle that is in an enclosed space if the transfer is likely to give rise to dangerous concentrations of dusts, mists or vapours.

Dangerous goods of Packing Group 1 or Division 2.3 (other than anhydrous ammonia or ammonia solution) must not be transferred out of a road vehicle or between road vehicles:

- in a built-up place with public access
- within 15 m of any building or place where there is likely to be a concentration of people, other than on the premises where the transfer takes place.