



## INDUSTRIAL WASTE RESOURCE GUIDELINES

# USED CONTAINERS – TRANSPORT AND MANAGEMENT

### CONTENTS

INTRODUCTION .....	1
EPA AND DANGEROUS GOODS CONTROLS.....	1
MANAGEMENT PRINCIPLES .....	2
CLEAN CONTAINERS .....	2
FURTHER INFORMATION .....	3

## INTRODUCTION

These guidelines are for any business involved in the supply, use, reuse, reconditioning, recycling and disposal of containers that have been used for prescribed industrial wastes (PIWs).

### Containers prohibited from disposal

EPA has issued a classification for large steel and rigid containers with a volume that is equal to or larger than 200 litres for their reuse potential.

This means that their disposal is prohibited and they must be cleaned to allow them to be reused or recycled. Common examples are: 205 L (44 gallon) steel drums, 200 L plastic 'Mauser' drums and 1000 L intermediate bulk containers (IBCs).

The classification excludes flexible packaging types, such as 1000 L bulk bags.

### What is a used container?

In this document, the definition of 'container' includes, but is not limited to, metal, fibre and plastic drums, intermediate bulk containers, bulk-bags and all internal linings and bladders. The definition does not apply to permanently fixed or demountable components of a vehicle.

EPA considers that a container contaminated with residues of PIW is, itself, a PIW.

## EPA AND DANGEROUS GOODS CONTROLS

Under the Regulations, a container contaminated with residues of prescribed industrial waste is, itself, considered a prescribed industrial waste.

Some PIWs may also be classified as dangerous goods under the Australian Dangerous Goods Code (ADG Code). In such cases, transportation of these wastes by road or rail must also comply with the ADG Code (see Further Information).

EPA regulations do not apply when contaminated containers are returned directly to the original supplier for refilling with the original product, however the ADG Code may still apply.

Under the ADG Code a container contaminated with a dangerous good must be transported as if it were full to normal capacity with that dangerous good and vehicles transporting these containers must be placarded in accordance with the Code. If the load consists of a single type of dangerous good, the appropriate class labels must be displayed. In general, if a load consists of more than one class of dangerous good then mixed class labels should be displayed.

If containers are clean, they are not subject to EPA or ADG Code controls. (See 'Clean Containers' below).

### WHAT THIS MEANS FOR YOU

**Receivers of used containers** (unless you are the original supplier) must have a current EPA licence or have an exemption or notification issued by EPA to receive containers holding that particular PIW type.

This applies whether the contaminated containers are being sent for reconditioning, recycling, energy recovery, treatment or disposal.

Licences will specify the type and amount of PIW that a given site may receive. For example, some licences specify that a site must only receive used containers with PIW residue. EPA defines residue as trace amounts of product remaining in packaging after emptying. Therefore, if a container holds more than a PIW residue, the container cannot be accepted and an alternate site must be used.

**Waste producers and accredited agents** must complete a waste transport certificate before contaminated containers (not destined for direct refilling by the original supplier), can be transported.

The waste transport certificate must accompany the consignment at all times during transit.

Part A of the certificate must show the number of containers being transported. If a container only has a small amount of residue, the waste code 'N100' should be used for drums or 'N110' for other containers and bags.

The amount of PIW in all containers must be recorded on the certificates, however, the weight of the load and the volume of the containers does not need to be included.

This guidance forms part of the Industrial Waste Resource Guidelines (IWRG), which offer guidance for wastes and resources regulated under the *Environment Protection (Industrial Waste Resource) Regulations 2009* (the Regulations). Publication IWRG644.1 – June 2010.  
This replaces publication IWRG644, published June 2009.

**Waste transporters** must hold a waste transport permit, unless the load is destined for a site that is exempt from the transport permit and tracking system.

## MANAGEMENT PRINCIPLES

All contaminated containers should be managed in the following order of preference:

- a) Avoidance
- b) Reuse
- c) Recycling
- d) Recovery of energy
- e) Containment/disposal

### Avoidance

Avoidance of contaminated containers is usually the cheapest and lowest risk option. Where possible, bulk handling of goods may eliminate the need to use smaller containers.

Contaminated containers can be avoided simply by using all the material in the container that has been paid for. Scraping out containers or washing them at their point of use and utilising the wash-waters in the batch, avoids generation of contaminated containers and lowers raw material costs.

Linings or bladders may not actually be necessary to protect raw materials, human health and the environment. Check with the supplier and, if they are not, request that the excess packaging be eliminated from the delivery.

### Reuse

Reuse means the use of a container for the same or similar purpose as the original purpose. In some cases, reconditioning is necessary before reuse.

Prior to any reuse, the integrity of the container must be examined and confirmed. Containers must be free from damage that is likely to impair performance, such as corrosion, cracking, fragility, or less obvious damage such as ultra violet damage to plastic.

Suppliers should note that the ADG Code prohibits the reuse of plastic packaging, to transport dangerous goods, more than five years after the date of its manufacture.

If reduction in container numbers through bulk handling is not practical, the return of empty containers to the supplier for reuse is environmentally the next best option. Users of containers should contact suppliers to see whether they operate a reuse scheme.

Suppliers should be aware that EPA and the ADG Code do not permit transportation of containers contaminated with different types of PIW unless they are compatible with each other.

### Recycling

Recycling means recovery of the packaging as a raw material to produce another product. Generally, containers should be cleaned to be recycled. For example, steel drums that are not suitable for reuse, and have been cleaned, may be recycled through scrap metal dealers. Other materials may also be recycled. Users should investigate container types and check with suppliers to see if they can provide containers that are recyclable.

Recyclers should be aware that under the ADG Code, recycled plastic material is not permitted in the manufacture of packages intended for the transport of dangerous goods.

### Energy recovery

Energy from waste facilities utilises waste with a calorific value as a replacement for traditional non-renewable fuel sources. Used containers may have potential for energy recovery.

### Containment/disposal

Disposal of containers should only be considered if all the above options are not practical.

Clean containers that are free of PIW residue, and therefore not classified as a PIW, may be disposed of to a landfill that is approved to accept non-prescribed industrial waste.

Currently containers contaminated with PIW residues must only be disposed of at a landfill that is licensed to accept those wastes. All containers should be rendered unfit for reuse prior to disposal. For example, drums should be punctured or crushed, and have their lids removed.

## CLEAN CONTAINERS

For the purposes of these guidelines, containers may only be considered clean if they are free of all residues.

There are a number of methods for cleaning containers, but a method that produces the least waste is environmentally, and often economically, preferable.

Any wash-water generated should be incorporated into the batch where practical, especially where additional dilution is required for production processes.

A triple rinse method is indicative of a thorough rinsing process. Every attempt should be made to generate as little wash-water as possible when using this method, whilst still ensuring that the container is free of all residues.

If wash-water cannot be re-used, pressure rinsing will produce less prescribed liquid waste than a triple rinsing method.

It is generally more efficient to clean containers at their point of use, immediately after the container has been emptied. This practice reduces transport of the contaminated container and may make it easier to utilise residues or wash-waters.

Some container designs and materials will be easier to clean than others. Consult with suppliers to check whether alternative containers are available or existing containers can be altered to make cleaning easier. A partnership with a supplier can be an effective way of avoiding and reducing the amount of used containers requiring disposal.

### FURTHER INFORMATION

EPA's Industrial Waste Database lists premises licensed to receive containers contaminated with prescribed industrial waste:

[www.epa.vic.gov.au/waste/iwdb](http://www.epa.vic.gov.au/waste/iwdb)

*Australian Dangerous Goods Code* (Volume 1 & 2) download a copy from the National Transport Commission website – [www.ntc.gov.au](http://www.ntc.gov.au) (follow 'Safety and Compliance' link).

[Industrial Waste Resource Guidelines](#) at EPA's website.

### EPA contacts

Please see the 'Contact details' page of EPA's website ([www.epa.vic.gov.au](http://www.epa.vic.gov.au)) for the addresses of our offices throughout Victoria.