Re-use of waste off-site

Introduction

This Environment Fact Sheet summarises potential off-site re-uses for typical wastes from Roads and Maritime Services infrastructure maintenance and construction projects.

These re-use opportunities do not require environmental licensing as a waste disposal to land activity from the NSW Environment Protection Authority (EPA), provided that all conditions for off-site re-use (see below) are met.

Please note that approval under Part 5 of the *Environmental Planning and Assessment Act 1979* or development consent may still be required for the activity for which the waste will be re-used.

This fact sheet does not apply:

- Where waste is taken to a licensed waste facility; or
- For treated acid sulfate soils and actual/potential acid sulfate soils. These soils can only be re-used on-site in accordance with an approved Acid Sulfate Soil Management Plan. Any transport of treated acid sulfate soils off-site must be to a licensed landfill. See RTA Guidelines for the Management of Acid Sulfate Materials, 2005 for further information about management of acid sulfate materials.

Prior to transport of waste off-site

Prior to waste being transported off-site for beneficial re-use:

- Check that the relevant resource recovery exemption/order is still current
- The waste must be appropriately classified and if required, tested, to verify it meets any specific conditions for its re-use
- The proposed receiver (consumer) of the waste material must be made aware of the conditions for re-use, including the relevant EPA resource recovery order and exemption (if applicable)
- Where waste is being transported to a site not owned by Roads and Maritime, a signed section 143
 notice must have been received from the landholder proposing to receive the waste (as per Roads
 and Maritime <u>Environmental Direction No.20, Legal Off-site Disposal of Roads and Maritime Project Wastes</u>).

Record Keeping

Keep all records of the quantity and nature of material supplied, person supplied to, and all testing/sampling/characterisation for six years.

Further information

Strict conditions apply to the re-use of waste materials off-site. Ensure that the 'additional information' referenced in Table 1 is reviewed and understood prior to transport of materials off-site. If you require further advice on Roads and Maritime waste issues, please contact your regional environment staff or the Senior Environmental Specialist (Sustainability) in Environment Branch on 02 8843 3055.

Table 1: Summary of potential off-site re-use

		Table 1. Cullinary of potential on-site			
Waste Material		Potential off-site re-use	Can be applied to private land	Testing required	Additional information (required reading)
Is material Virgin Excavated Natural Material (VENM) ¹ ?	Yes	 Can be applied to land by: spraying, spreading or depositing on the land, ploughing, injecting or mixing into the land, filling, raising, reclaiming or contouring the land. Can be applied to private or public land. No limit on quantity re-used off-site. 	Yes	No (but evidence/ certificate of origin may be required)	RMS Environment Fact Sheet EFS-701
Is material excavated natural material (ENM) ² ?	Yes	Can be applied to land as engineering fill or for use in earthworks. Can be applied to private or public land. No limit on quantity re-used off-site for approved activities.	Yes	Yes	RMS Environment Fact Sheet EFS-702
Is material excavated public road material ³ ?	Yes	Can be applied to land within a public road corridor for public road related activities including road construction, maintenance and installation of road infrastructure facilities. Cannot be applied to private land. No limit on quantity re-used off-site for approved activities.	No	No	RMS Environment Fact Sheet EFS-703
Is material recovered aggregate ⁴ ?	Yes	Can only be applied to land in road making activities, building, landscaping and construction works. Cannot be re-used for: - Construction of dams or related water storage infrastructure, - Mine site rehabilitation, - Quarry rehabilitation, - Sand dredge pond rehabilitation, - Back filling of quarry voids, - Raising or reshaping of land used for agriculture, and - Construction of roads on private land unless: - the recovered aggregate is applied only to the minimum extent necessary for the construction of the road, and - a development consent has been granted under the relevant Environmental Planning Instrument (EPI), or - it is to provide access (temporary or permanent) to a development approved by a Council, or - (d) the works are either exempt or complying development. No limit on quantity re-used off-site for approved activities.	Yes (but not to construct roads on private land unless specific conditions are met as per previous column)	Yes	RMS Environment Fact Sheet EFS-704

Waste Material		Potential off-site re-use	Can be applied to private land	Testing required	Additional information (required reading)
Is material reclaimed asphalt pavement (RAP) ⁵ ?	Yes	Can be: - applied to land for road related activities including road construction or road maintenance activities being: - use as a road base and sub base, - applied as a surface layer on road shoulders and unsealed roads, and - use as an engineering fill material - used as an alternative input into thermal processes for non-energy recovery purposes in the manufacture of asphalt. No limit on quantity re-used off-site for approved activities.	Yes but limited to road applications	No (but ensure no detectable quantity of coal tar or asbestos)	RMS Environment Fact Sheet EFS-707
Is material mulch ⁶ ?	Yes	Can only be applied to land as a soil amendment. Can be applied to private or public land. Must not be further processed at the application site. Leachate must not be generated or permitted to migrate from the application site. No limit on quantity re-used off-site for approved activities.	See note 7	See note 7	Regional Environmental Officer or Senior Environmental Specialist (Sustainability)
Is material building and demolition waste 8?	Yes	Waste generated within the regulated area Up to 200 tonnes of the following waste (and no other waste) can be taken to a site for an identified beneficial re-use: - building and demolition waste only - building and demolition waste mixed with virgin excavated natural material Re-use site may be located inside or outside the regulated area, on private or public land. Tonnage limit applies over any period of time, ie not for each re-use application. Waste generated outside the regulated area Up to 20,000 tonnes of the following waste (and no other waste) can be taken to a site for an identified beneficial re-use: - building and demolition waste only - building and demolition waste mixed with virgin excavated natural material Re-use site located outside the regulated area, on private or public land. Tonnages limit applies over any period of time, ie not for each re-use application.	Yes	No	Regional Environmental Officer or Senior Environmental Specialist (Sustainability)
Is material the subject of another EPA general resource recovery order /exemption?	Yes	Can be re-used in accordance with the conditions of the general resource recovery order and exemption. Resource recovery orders and resource recovery exemptions currently in force in NSW are listed on the EPA website .	See specific conditions of order/ exemption		http://www.epa. nsw.gov.au/wa steregulation/or ders- exemptions.ht m

- that has been excavated or quarried from areas that are not contaminated with manufactured chemicals, or with process residues, as a result of industrial, commercial, mining or agricultural activities
- that does not contain sulfidic ores or soils, or any other waste,
- ² **ENM:** means naturally occurring rock and soil (including but not limited to materials such as sandstone, shale, clay and soil) that has:
 - · been excavated from the ground, and
 - contains at least 98% (by weight) natural material, and
 - does not meet the definition of VENM.

Excavated natural material does not include material located in a 'hotspot'; that has been processed; or that contains asbestos, Acid Sulfate Soils (ASS), Potential Acid Sulfate soils (PASS) or sulfidic ores.

Refer to the Excavated Natural Material Order 2014 for the definition of 'hotspot'.

³ Excavated public road material: means materials

- being rock, soil, sand, bitumen, reclaimed asphalt pavement, gravel, slag from iron and steel
 manufacturing, fly and bottom ash, concrete, brick, ceramics and materials that hold a resource recovery
 order for use in road making activities; and
- that have been excavated during the construction and maintenance of council and RMS public roads and public road infrastructure facilities.

This does not include any waste that contains coal tar or asbestos, or any waste that is classified as hazardous, restricted solid, special or liquid waste.

- ⁴ Recovered aggregate: means material comprising of concrete, brick, ceramics, natural rock and asphalt processed into an engineered material. This does not include refractory bricks or associated refractory materials, or asphalt that contains coal tar.
- ⁵ **Reclaimed asphalt pavement**: means an asphalt matrix which was previously used as an engineering material and which must not contain a detectable quantity of coal tar or asbestos.
- ⁶ **Mulch:** means plant material shredded and/or screened to a preferred particle size grading for particular applications. Mulch, by virtue of the nature and source of the plant material, must pose minimal risk of the presence of physical and chemical contaminants.
- ⁷ Requirements for the reuse of mulch are outlined in the *RMS Technical Procedure: Mulch Management.* Implementation of this Procedure is required to demonstrate Roads and Maritime's compliance with the requirements of The NSW EPA's Mulch Order 2016 and The Mulch Exemption 2016. This includes ensuring there is an appropriate assessment to determine the presence of any weed, disease, and pests, that there is a written risk management protocol in place, and the land application site meets the requirements of the Mulch Order 2016 and Mulch Exemption 2016. Contact envoys@rms.nsw.gov.au for a copy of the Procedure.
- ⁸ **Building and demolition waste**: means unsegregated material (other than material containing asbestos waste or liquid waste) that results from:
 - the demolition, erection, construction, refurbishment or alteration of buildings other than
 - chemical works
 - mineral processing works
 - container reconditioning works
 - waste treatment facilities
 - the construction, replacement, repair or alteration of infrastructure development such as roads, tunnels, sewage, water, electricity, telecommunications and airports and includes materials such as:
 - bricks, concrete, paper, plastics, glass and metal
 - timber, including unsegregated timber, that may contain timber treated with chemicals such as copper chrome arsenate (CCA), high temperature creosote (HTC), pigmented emulsified creosote (PEC) and light organic solvent preservative (LOSP)

but **does not include excavated soil** (for example, soil excavated to level off a site prior to construction or to enable foundations to be laid or infrastructure to be constructed).

¹ **VENM**: means natural material (such as clay, gravel, sand, soil or rock fines):