

Vehicle guidance: Non-tanker vehicles/trailers



Environment
Protection
Authority Victoria

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Industrial waste resource guideline (IWRG)

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About the vehicle guidelines

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 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, not mentioned in this guidance, but which give equivalent results, could be considered appropriate, pending further assessment by EPA.

Additionally, if you want to apply for a waste code that does not correspond with the permitted codes, contact EPA's Development Assessments Unit on 1300 372 842 (1300 EPA VIC) or email contact@epa.vic.gov.au to discuss your permit application further.

For a summary of the vehicle feature/fittings requirements and the suitable waste codes for each type of non-tanker refer to Appendix 1 of this guidance.

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) 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 is mounted in a properly attached quick-release bracket.

Load area extinguisher

If a vehicle carries only environmentally hazardous solid waste (e.g. Category C contaminated soil) then a 2.5 kg x 40B(E) fire extinguisher is sufficient.

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 millimetres 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).

This guidance forms part of the Industrial Waste Resource Guidelines, which offer guidance for wastes and resources regulated under the *Environment Protection (Industrial Waste Resource) Regulations 2009*.



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 that 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 that 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 Secondary containment

To minimise minor spills from containers, packages and other devices such as liquid waste transfer hoses or valves, vehicles transporting liquid PIW must be fitted with secondary containment devices or portable bunded trays.

5.1 Load security (excluding tipper/tipper trailers)

5.11 Secure load area

To safely transport PIW, the load area must be leak proof with no holes or gaps.

5.12 Load covers

The load cover must be sufficient to prevent environmental spillage during transport, and must meet relevant OH&S requirements in terms of use.

5.13 Freight container securing devices

Freight containers such as hook lifts, roll-on/roll-off trays and shipping containers must be fitted with effective freight container securing devices. These devices must be properly placed on the chassis and secured with tie-downs. In accordance with the Load Restraint Guide published by the National Transport Commission, hook lifts must be securely fastened to the vehicle using either four engaged locks or another, equally effective, method.

5.14 Load-restraining devices for drum containers

When containers such as drums are being transported, they must be secured using an effective load restraint system. There are many different load restraint systems. The selected system should prevent unacceptable movement of the load and ensure that the load does not dislodge from the vehicle.

The load-carrying area of tray trucks and tautliners must be gated to contain the load whilst in transit. If carrying 205 L drums, the gates must be positioned, so that the top of the drum is located no higher than 500 mm from the top of the gate. The side gates strengthening mechanism and load securing methods must be in accordance with the Load Restraint Guide.

5.15 Sealed and bunded floor(s)/portable bunded tray(s)

(Applicable if you transport packaged liquid waste)

The load compartment (including tray) must be totally leak proof with seamless walls and a floor. The tray must be bunded with a lip of at least 40 mm (portable bunded trays, secondary containers and UN approved containers are regarded as equivalent arrangements).

A secondary containment unit is required where packaged waste is carried on a flat tray. These include portable bunded trays and wheelybins.

5.16 Spillage collection sump

(Applicable if you carry packaged liquid waste, and/or clinical and related waste)

A bunding and sump system to prevent spills and leaks must be present and working, and include a drain tap. Equal arrangements to effectively contain spill leaks are acceptable, for example, built in channels.

5.2 Load security (tipper/trailer specific)

5.21 Secure load area

To safely transport PIW, there must be no gaps between the tailgate and the tipping body and the load area must be leak proof with no holes or gaps.

5.22 Bin securing devices for hook lift vehicles

Hook lift devices must be securely fastened with tie-downs installed lengthwise. The bin should be aligned with the chassis for transport.

5.23 Gate seals and lock(s)

A leak-free compression seal is required between the body and the tailgate when closed.

5.24 Waterproof PVC tarpaulin covers or equivalent

All bulk loads and high hazard packages need to be protected from adverse weather conditions. Tarpaulins are useful for containing loose bulk loads that might be affected by airflow. They can also act as a secondary restraint system where a loose package might become airborne.

Higher vehicles must be fitted with a mechanical cover that can be operated from the ground. Tarping of demountable bins must be done from the ground. The OH&S guidelines require that a driver should be able to put the tarpaulin cover in place without climbing on the vehicle.

Retractable tarpaulin, roll-on/roll-off type tarpaulin covers, or manual tarpaulin covers with enveloped sides and tie-downs are all appropriate for more hazardous wastes.

All load coverage must meet relevant OH&S requirements in terms of use.

5.3 Additional requirements for specific waste types

5.31 Asbestos waste

Asbestos waste must be appropriately packaged in accordance with the requirements of *Asbestos transport and disposal* (EPA Publication IWRG611.2).

All asbestos transported must be securely loaded and stowed on the vehicle during transit in such a way that does not cause the packaging to rupture.

The load compartment or secondary container must be physically separated from the driver's cabin by a solid partition.

5.32 Clinical and related waste

If you carry clinical and related waste, the load compartment must be sealed and have lockable doors or if using secondary containers, these must have lockable lids. The load must be physically separated from the driver's cabin by a solid partition.

A bunding and sump system to prevent spills and leaks must be present and working, and include a drain tap. Equal arrangements to effectively contain spill leaks are acceptable, for example, built in channels.

5.33 Packaged liquid waste

When packaged liquid waste is transported, the waste load compartment must be designed and maintained to ensure that it contains spills effectively.

5.34 Bulk loads

All bulk loads must be fully contained and/or covered by a suitable PVC tarpaulin cover.

6 Placards

6.1 Placarding principles

Placards provide a warning of the type of prescribed waste being transported and its associated risks in the event of an emergency. Table 1 summarises the minimum quantity at which placards are required for different waste types.

Table 1: Placard load (minimum quantity for which placards are required)

	Waste type in transport unit	Placard load quantity
(a)	Prescribed industrial waste that can also be classified as Dangerous Goods	Container with capacity > 500 kg or L
(b)	Prescribed industrial waste that can also be classified as Dangerous Goods	Aggregate total (packages) ≥ 1000 kg or L
(c)	Environmentally hazardous solid prescribed industrial waste (e.g. contaminated soil)	Bulk containers or tanks with capacity > 500 kg or L
(d)	Clinical and related wastes	Any quantity
(e)	30XY wastes	Tanks/bulk containers > 500 kg or L

6.2 Class labels

A class label is a sign that indicates the type of hazard related to the waste being carried. The format of a class label is standardised across Australia and internationally.

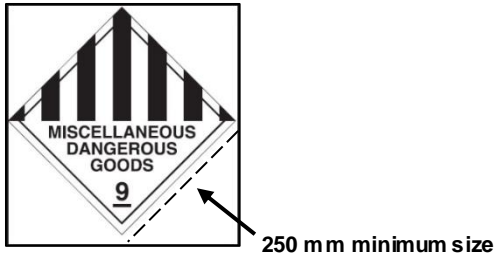
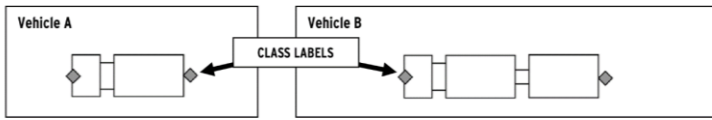
Where a vehicle is used for the transport of a placarded load of PIW, as determined from Table 1, the transport unit(s) or container(s) must be provided with class labels as outlined in the diagram below. More information about class labels can be found in the ADG Code.

Note:

- The same set-up is acceptable for (Class 9) bulk solid wastes such as asbestos and Category B and C contaminated soil.
- Where the vehicle carries only transport unit(s) or containers with a capacity of more than 500 kg (L), a separate class label is not required at the rear, since EIPs would provide such information (see below).
- 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 and rear of the vehicle. These accommodate a number of class labels.

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Positioning of class labels



Format of class label for miscellaneous substances

Symbol (seven vertical stripes in upper half)
Text: black
Background: white

6.3 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.

Wastes that require an EIP:

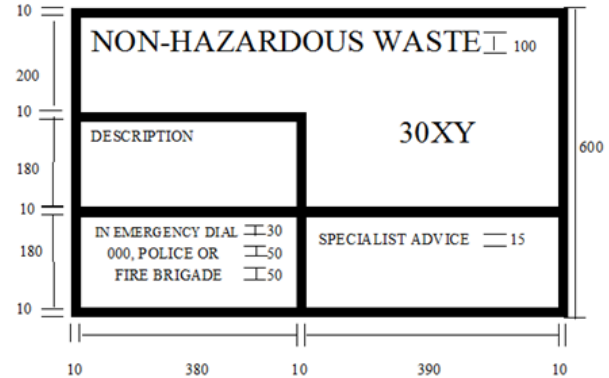
- PIW in receptacles with a capacity of more than 500 kg(L), which is also classified as dangerous goods as per the ADG Code (excluding bulk solid wastes such as asbestos, and category B and C contaminated soil).
- 30XY waste (as per Schedule 4 of the Regulations).

EIP format

Except as provided in 6.2 for contaminated soil and asbestos, if a vehicle is used for the transport of prescribed waste in receptacles with a capacity of more than 500 kg (L) (which is also classified as a dangerous good as per the ADG Code), the vehicle must be provided with appropriate EIPs. Examples of EIPs are outlined below. For further information, refer to the ADG Code.

EIP format for 30XY

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



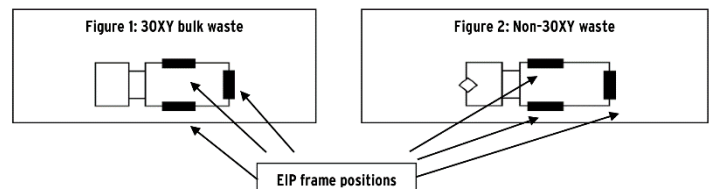
Format of emergency information panel

Format of emergency information panel for 30XY prescribed waste (measurements in mm)

Positioning of emergency information panels:

There should be fitted frames to accommodate an EIP or EIPs on each side of the vehicle. There should be a fitted frame to accommodate an EIP at the rear of the vehicle.

See Figures 1 and 2 below.



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.

Appendix 1

Summary of vehicle features/fittings and permitted waste codes

The following table (see next page) summarises the vehicle features/fittings that your vehicle may have in place depending on the waste codes that you wish to take and the type of vehicle that you have. Before you select waste codes in your application for a permit to transport prescribed industrial waste, you must assess your vehicle against the vehicle features listed in this table. For example, if your vehicle is a hook lift (bin/skip only), you can transport the waste codes listed within column 5 in this table, provided the vehicle has the corresponding features.

Any alternative measures that are not mentioned in this guidance, but which give equivalent results, could be considered appropriate, pending further assessment by EPA. If you want to apply for a waste code that does not correspond with the permitted codes, please contact EPA to discuss your permit application further.

A single letter in the 'waste codes' column indicates that all waste codes beginning with that letter are acceptable for that type of vehicle with the controls described. For example, 'H' includes waste types H100, H110, H160 and H170. A list of waste codes and what they mean can be found in the waste codes guidance document [IWRG822](#).

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Table of vehicle feature/fittings and permitted waste codes

Vehicle features/fittings	Guidance / Regulations ¹ section reference	1. Tray trucks/ tautliners/vans/ trucks (with secondary containment)	Waste Codes	2. Hook lifts with demountable tank, tray, bin and skip	Waste Codes	3. Utility (with secondary containment)	Waste Codes	4. Trucks/trailers (with bunded shipping containers or DG approved IBCs/containers)	Waste Codes	5. Tipper/ trailers/hook lifts (bin/skip only)/ trucks/utility/ vans (without secondary containment)	Waste Codes
Meets basic requirements (fire extinguisher, suitable spill kit etc.) as specified in this document	1, 2 & 3	✓	A B C D	✓	A B C D	✓	A B C D	✓	A B C D	✓	D141 D300 D400 K140
Load-restraining devices/load securing devices	5	✓	E F	✓	E F	✓	E F	✓	E F		M110 M120
Secondary containment for liquids (i.e. sealed and bunded floor and spillage collection sump OR portable bunded tray)	4, 5., 5.15 & 5.33	✓	G H J K L M N R T	✓	G H J K L M N R T	✓	G H J K L M N T		G H J K L M N T		N110 N119 N120 N121 N140 N150 N160 N170 N180 N190 N200 N210 N220 N230 N260 T160
Driver compartment separated	5.31, 5.32	✓		✓		✓		✓		✓	
Load compartment or secondary containers are lockable (applicable for R100, R120, R140 only)	5.32	✓		✓							
Waterproof PVC tarpaulin cover or equivalent (<i>not applicable to asbestos waste transported in secondary containers OR Large containers i.e. IBC's / 205Lt drums</i>)	5.24 & 5.34			✓		✓				✓	
Freight container/bin securing device, hook lift – securely fastened	5.13 & 5.22			✓				✓		✓	
No gaps between tailgate and tipping body	5.21 & 5.23			✓		✓				✓	
Load area must be leak proof with no holes or gaps	5.11	✓		✓		✓					
Emergency Information Panels (dangerous goods)	6 / Schedule 4, Regulations	✓ (DG bulk loads only)		✓ (DG bulk loads only)				✓ (DG bulk loads only)			
Class Labels (Dangerous Goods)	6 / Schedule 4, Regulations	✓ (DG packages only)		✓ (DG packages only)		✓ (DG packages only)		✓ (DG packages only)		✓ (DG packages only)	
30XY Emergency Information Panel	6 / Schedule 4, Regulations	✓ (bulk loads only)		✓ (bulk loads only)				✓ (bulk loads only)			

¹ Environment Protection (Industrial Waste Resource) Regulations 2009