6.11 Waste management

6.11.1 Policy setting

Roads and Maritime is committed to ensuring responsible management of unavoidable waste and to promoting the reuse of such waste through appropriate measures. This is done in accordance with the resource management hierarchy principles contained in the *Waste Avoidance and Resource Recovery Act 2001*. The resource management hierarchy principles in order of priority as outlined in the *Waste Avoidance and Resource Recovery Act 2001* are:

- Avoidance of unnecessary resource consumption.
- Resource recovery (including reuse, reprocessing, recycling and energy recovery).
- Disposal.

By adopting the above principles, Roads and Maritime encourages the most efficient use of resources and reduces cost and environmental harm in accordance with the principles of ecologically sustainable development, as outlined in Section 8.2 of this REF.

6.11.2 Potential impacts

The study area for the waste management assessment is defined as the area within 500 metres of the proposal.

The proposal has the potential to generate waste from the following sources, some of which would be recycled or reused:

- Excavation for the new road realignment, including about 310,000 cubic metres of materials such as rock, gravel, loam, soils and clay.
- Excavation of pavement from the existing Olympic Highway (locations shown in Figure 1.2).
- Vegetation (native, introduced and noxious) to be removed as part of the proposal (clearing over an area of 32.5 hectares).
- Construction materials, including road base, paints, solvents, asphalt, spray seal, sand, concrete, aggregate etc.
- Paper and office waste from site and management facilities.
- General waste from staff (lunch packaging etc).

The largest quantities of waste expected to be produced would be from excavation and clearing activities. There is potential to reuse these materials on-site. Some of the trees removed would be re-used as habitat. Mulched vegetation would be used in sediment erosion controls, stabilisation and rehabilitation where appropriate. All of the 310,000 cubic metres of material excavated for the new highway alignment would be used on-site as fill, or may be used for flattening fill batters, constructing noise mounds or in landscaping. There is the potential for excavated pavement to be recycled, depending on suitability. Material not reused on-site would be removed to a licensed or approved facility.

Liquid and solid waste would be removed by tanker or truck and disposed of off-site at a facility that is licensed and able to accept those wastes for storage, reuse or disposal. Fuel and chemical storage areas would be bunded and protected in accordance with the specifications set out by OEH and WorkCover.

The impacts of waste generation at the site are considered to be low, and would be minimised. It is expected that the largest component of waste materials on site (surplus spoil) would be reused. Materials would be recycled wherever possible.

The proposal has the potential to leave obsolete road infrastructure at the site. The infrastructure may become dilapidated with time and could have negative environmental impacts on land owners and the environment. This impact was identified by Wagga Wagga City Council in its response to consultation for this REF. The impact would be unlikely to occur provided that appropriate sections of the Olympic Highway are decommissioned fully as planned.

6.11.3 Safeguards and management measures

Impact	Environmental safeguards	Responsibility	Timing
Waste management - general impacts of waste	• A waste management plan will be included in the CEMP.	Project manager and contractor	Construction
Waste management - general impacts of waste	• Resource management hierarchy principles will be followed: - Avoid unnecessary resource consumption as a priority. - Recover resources as far as is practicable (including reuse of materials, reprocessing, and recycling and energy recovery). - Disposal is undertaken as a last resort (in accordance with the *Waste Avoidance and Resource Recovery Act 2001*). • Site inductions will be undertaken (and recorded) by a site supervisor for all staff, to provide a thorough knowledge of all key environmental/safety issues, including waste disposal protocols. • Bulk project waste (eg fill) sent to a site not owned by Roads and Maritime (excluding OEH licensed landfills) for land disposal is to have prior formal written approval from the landowner, in accordance with Roads and Maritime *Environmental Direction No. 20 – Legal Off-site disposal of Bulk RTA Project Wastes.* • If coal tar asphalt is identified and is to be removed, it is to be disposed of to landfill in accordance with Roads and Maritime *Environmental Direction No.21 – Coal Tar Asphalt Handling and Disposal.* • All waste will be disposed of at appropriately approved and licensed facilities. • Cleared weed free vegetation will be mulched and reused on-site to stabilise disturbed soils where possible. Weedy	Project manager and contractor	Construction

Impact	Environmental safeguards	Responsibility	Timing
	mulch will either be composted to sterilise propagules and seeds, or not reused. • Waste will not be burned at the site • All wastes will be managed and disposed of in accordance with the Waste Classification Guidelines (DECC 2008b) and managed in accordance with the POEO Act • Garbage receptacles will be provided and recycling of materials encouraged. Rubbish will be transported to an appropriate waste disposal facility • Where appropriate, excess roadside materials will be disposed of according to the following (in order): - Transfer to nearby Roads and Maritime projects for immediate use. - Transfer to an approved Roads and Maritime stockpile site for future use during projects or routine maintenance. - Transfer to a Roads and Maritime approved site for reuse on concurrent private/local government project. - Disposal at an approved materials recycling or waste disposal facility. - As otherwise provided for by the relevant waste legislation. • Waste material, other than vegetation and tree mulch, will not be left on site once the works have been completed.		
Waste management - obsolete infrastructure	• Any obsolete infrastructure will be decommissioned and not left in a state that will negatively impact upon the Council, private land owners or the environment.	Project manager and contractor	Construction