APPENDIX D – FACT SHEET VIRGIN EXCAVATED NATURAL MATERIAL (VENM)

What is virgin excavated natural material?

Virgin excavated natural material (VENM) refers to natural material (such as clay, gravel, sand, soil or rock fines):

- 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 any sulfidic ores or soils or any other waste.

VENM, by its nature, can be re-used easily. VENM may be sent offsite to a site that can legally accept this material for re-use or reprocessing.

Waste classification

All waste must comply with the general solid waste requirements of the NSW EPA <u>Waste Classification Guidelines</u> – <u>Part 1: Classifying Waste.</u>⁶ VENM is pre-classified as 'general solid waste (non-putrescible)'. For more information, <u>see the EPA website</u>.⁷

How do I classify my excavated material as VENM?

Excavated material must meet all aspects of the above definition to be classified as VENM. Generators of excavated material must consider the following questions to determine if the soil is VENM. The NSW EPA website provides a <u>VENM certificate template to be used to certify material as VENM</u>.⁸

Has the soil been contaminated by land-use activities?

Generators of VENM must consider if past and present land-use activities on the site could contaminate the excavated material. This also includes impacts from offsite sources such as contaminated groundwater.

Material can only be classified as VENM if it has been excavated from an area that is not contaminated with manufactured chemicals or process residues as a result of industrial, commercial, mining or agricultural activities.

Land uses that could result in contaminants being present in an excavated material include:

- acid/alkali plant and formulation
- agricultural/horticultural
 activities
- airports
- asbestos production and disposal
- chemical manufacture and formulation
- defence works
- drum reconditioning works
- dry cleaning establishments
- electrical manufacturing (transformers)

- electroplating and heat treatment premises
- engine works
- explosives industry
- gas works
- iron and steel works
- landfill sites
- metal treatment
- mining and extractive industries
- oil production and storage
- paint formulation and manufacture
- pesticide manufacture and formulation

- power stations
- railway yards
- scrap yards
- service stations
- sheep and cattle dips
- smelting and refining
- tanning and associated trades
- waste storage and treatment
- wood preservation

Note: residential housing built prior to 1969 can result in lead contamination of soil, and is often encountered after demolition.

⁶ http://www.epa.nsw.gov.au/resources/wasteregulation/140796-classify-waste.pdf

⁷ http://www.epa.nsw.gov.au/waste/virgin-material.htm

⁸ <u>https://www.epa.nsw.gov.au/your-environment/waste/classifying-waste/virgin-excavated-natural-material</u>

Is the site identified within a high-risk probability area for acid sulfate soils?

VENM cannot contain sulfidic ores or soils. Acid sulfate soil risks have been mapped across the state to determine the probability of acid sulfate soils. These are available on the <u>CSIRO website.</u>⁹

If the site is identified as having a high-risk probability of having or potentially having acid sulfate soils, the material will require laboratory testing before it can be classified as VENM.

Does the material contain any form of asbestos (naturally occurring or otherwise)?

The waste cannot be classified as VENM if it contains naturally occurring asbestos soils or any other type of asbestos-containing material.

Is there any other waste present, or has the material been processed?

VENM cannot contain any other waste or be 'made' from processed soils. Excavated material that has been processed in any way (such as by adding lime to acid sulfate soils) cannot be classified as VENM. VENM should not be mixed with any other types of waste.

Is chemical assessment necessary?

If the material meets the above definition for VENM, it can be re-used onsite or offsite without prior testing. If there is uncertainty as to whether all aspects of the definition have been met, chemical testing may be required. If the source of the material is identified as having a high-risk probability of having or potentially having acid sulfate soils, then laboratory testing for acid sulfate soils is required.

Do I need to obtain a section 143 from the landholder if I dispose of VENM offsite (for example, as fill material)?

Yes. When disposing of VENM offsite to a private or publicly owned site, you must issue the landholder with a copy of the letter and a section 143 notice (Appendices F and G of this guide). The landholder must complete, sign and return the section 143 notice to the waste generator prior to the waste being transported to the landholder's site.

Are there any legal waste transport or tracking requirements?

No, but, as a minimum and for due diligence, you should keep records of the:

- amount and type of waste material generated, stored, treated or disposed of
- amount and type of waste transported
- name of the transporter and the transporter's vehicle registration number
- date of transportation
- name and location of the waste management facility that is receiving the waste material.