

Assessment of road transport depots

Updated September 2017

EPA 678/17: This guideline will assist a relevant authority (as defined by the Development Act 1993) to undertake an environmental assessment of proposals for road transport depots.

Introduction

The information contained in this guideline is in lieu of the advice given by the Environment Protection Authority (EPA) in responses to referred development applications prior to removal of the activity from Schedule 21 of the *Development Regulations 2008*.

For the purposes of this guide, a road transport depot means land used primarily for bulk handling goods for transport by road, whether or not the land is also used for:

- loading and unloading of vehicles used to transport such goods
- parking, servicing or repairing of vehicles used to transport such goods.

Assessing environmental issues

How the depot is used and the scale at which it operates are important factors in assessing potential environmental impact. Management issues that can influence the degree of impact include:

- extent and range of activities especially loading and unloading of freight, open storage of sand and metal
- the intensity at which activities are undertaken (eg heavy or light mechanical repairs to trucks, spray painting and body work, the number and type of trucks using the premises, constant and regular refuelling of heavy vehicles, idling times)
- the times activities occur including arrival and departure times of trucks
- frequency of forklift movements.

Air quality

A transport depot has the potential for emission of dust and fumes, which may be generated from unsealed roadways, the transfer of materials, and from the operation of diesel trucks or other mobile equipment.

Heavy traffic areas should be sealed to prevent the potential for dust nuisance. When transferring materials such as soil or rubble from front-end loaders to trucks, the lifting height of the loader bucket should be minimised and its unloading speed controlled to reduce wind-borne dust.

Noise

Noise nuisance from road transport depots includes noise generated from the movement of large vehicles and forklifts and loading and unloading materials and reversing alarms on mobile plant.

The applicant will also need to demonstrate that relevant indicative noise levels specified in Clause 5 of the *Environment Protection (Noise) Policy 2007*¹ (Noise Policy) would not be exceeded at the nearest sensitive receiver, both during the day and at night. This may require a report from an acoustic engineer stating that noise from all fixed and transient noise sources on site will meet the Noise Policy at the nearest sensitive receivers; otherwise the acoustic report should recommend measures to achieve this..

Landfill sites

When considering a site for a road transport depot, consideration needs to be given to the presence of any closed or operational landfills.

There are a range of inherent risks associated with landfills including adverse impact on the environment and human health due to landfill gas, odour, litter, vermin, dust and leachate.

The EPA guideline, [*Environmental management of landfill facilities \(municipal solid waste and commercial and industrial general waste\)*](#) recommends a minimum separation distance of 500 m between development and a landfill boundary, historic, currently operational and future designated landfill areas, and active tipping face. The buffer should be maintained for the life of the landfill². Maintaining a 500-m separation distance will reduce the likelihood of impacts from the landfill, including the accumulation of landfill gas in structures.

A proposed road transport depot in which landfill gas could accumulate and that is within 500 m of a closed or operational landfill should proceed only on the basis of a landfill risk assessment undertaken by a site contamination consultant or a site contamination auditor. Any development within the buffer should be assessed and determined as suitable and compatible. The [*Landfill gas and development near landfills – advice for planning authorities and developers*](#) contains further information.

Waste management

Waste generated is likely to include empty storage containers and packaging, general litter, byproducts of any vehicle maintenance (including petroleum products, coolants, degreasing agents, sediment, rubber particles, detergents) and other hazardous materials.

The development should include:

- provision for implementation of the waste management hierarchy³ as identified in the *Environment Protection (Waste to Resources) Policy 2010*
- dedicated covered areas for all non-toxic solid waste materials

¹ The Noise Policy sets noise goals and provide a consistent approach to noise issues in the assessment of development applications. Clause 5 identifies indicative noise levels considered to be acceptable in various land use categories including industrial and commercial. Clause 20 sets out the process the relevant authority should use when assessing development applications.

² The life of the landfill includes the period after closure and capping, and continues for as long as the landfill has the potential to create offsite impacts to the environment (particularly due to landfill gas emissions or leaching to groundwater), which may be decades after the landfill has closed.

³ Waste management hierarchy, as described in the *Zero Waste SA Act 2004*, refers to an order of priority for the management of waste, being: avoidance of the production of waste, minimisation of the production of waste, reuse of waste, recycling of waste, recovery of energy and other resources from waste, treatment of waste to reduce potentially degrading impacts, and disposal of waste in an environmentally sound manner.

- dedicated covered and bunded areas for all toxic waste materials
 - liquid wastes should be contained and/or treated before transport off-site by an EPA-licensed transporter
 - solid toxic wastes should be removed from the site regularly by an EPA-licensed transporter.

The EPA guideline, [Bunding and spill management](#), contains further information on design, capacity, operation and maintenance of bunds.

Water quality

Pollutants associated with road transport depots may include suspended solids, grease, lubricants, solvents, nutrients and oils. Such pollutants must be prevented from entering water bodies (including groundwater) through direct discharge, seepage or through contamination of stormwater.

Fuel storage facilities (including overhead fuel tanks and hand pumps), or chemical and hazardous material storage facilities need to be bunded and preferably rainproofed to minimise the risk of surface or groundwater contamination. The EPA guideline, [Bunding and spill management](#), contains further information on design, capacity, operation and maintenance of bunds.

Leakage from underground petroleum storage systems is a significant issue that can have impacts on soils and groundwater and cause site contamination, as well as safety implications.

To prevent leaks the underground petroleum storage systems (including tanks and piping) should be designed and installed to meet the requirements of *Australian Standard AS 4897–2008: The design, installation and operation of underground petroleum storage systems*.

Other relevant Australian Standards include:

- *AS 1940–2004: The storage and handling of flammable and combustible liquids*
- *AS 1692–2006: Steel tanks for flammable and combustible liquids*
- *AS 4977–2008: Petroleum products – pipeline, road tanker compartment and underground tank identification*
- *AS 4976–2008: Removal and disposal of underground petroleum storage tanks.*

Where mechanical servicing and maintenance for trucks is involved, the liquid waste from these activities needs to be collected and contained within a bunded and covered facility, and the wastes and other substances then directed to the sewer system (if available) or transported off site by an EPA-licensed waste removalist.

Truck wash bays and similar washing facilities should include washwater collection and disposal in a covered facility where all wastewater and other substances are either directed to the sewer system (if available) or transported off site by a waste transporter licensed by the EPA.

Stormwater – Water sensitive urban design

Water sensitive urban design is an approach to urban planning and design that seeks to integrate the management of the total water cycle to minimise the impacts of development, protect water quality, make more efficient use of water, reduce the cost of water infrastructure and address flooding.

Water sensitive urban design could be used in many parts of a retail fuel outlet including treatment of roadways and footpaths with bio-filtration systems or capturing roof water and using this for toilet flushing. Further information on water sensitive urban design can be found at:

- [Planning professionals and developers](#)
- [Water Sensitive SA](#)
- [Creating more liveable and water sensitive cities in South Australia.](#)

Construction management

Construction activities undertaken as part of a development can detrimentally affect the environment and community health. Air emissions, noise, site contamination, stormwater and waste need to be managed to prevent impacts on nearby land uses and the natural environment.

The relevant authority may require a construction environmental management plan (CEMP) from the proponent. The plan describes how activities undertaken during the construction phase of development will be managed to avoid or mitigate negative environmental impacts on site and how the environmental management requirements will be implemented.

For further information on the impacts of construction activities and preparing a CEMP refer to the EPA's guideline, [Construction environmental management plans](#).

Disclaimer

This publication is a guide only and does not necessarily provide adequate information in relation to every situation. This publication seeks to explain your possible obligations in a helpful and accessible way. In doing so, however, some detail may not be captured. It is important, therefore, that you seek information from the EPA itself regarding your possible obligations and, where appropriate, that you seek your own legal advice.

Further information

Legislation

[Online legislation](#) is freely available. Copies of legislation are available for purchase from:

Service SA Government Legislation Outlet
Adelaide Service SA Centre
108 North Terrace
Adelaide SA 5000

Telephone: 13 23 24
Facsimile: (08) 8204 1909
Website: shop.service.sa.gov.au
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General information

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