

Waste Management on National Road Schemes: Soil & Stone Waste Prevention

David Flynn

Programme Manager, Environmental Protection Agency

Disclaimer I am not a lawyer and this presentation is not legal advice. It is intended as a general summary and for discussion purposes only. Always refer to the original legal texts and case law.

Waste Prevention

- Focusing on preventing soil and stone materials becoming waste.
- EPA has published (19/10/18), for public consultation, a specific Regulatory Position on Soil & Stone By-products.
 - LINK
 - Consultation ends 5.00pm on 14 December 2018.
- Submissions are invited by email only to Article27@epa.ie to be received no later than 5pm on 14 December 2018.

What's in this for you (and your clients)?

1) How to prevent waste (& costs) by planning for your excess soil and stone materials to be used elsewhere as a by-product and not discarded as a waste.

2) How to accept **by-product** soil and stone materials for use in construction (and stay within the law).

By-product √

By-product?



What is a waste?

'waste'

means any substance or object which the holder discards or intends or is required to discard.

'waste holder'

means the waste *producer* or the natural or legal person who is in *possession* of the waste.

'Prevention'

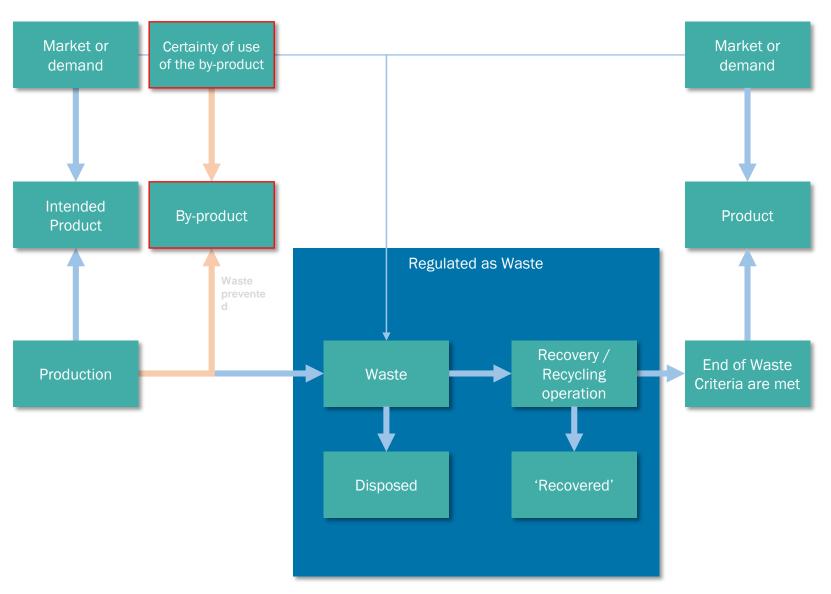
means measures taken *before* a substance, material or product has become waste...

What is never a waste?

- Unexcavated land.
 - Including contaminated land,
 - buildings connected to land

- Uncontaminated soil excavated during construction and reused on the site where it was excavated.

Mapping waste and non-waste



Once a material is waste....

End-of-waste criteria for that product determine when the product ceases to be waste.

End-of-waste criteria

- commonly used for specific purposes;
- a demand exists;
- fulfils the technical requirements, legislation and standards; and
- the use will not lead to overall adverse environmental or human health impacts.

It is best to prevent the waste being generated.

Generating a "by-product"...

In summary, excess soil and stone resulting from excavation works can be a by-product and not a waste, if the following conditions are met;

- Further use of the soil and stone is certain.
- The soil and stone can be used directly without further processing other than normal industrial practice.
- The soil and stone is produced as an integral part of a production process (e.g. building a road).
- <u>Further use is lawful</u> in that the soil and stone fulfils all relevant requirements for the specific use and will not lead to overall environmental or human health impacts.

If the criteria are met, then the substance or object in question will not be discarded.

Certainty of use

- Establish that there is an obvious need for all the material.
- Show that the timescale of use is known (or not uncertain).
- Show that the material is not a burden for the producer.
- Flow of financial benefit can be a good indicator of waste or by-product.
- Show a strong, established need elsewhere for the material (e.g. rock for engineering works).

Is use lawful...

- Show that the specific use will **not** lead to overall adverse environmental or human health impacts.
- Show that it fulfils all requirements for the **specific** use
 - Is it exempt development?
 - Has the use planning permission for the specific use?
 - Is the specific use within the terms of the planning conditions?
 - If licensed or permitted, is the specific use within the conditions of the permit or licence?

Using a by-product...

To avoid accepting 'waste' onto your project site...

- Apply the by-product tests in reverse.
- Look for the evidence (not opinions...).
- Go and see the origin site, verify its origin.
- Have written contracts (with the producer is better).
- Look for records and keep your own records.

If it is waste, you will have become the holder and so will have legal responsibilities!

Case study



55,000 tonnes of stone, from the deepening of the north channel of Dingle Fishery Harbour

- Use is certain in the N86 Tralee to An Daingean Road Project
- Used directly, equivalent to quarried stone
- Produced as an integral part of harbour works
- Use is lawful and meets engineering specifications for use in the N86 Project

A few key points...

- Design stage planning is key to preventing waste.
- Waste law is interpreted in light of the protection of human health and the environment.
- The intent of the holder is key. Intent is inferred from the holder's actions
 - Ensure that your actions demonstrate that it is a byproduct.
 - Just because a material is useful to others does not mean it is not waste.
 - Just because a material is uncontaminated does not mean its not waste.

If in doubt, ask – your local authority waste section or the EPA.

Thanks



article27@epa.ie

WASTE ACCEPTANCE CRITERIA AND DEVELOPMENT OF SOIL TRIGGER VALUES FOR EPA-LICENSED SOIL RECOVERY FACILITIES



Kevin MotherwayWaste and Financial Provision Team
Office of Environmental Enforcement

IAH Technical Meeting 20/11/18

EPA Licensed Soil Recovery Facilities

- Third Schedule of the Waste Management (Facility Permit and Registration) Regulations 2007 (S.I. No. 821 of 2007) as amended.
- Applies to soil & stone recovery facilities
 >100,000 tonnes
- Typically LoW:
 - 17 05 04 Soil and stones other than those mentioned in 17 05 03
 - 17 05 06 Dredging Spoil
 - 20 02 02 Soil and stones



What type of facility

- Soil & Stone Recovery Facility (SRF)
- Not a landfill
 - ■No requirement for basal liner
 - ■No requirement for cap
 - Not covered by Landfill Directive
 - or any requirements that stem from it
 - ■Not covered by 2003/33/EC or "Landfill WAC"
 - Presumes the protections of a landfill infrastructure hence the risks the materials pose are mitigated

2003/33/EC

Article 1

This Decision establishes the criteria and procedures for the acceptance of waste at landfills in accordance with the principles set out in Directive 1999/31/EC and in particular Annex II thereto.

Article 2

Member States shall apply the procedure as set out in section 1 of the Annex to this Decision to determine the acceptability of waste at landfills.



Soil Recovery Facility Licences

- Typically backfill of quarries
- 12 Facilities Licensed (15 Soil Recovery Licenses issued, 3 revised licences)
- 7 appear Active
- 4 not started or paused
- 1 Full/Completed

Licensed Waste Activities

Licensed Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Management Act 1996 as amended

Class R 5 (P).	Recycling/reclamation of other inorganic materials, which includes soil cleaning resulting in recovery of the soil and recycling of inorganic construction materials.
Class R 13.	Storage of waste pending any of the operations numbered R 1 to R 12 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is produced).



Total Licensed Soil & Stone Capacity

Currently Licensed

Total National capacity
19.8M Tonnes

Annual National capacity
3.4M Tonnes

Substantial number of LA permitted sites



Wastes acceptable for SRF

Greenfield sites:

Acceptable, subject to meeting agreed Waste Acceptance Criteria.

Non-greenfield sites where the risk of contamination from chemical or solid materials is low:

Acceptable, subject to meeting agreed Waste Acceptance Criteria.

Non-greenfield sites where there is an increased risk of contamination

Not acceptable such materials should not be accepted at soil recovery facilities. Waste soil and stone from such sites



Draft Guidance

- Draft Guidance Note on Soil Recovery Waste Acceptance Criteria (link) in December 2017
 - Proposed methods and limits to be considered by licensees when proposing acceptance criteria to the Agency
 - Consultation period was late-2017 to 16th March 2018
 - Applicability to permitted sites
 - Local Authorities can set limits themselves as appropriate
 - Draft Guidance not drafted for Local Authority purpose however......
 - working with Eastern-Midlands Regional Waste Management Office



Responses to consultation

- In the order of 20 detailed responses
- Numerous concerns/views expressed:
 - Should apply to all soil recovery facilities...not just licensed sites
 - Continue use of 2003/33/EC
 - Metals:
 - Consultation draft: 90 %-ile of National Soil Database
 - Levels of metals in some natural soils/subsoil are set too low (As, Ni, Cd)
 - Metals should be on leachable levels not total metal content
 - Levels of organic contaminants are set too low
 - Consider WAC based on Site Specific Risk Assessments
 - Qualifications of suitably qualified person
 - System too heavy handed for small volumes of material
 - Specify testing requirements



Next Steps

- Detailed assessment of consultation submissions
- Consider the scope of the document
- Issues of Metals in natural materials
- Timeframe



Work in Progress

- Resolve issues with baseline values for metals in soils
- Aim to take regional/local natural variations into account
 - Possible use of more localised geochemical values
 - Teagasc NSDB/ Soil Geochemical Atlas(link)
 - TELLUS Programme Geological Survey of Ireland (Soil & Subsoil) (link)
 - Possible Site Area specific methodology
- Ongoing work
 - Geological Survey of Ireland
 - Eastern-Midlands Regional Waste Management Office



