



INDUSTRIAL WASTE RESOURCE GUIDELINES

VEHICLE GUIDANCE: TANKER/TANKER TRAILER

ABOUT THE VEHICLE GUIDANCE

This guidance lists the requirements for vehicles that transport prescribed industrial waste (PIW). It is a condition of the Permit to Transport Prescribed Industrial Waste that the vehicle meets the requirements for the type of waste being transported.

The *Environment Protection (Industrial Waste Resource) Regulations 2009* (the Regulations) require that a person who applies for a new permit, or who renews an existing permit, must sign a declaration that the vehicle is fit for the purpose of safely transporting the PIW specified in the application or permit. It is the responsibility of the transporter to ensure compliance with these and any other Regulations, Acts or rules that relate to the transport of PIW and, where not specified, their conduct ensures the safe and secure transport of PIW.

Important note: Any method of assembly, or alternative designs, which are not mentioned in this guidance, but which give equivalent results, could be considered appropriate.

1 SAFETY EQUIPMENT

1.1 Driver safety kits

The safety of drivers is the responsibility of the company or the individual (in the case of owner drivers). For further information, the *Australian Code for the Transport of Dangerous Goods* (ADG Code) (page 173) contains recommendations on the selection of personal protective equipment and safety equipment for the particular UN Class. This may include full-length overalls, abrasion or chemical-resistant gloves, dust masks, respirators or breathing apparatus, safety footwear or chemical-resistant boots, goggles or face shields, eye rinse bottle.

1.2 Fire extinguishers

Fire extinguishers must be located where they are clearly visible, unobstructed and readily available.

Cabin extinguisher

A 1 kg X 10B (E) dry powder type fire extinguisher must be mounted in a properly attached quick-release bracket.

Load area extinguisher

For Class 3, 4 and 5 fire extinguishers must be in accordance with the ADG Code.

A vehicle transporting classes other than Class 3, 4 or 5 should be equipped with at least one portable fire extinguisher with a minimum capacity of 4.5 kg X 60B(E) or equivalent.

1.3 Emergency procedure information

The following is required to ensure that the necessary information is available to drivers and emergency workers in the case of an emergency.

Source the appropriate emergency procedure Information from either the Emergency Procedure Guide (EPG) or the Dangerous Goods Initial Emergency Response Guide.

The Emergency Procedure Information document should be placed in a holder and marked with the words 'emergency procedure guide' or 'emergency information' in red letters at least 10 millimeters high on a white background. It must be attached to the door of the cabin (or other appropriate accessible position, where the door is not suitable).

2 ELECTRICAL

2.1 Battery

To avoid the risk of fire or explosion, all sources of sparks and ignition must be kept away from the battery. The battery must be firmly secured and well ventilated, with an acid resistant cover in an accessible area.

2.2 Electrical wiring

(Applicable if you transport Class 3, 4 or 8 prescribed waste)

All electrical wiring must be contained within a properly fitted conduit which is in good condition with secure mounting points. Conduits and cables outside and to the back of the cabin, are to be securely fastened and protected.

3 SPILL KIT

A spill kit, which is appropriate for the waste being transported, must be carried and located in an easily accessible position. It should include the following:

containment tubes or absorbents, broom and shovel, container(s) as appropriate to carry the spill, such as a sealable bucket.

Please note: if transporting clinical waste, the spill kit must include hospital grade disinfectant in a sprayer and enough plastic bags to double enclose 15% of the maximum load.

4 THE TANK

4.1 Tank construction

The tank must be constructed from materials that are resistant to the waste being transported.

4.2 Tank mountings

For information on effectively securing the tank container to the vehicle, refer to the ADG Code (Chapter 4), and/or AS/NZS 3711.10.

4.3 Tanker fittings and accessories

(including valves, caps, hoses, outlets, sample points and vacuum system)

It is a condition of the permit that all tanker fittings and accessories meet the requirements for safe, secure and leakfree transport of PIW and the safety requirements of the driver and/or company.

Tankers fittings and requirements include:

- coaming (roll over) meets Australian standards
- manhole of at least 400 mm diameter
- venting meets the requirements of the waste transported
- valves meet ADG Code requirements (e.g. Class 3, 4 and 8).

If the tank is used for the transport of Class 3, 4, or 8, all fittings should be in accordance with relevant Australian Standards *(AS2809).

4.4 Tanker baffles

The function of the tanker baffles is to control liquid surge during transport. They are generally welded inside the tank and, over a period of time, can break down or fail. When baffles are broken or become ineffective, liquid surge poses a very serious hazard.

Therefore, each baffle should be accessible through a manhole to allow inspection and maintenance work.

Large compartments (in excess of 2.5 meters) of tanks should be fitted with baffles.

The distance between a bulkhead and a baffle should not exceed 2.5 meters.

Where multiple baffles are required to satisfy the 2.5 meter spacing requirements, the surface area of the baffles should not be less than 70 per cent of the maximum area of the cross section.

5 REAR BUMPER

The bumper must be frame mounted, attached to the subframe/chassis and extend the full width of the tank.

There must be a 'collision buffer' present, with a gap of 150mm between the rear of the tanker and the bumper.

The bumper must protect all external rear fittings on the tank (ie. inlet, outlet, sample point or hose hook must not protrude beyond the bumper).

6 SAFETY FEATURES AND DEVICES FOR TRANSPORTING FLAMMABLE LIQUID (CLASS 3 & 4 PRESCRIBED WASTE)

For tankers transporting flammable liquid (Class 3 or 4 ADG Code), the following applies:

- Flammable or combustible vapours, dust and mists may be generated or evolve within a loading environment. These can form explosive mixtures with air, in certain proportions. It is important to reduce the amount of vapour and dust generated during loading operation.
- To guard against static electricity discharge, all tankers should be equipped with an earth plug.

A certificate from the Victorian Workcover Authority must be obtained, and the following safety features and devices used, as appropriate to the design of the tanker:

- pressure relief valves (roof-mounted)
- shield to guard spills from ignition source or hot spots
- quick-acting shut off valves
- antistatic earth plug
- ventilation (roof-mounted)
- diverter to direct emissions from ignition source or hot spots
- wiring shrouded in conduit
- diverter equipped with emission control devices
- exhaust air cleaner (if applicable, e.g. carbon filter).

7 PLACARDS

7.1 Class diamonds

A class diamond is a sign that indicates the type of hazard related to the waste being carried. The format of a class diamond is standardised across Australia and internationally. More information about class diamonds can be found in the ADG Code.

Positioning of class diamonds:

Where a vehicle is used for the transport of liquid PIW, (which is also classified as a dangerous good by the



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ADG Code) it must be provided with a class diamond at the front, as outlined in the diagram below.

A class diamond is not required at the rear, since EIPs would provide such information.

Where more than one class of waste is carried over time, you may wish to install flip-over class diamonds or fitted frames at the front of the vehicle. These accommodate a number of class diamonds.

7.2 Emergency information panel (EIP)

An emergency information panel (EIP) is a standardised panel that sits in a predetermined position on the vehicle. It decodes information about the waste being carried. The information on the EIP is used by emergency response personnel in the event of any emergency. All tankers require an EIP.

Wastes that require an EIP:

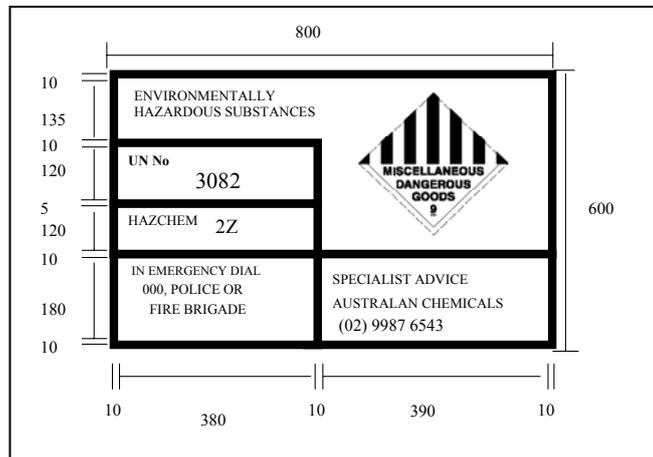
- waste classified as Dangerous Goods as per the ADG code in a tanker with a capacity of more than 500 kg(L).
- 30XY waste in a tanker with a capacity of more than 500 kg(L).

EIP FORMAT for hazardous waste

If a vehicle is used for the transport of liquid PIW in bulk (which is also classified as a dangerous good as per the ADG Code), the vehicle must be provided with EIPs in the following format:

Format of emergency information panel for environmentally hazardous substances (liquid)

Example of a placard used to transport dangerous goods in bulk (measurements in mm)

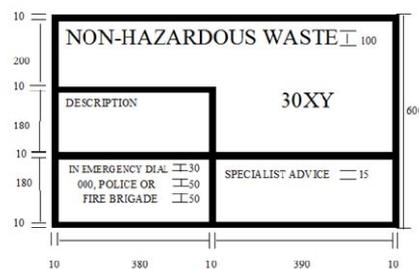


EIP FORMAT for 30XY Non Hazardous Waste

A vehicle transporting 30XY waste, as per Schedule 4 of the Regulations, must be provided with signs bearing the information '30XY Non-hazardous waste'.

Format of emergency information panel (EIP) for 30XY non-hazardous waste

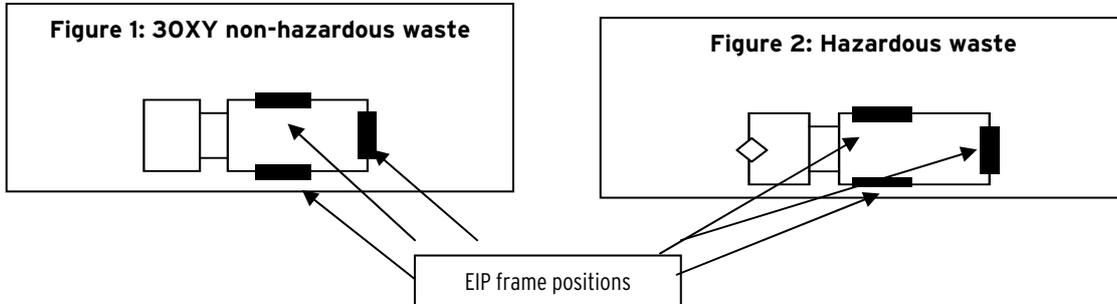
(measurements in mm)





Positioning of EIPs and class diamonds:

There should be fitted frames to accommodate an EIP or EIPs on each side of the vehicle; and
There should be a fitted frame to accommodate an EIP at the rear of the vehicle.
See Figures 1 and 2.



If in the case of an obstruction on the vehicle or tank, it is not possible to mount a full size EIP, a half size panel may be mounted. Half-size panels must have dimensions of not less than half of that shown in the diagrams above.