

Fact sheet



Definition

Excavated Natural Material (ENM) is naturally occurring rock and soil (including materials such as sandstone, shale, clay and soil) that has:

- been excavated from the ground
- contains at least 98 per cent (by weight) natural material
- does not meet the definition of Virgin Excavated Natural Material (VENM)

ENM does not include material that has been processed or contains acid sulphate soils or potential acid sulphate soils.

An example of the difference between VENM and ENM: A noise mound that was originally formed using VENM and is demolished many years later is now considered ENM. The reason is that in the intervening period there is a risk that the noise mound may have been contaminated with other materials such as oils, asbestos, herbicides, etc. and needs to be tested before re-use.

Waste classification

ENM is classified as General Solid Waste (non-putrescible).

Beneficial re-use

ENM by its nature can be re-used easily. Weed-free topsoil may be stockpiled and reused on batters or in landscaping and revegetation works.

ENM may be sent offsite to a place that can legally accept this material for reuse or reprocessing. Off-site reuse must be undertaken in compliance with all conditions of the EPA's [Excavated natural material order 2014](#) (ENM order) and [Excavated natural material exemption 2014](#) (ENM exemption). ENM can be beneficially re-used off-site as engineering fill or for use in earthworks.

Prior to supplying ENM off-site, the generator must certify that the ENM complies with the relevant conditions of the ENM order and provides the off-site consumer with:

- A written statement of compliance, certifying that the ENM complies with the conditions of the ENM order.
- Copies of all test results (see below).
- A copy of the ENM exemption, or a link to the EPA website where the ENM exemption can be found.

The generator must keep a written record of the quantity of ENM supplied, and the name and address of each person to whom the processor supplied the ENM. Records must be kept for six years.

Receiving ENM from an off-site source requires that you ensure the ENM:

- Complies with the relevant conditions of the ENM exemption.
- Meets all chemical and other material requirements as per the excavated natural material order.
- Is only applied to land as engineering fill or for use in earthworks.
- Is applied to land within a reasonable period of time after its receipt.

A consumer must keep records of the quantity of ENM received and the supplier's name and address. These records must be kept for six years.

ENM must not be mixed with any other types of waste to maximise future re-use opportunities.

Testing requirements

ENM must be sampled, tested and contain contaminant levels less than the criteria listed in the ENM order before the material is transported to the receiving site. Sample collection and testing methodology is detailed in the ENM order.

Additional testing (beyond the ENM criteria) is only required if there is evidence that potentially-contaminating activities previously took place on the excavation site (for example, former service station site, cattle tick dip site, banana plantation, asbestos or lead-painted infrastructure). If this is the case, specialist advice should be obtained from Environment and Sustainability on additional test requirements.

Written records of all test reports must be kept for six years.

Transporting requirements

It is a Transport requirement that records must be kept for six years and include as a minimum:

- [Notice under section 143](#)
- amount of ENM generated, stored, treated or disposed of
- amount of ENM transported
- name of transporter and transporter's vehicle registration number
- date of transportation
- name and location of the facility that is receiving the ENM.

Disposal requirements

Transport for NSW has a target of 100% beneficial re-use of ENM.

Every effort must be made to re-use ENM on- or off-site before considering disposal. If disposal is the only option, justification of disposal must be documented and the material taken to a licenced waste facility, licenced to accept General Solid Waste (non-putrescible).

Contact and further information

Internal: [Environment and Sustainability Management Framework - Waste](#)

All users: environmentandsustainability@transport.nsw.gov.au