

Information sheet

Waste management

Storage and transport of clinical or related waste




This information sheet provides advice on transportation requirements for clinical or related wastes.

Introduction

Clinical or related wastes must be packaged, labelled, handled and transported appropriately to minimise the potential for contact with the waste and reduce the risk to the environment from accidental releases. Schedule 8 of the *Environmental Protection (Waste Management) Regulation 2000* (Waste Regulation) contains requirements (known as the design rules) for waste containers and waste transport vehicles¹.

Containers and identification

Clinical or related waste container colours/symbol coding

WASTE	CONTAINER COLOUR	LABEL COLOUR	SYMBOL	LABELLING
CLINICAL	YELLOW (vivid yellow Y13)	BLACK	BIOHAZARD SYMBOL 	CLINICAL WASTE
CYTOTOXIC	LILAC (lilac P23)	WHITE	CELL IN TELOPHASE 	CYTOTOXIC WASTE
GENERAL	-----	-----	-----	-----
RADIOACTIVE	RED (scarlet R12)	BLACK	RADIOACTIVE SYMBOL 	RADIOACTIVE WASTE

¹ It is an offence under section 67 of the Waste Regulation to use equipment that does not comply with the design rules where applicable.

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The table on page one is based on the design requirements for waste containers from schedule 4 of the Waste Regulation. Under section 47 of the Waste Regulation a person who operates premises at which these types of clinical or related waste is generated must ensure all bags and other containers used at the establishment for the collection, storage, transport or disposal of clinical and related waste comply with the requirements in the schedule.

Sharps

Sharps produced by premises generating clinical or related waste must be placed into a rigid-walled, puncture-resistant container that meets the relevant Australian Standard for the type of container, and is the appropriate colour for the type of sharp.

For example, if the sharps waste is contaminated with a cytotoxic drug, the container should be purple. If it is contaminated with blood, the container should be yellow. If the sharps waste is contaminated with blood and a cytotoxic drug, the container used should be the colour of the highest level waste present — this being the cytotoxic drug (the container should be purple). Sharps discarded in other areas (e.g. public toilets, hotels, shopping centres, restaurants, parks, or skin penetration premises) must be placed into rigid-walled containers and should be disposed in accordance with local government requirements.

Once the sharps container has been sealed and secured, it can be placed directly into a secondary container for transportation. There is no requirement to first place the sharps container into a plastic bag before disposal into a secondary container, as they are already contained.

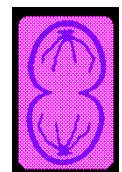
Clinical waste

Clinical waste must be placed in yellow bags and containers identified with the Biohazard symbol and the words “**CLINICAL WASTE**” marked prominently and permanently in black.



Cytotoxic waste

Cytotoxic wastes require careful handling and containment. All cytotoxic waste must be placed into purple bags and containers that are identified with the cell in telophase symbol and the wording “**CYTOTOXIC WASTE**” in white.



Radioactive waste

Radioactive waste must be placed into red bags and containers that are marked with the radiation warning symbol and the words “**RADIOACTIVE WASTE**” in black. The *Radiation Safety Act 1999* contains requirements for the management of radioactive substances.



The lid of the secondary container should be capable of being secured once the waste has been deposited. Once sealed, neither the primary nor secondary container should be opened on-site, unless for the purposes of conducting a waste assessment or audit.

Internal movement and transporting of clinical or related waste

Internal movement

Internal movement is the movement of containerised clinical or related waste from its source to the storage, treatment or collection point. Waste should be moved around premises in rigid-walled, puncture resistant containers. A rigid-walled container is one that has hard, unbending sides and is resistant to splitting, breaking and puncturing.

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The container must not allow liquids to leak or soak through. A mobile garbage bin is an example of a rigid-walled container suitable for the transportation of clinical or related waste. The movement of loose waste or waste carried in plastic bags should be avoided or, where necessary, limited to short distances, light waste loads and low risk wastes.

Good waste management practice involves minimising exposure to the waste. To facilitate this, all movement of wastes throughout the premises should be planned to avoid peak activity times, such as visiting hours, meal times and change of shifts.

Clinical or related wastes should not be moved through public areas or general staff thoroughfares.

Trolleys and bins should not be overfilled, to avoid potential spillage.

The practice of double-bagging waste should be carefully considered before it is used. Double-bagging means using two bags to contain one waste load. It potentially doubles the thickness of the plastic skin and gives added strength.

Double-bagging may be used in situations where heavy loads of waste are moved from generation areas to bins. However, care must be taken when placing a bag containing waste into an empty bag so that the contents are not spilled, or staff do not come in contact with the waste. The risks associated with this double handling may reduce the value of double-bagging.

Waste disposal chutes

Many facilities are equipped with waste disposal chutes. These are generally hollow steel tunnels that allow movement of waste bags from waste generating areas to a collection point.

Waste chutes must not be used for moving clinical or related wastes because of the risk of the bag breaking and waste spilling. In such instances, staff collecting the waste at the bottom of the chute run the risk of unnecessary exposure to infection. It is also likely that the waste chute may become contaminated.

Off-site transportation

Transporting wastes from a generating premise to a storage, treatment or disposal facility away from the premises is off-site transportation.

If clinical or related waste is transported in loads of 250kg or more, or for fee or reward, licensing (in the form of a registration certificate²) is required for environmentally relevant activity (ERA) 83 under the *Environmental Protection Regulation 1998*. This is a requirement regardless of whether the waste is being transported by the person who generated the waste or by a commercial operator. The *Code of environmental compliance for certain aspects* of regulated waste transport (ERA 83)* contains conditions that must be complied with for road transport aspects of ERA 83 (see the information sheet *Carrying out an ERA subject to a code of environmental compliance* for information on the requirements when a code of environmental compliance applies)³. Other forms of transport of regulated waste are required to have a development approval in addition to the registration certificate.

² See the information sheet *Requirement to become a registered operator* (available at www.epa.qld.gov.au) for more information.

³ Copies of the code, and the information sheet *Carrying out an ERA subject to a code of environmental compliance* are available at www.epa.qld.gov.au.

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Even if a vehicle does not require licensing to undertake the activity, certain requirements should be met to provide safe transportation of clinical or related waste⁴.

All waste must be transported in rigid-walled, puncture resistant containers. The container used must have a lid that is capable of being secured during transportation. Plastic bags alone may not be strong enough to ensure the safe handling and transportation of these wastes.

It is important to ensure that any reusable containers are in good condition and are not split, cracked or damaged in any way.

It is preferable that any vehicle used for the transportation of clinical or related waste should be used solely for that purpose. The transport vehicle should be designed to protect the driver, public and environment from contact with the waste during transportation and in the event of an accident. The driver area should be separated from the waste transport area to minimise risk of exposure.

The vehicle should be easy to load, unload and clean.

The waste transport compartment should be fitted with container restraints or a method of securing containers. Restraining containers during transportation will ensure that containers do not fall during transporting and create risk of contact when unloading. It also prevents containers from being damaged.

Supporting information

Australian Dangerous Goods Code for Transportation by Road or Rail.

Australian Standard AS 4031:1992. Non-reusable containers for the collection of sharp medical items used in health care areas.

Australian Standard AS 3816:1998. Management of Clinical or related Wastes.

Australian/New Zealand Standard AS/NZS 4261:1994. Reusable containers for the collection of sharp items used in human and animal medical applications.

Australian and New Zealand Clinical Waste Management Industry Group, 2000. Industry Code of Practice for the Management of Clinical or related Wastes.

National Health and Medical Research Council, 1999. National guidelines for waste management in the health care industry. (<http://www.health.gov.au:80/hfs/nhmrc/publications/pdf/eh11.pdf>, accessed 22 October 2001)

Other Environmental Protection Agency (EPA) information sheets in this series include:

Clinical or related waste treatment and disposal;

Defining clinical waste;

Determining whether waste is "clinical waste";

Managing sanitary hygiene waste;

Managing clinical or related waste; and

Managing clinical or related waste in scheduled areas.

For copies of these information sheets on clinical or related waste, visit the website at www.env.qld.gov.au or contact the Ecoaccess Customer Service Unit on 1300 368 326.

⁴ Refer to the Waste Regulation as the design rules and any other requirements of the Waste Regulation would still apply. Where there is a conflict between these general requirements and the requirements of the Waste Regulation, the requirements of the Waste Regulation prevail.