

TRANSPORT AND MANAGEMENT OF USED CONTAINERS

Publication 344.1

December 2003

This document provides guidance on the transportation, reuse, recycling and disposal of containers contaminated with prescribed industrial wastes. In Victoria, hazardous wastes and wastes that can have an adverse effect on amenity (for example odour) are referred to legally as 'prescribed wastes'.

INTRODUCTION

This document should be considered by any business involved in the supply, use, reuse, reconditioning, recycling and disposal of containers used for prescribed industrial wastes.

Prescribed industrial wastes are listed in the *Environment Protection (Prescribed Waste) Regulations 1998*.¹ These wastes include hazardous wastes and wastes that can have an adverse impact on amenity. The storage, transport, handling and disposal of these wastes are subject to EPA controls.

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. This document does not apply to permanently fixed or demountable components of a vehicle.

EPA AND DANGEROUS GOODS CONTROLS

Under EPA regulations, a container contaminated with residues of prescribed industrial waste is, itself, considered a prescribed industrial waste.

Some prescribed industrial wastes may also be classified as dangerous goods under the Australian Dangerous Goods Code (ADG Code).² In such cases, transportation of these wastes by road or rail must also comply with the ADG Code.

EPA Information Bulletin 395b, *Instructions for Completion of Waste Transport Certificates*, refers to EPA and ADG Code requirements for transportation of containers contaminated with prescribed industrial waste.

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

EPA regulations do not apply when contaminated containers are destined directly for 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.

Under the ADG Code, vehicles transporting containers contaminated with a dangerous good must be placarded in accordance with the Code. If

¹ Reprinted incorporating amendments as at 1 October 2000.

TRANSPORT AND MANAGEMENT OF USED CONTAINERS

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 mixed class labels should be displayed.

Used Container Receivers

Under EPA regulations, containers contaminated with prescribed industrial waste (that are not destined for direct refilling by the supplier) must be destined for a facility that has either a current EPA licence to receive containers holding that particular prescribed industrial waste type, or a current exemption from licensing for that waste type, as granted by EPA.³ This applies whether the contaminated containers are being sent for reconditioning, recycling, energy recovery, treatment or disposal.

Licence conditions will specify the type and amount of prescribed industrial waste that a given site may receive. For example, some licences specify that a site must only receive used containers holding less than 1 per cent of a particular waste. If a container holds a greater amount of waste, an alternate site must be used.

Waste Transport Certificates

Under EPA regulations, a waste producer or their accredited agent 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 prescribed industrial waste in all containers should be estimated and recorded on the certificates.

The certificates do not require the weight of the load or volume of the containers.

Waste Transport Permit

EPA's regulatory framework for vehicle owners transporting prescribed industrial waste is outlined in EPA Publication 436c *Instruction for Completion: Application for a Permit to Transport Prescribed Waste*.

Under EPA regulations, owners of vehicles used for the transport of prescribed industrial waste must hold a waste transport permit, unless the load is destined for a site that is exempt from the transport permit and tracking system, or the vehicle is exempt as outlined in Publication 436c.

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 producing the least waste is environmentally, and often economically, preferable.

² Schedule 3 of the Environment Protection (Prescribed Waste) (Amendment) Regulations calls forth the Road transport (Dangerous Goods) Act 1995.

³ Applications for an exemption from a licence, (or any other EPA permit), must concur with EPA publication 658.2, *Instruction for Completion: Application for Exemption*.

TRANSPORT AND MANAGEMENT OF USED CONTAINERS

Any wash-water generated should be incorporated into the batch where practicable, 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 the point of utilising the contents, 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 can be altered to facilitate cleaning. A partnership with a supplier can be an effective way of avoiding and reducing the amount of used containers requiring disposal.

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

A full explanation of the waste management principles and hierarchy can be found in EPA Publication 866, *IWMP (Prescribed Industrial Waste) Implementation of Policy - Overview*.

Avoidance

Avoidance of contaminated containers is usually cheaper and incurs a lower risk than management. If feasible, bulk handling of goods may enable complete elimination of the use of 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.

Avoid any excessive packaging. For example, check that linings or bladders are actually necessary to protect raw materials, human health and the environment. If they are not, contact the supplier to request that they 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 likely to impair performance, such as corrosion, cracking, fragility, or less obvious damage such as ultra violet damage to plastic. (For test references see 'Dangerous Goods' below).

If reduction in container numbers through bulk handling is not practicable, 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 requirements or the ADG Code do not permit transportation of containers contaminated with different types of prescribed industrial waste unless they are compatible with each other.

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.

Recycling

Recycling means recovery of the packaging material 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 utilise 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 prescribed industrial waste residue, and therefore not classified as a prescribed industrial waste, may be disposed of to a landfill that is approved to accept non-prescribed industrial waste.

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

There are programs in place to phase out disposal of prescribed industrial waste to landfill. In the future, long-term containment facilities will be available to accept prescribed industrial waste.

FURTHER INFORMATION

Prescribed Industrial Waste

EPA Victoria administers prescribed waste legislation and should be consulted directly for information on transportation, handling, storage, cleaning and disposal of empty containers contaminated with prescribed waste.

EPA Victoria
40 City Road
Southbank 3006
Tel: (03) 9695 2722
www.epa.vic.gov.au

TRANSPORT AND MANAGEMENT OF USED CONTAINERS

Environment Protection (Prescribed Waste) Regulations 1998:

www.dms.dpc.vic.gov.au/sb/1998_SR/Soo812.html

Environment Protection (Prescribed Waste) (Amendment) Regulations 2000:

www.dms.dpc.vic.gov.au/sb/2000_SR/So1287.html

EPA Publications:

www.epa.vic.gov.au/Publications

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

www.epa.vic.gov.au/Industry/IWDB

Dangerous Goods

The Victorian WorkCover Authority administers dangerous goods legislation and should be consulted directly for information or clarification of legislation applying to dangerous goods.

Victorian WorkCover Authority

222 Exhibition Street

Melbourne

Tel: (03) 9641 1444

Country and Regional Offices

Tel: 1800 136 089

www.workcover.vic.gov.au

Department of Transport and Regional Services gives:

- The Australian Dangerous Goods (ADG) Code; and
- Integrity tests for drums and intermediate bulk containers:

www.dotrs.gov.au/transreg/str_dgoodsum.htm