

East Land Quality Forum

Reuse of Soils



Materials Management Plans Overview and Pitfalls

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Re-use of soils is all about waste.

What is waste?

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

(Article 3, Paragraph 1 - European Waste Framework Directive)

- In a geo-environmental context, waste is most often ‘soil’.
- Offsite disposal of the material to landfill = waste.
- But if you re-use material, are you using waste?

What is not waste

- Soil is excluded from the Waste Framework Directive (under Article 2(1)(c)) (i.e. not waste) when:
 - uncontaminated;
 - excavated during construction activities; and
 - certain to be used in its natural state for construction purposes on the same site.
- Commercial products are not waste:
 - Recycled aggregate (if produced in accordance with the 2013 WRAP '*Quality Protocol: Aggregates from inert waste*').
 - Commercial topsoil (natural or manufactured).
 - Quarried stone.

Simplifying the interpretation for soils:

- Sites where contaminated soil / Made Ground is present – becomes a waste on excavation (unless it is never intended to be discarded).
- Sites where only uncontaminated, natural soil is present – becomes a waste upon leaving the site.

It is the responsibility of the holder of a material to form their own view on whether that material is waste or not.

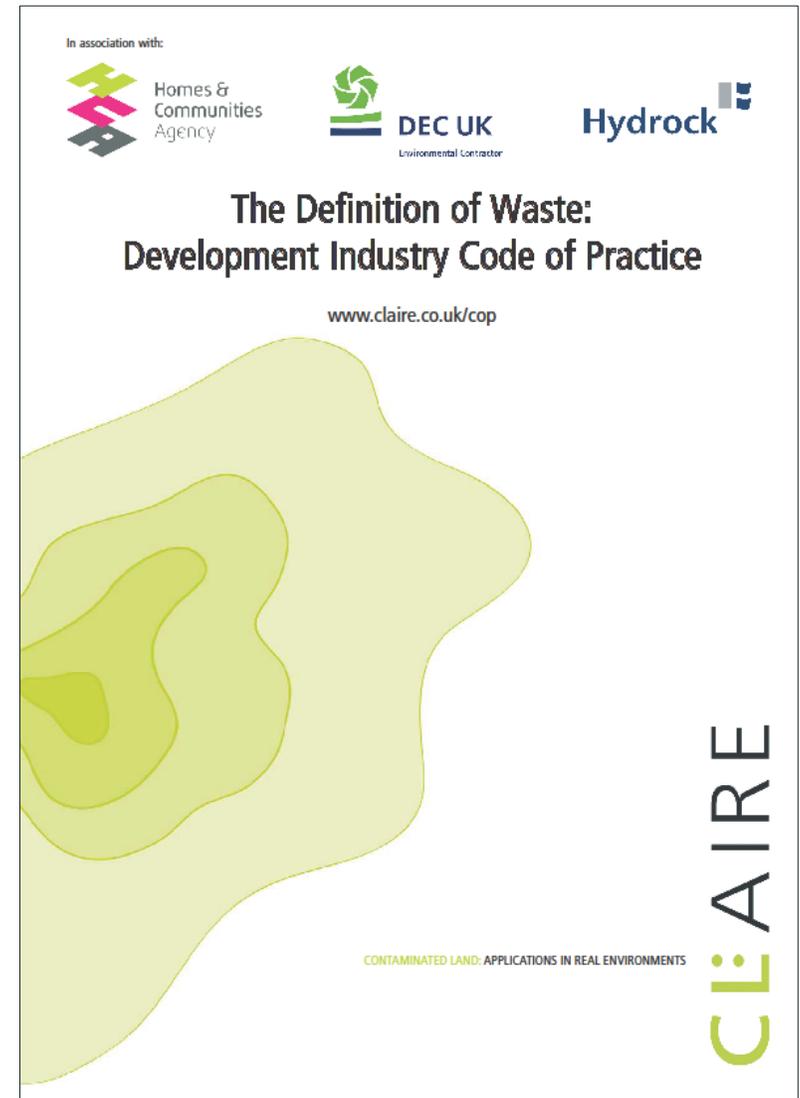
Or to put it another way.....

It is up to the developer to prove that the material is not a waste.

The best way to prove that the material is not a waste is by completing a Materials Management Plan in accordance with the 'Definition of Waste: Development Industry Code of Practice' (DoWCoP)

DoWCoP Version 2:

- Is an Industry Code of Practice.
- Applies to excavated materials.
- Provides a framework which allows the holder of a material to come to a view on waste and to demonstrate how they did so.



DoWCoP

- The Environment Agency will take into account the DoWCoP (as interpreted in the MMP) in deciding whether to regulate the materials as waste.
- If materials are dealt with in accordance with the DoWCoP the Environment Agency “*considers that those materials are unlikely to be waste if they are used for the purpose of land development*”.

When are MMPs not needed

- During site investigation.
- Disposal off site to a registered waste management facility.
- If another mechanism is already in place:
 - Waste exemption (most commonly U1 exemption).
 - Waste recovery permit (either Standard Rules or Bespoke).
 - WRAP Quality Protocol.
 - If you have negotiated an alternative with the EA.

What's changed?

Why is this on everyone's radar now?

Biggest Change – Teeth to the Regulators.

MMPs required since 2008. However, from 1 April 2018:

- Sites operating without the appropriate environmental disposal permit and operators of illegal waste sites will be liable for Landfill Tax.
- All material at illegal sites on 1 April 2018 and any material disposed at such sites after this date will be caught by the tax.

No MMP, Exemption or Permit = illegal waste site.

The implications of this are covered by other speakers.....

DoWCoP and MMPs: Key Points

Three routes:

Re-use on Site of Origin

Site of Origin
(Suitable for use with no Treatment - no Permit)



Site of Origin
(Suitable for use with Treatment - Permit Required)



Direct Transfer

Greenfield to Greenfield (no Permit)



Greenfield to Brownfield (no Permit)



Brownfield to Brownfield (Permit on one of the sites)



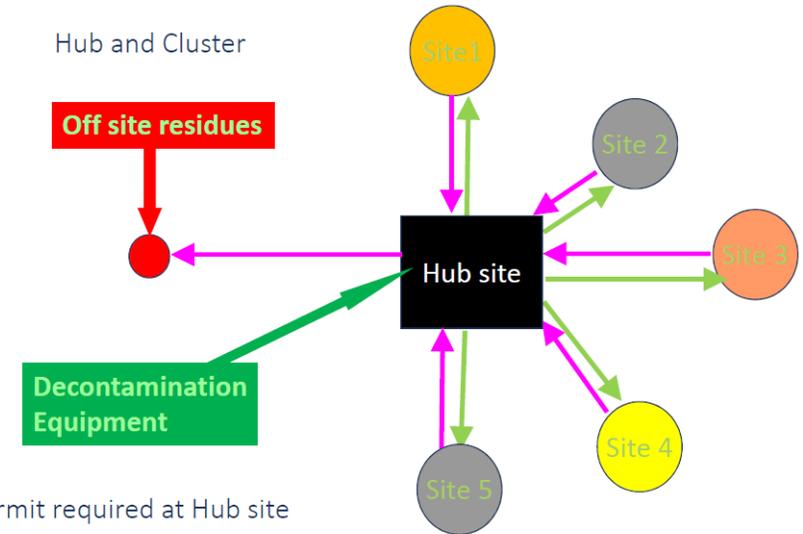
Hub and Cluster

Hub and Cluster

Off site residues

Decontamination Equipment

Permit required at Hub site



- Must be pre-planned, retrospective MMPs are not allowed

DoWCoP and MMPs: Key Points

- Materials are only considered to be waste if they are discarded, intended to be discarded or required to be discarded, by the holder.
- There is no single factor that can be used to determine if something is a waste or when it ceases to be waste.
- Lines of evidence approach – Four Factors.
 - *Protection of human health and environs.*
 - *Suitable for Use.*
 - *Certainty of Use.*
 - *a Defined Quantity is used.*

Spot the Difference?



This is Waste



This is not Waste.

Anyone want to guess what the difference is?

The one of the right satisfies the Four Factors of DoWCoP.

Four Tests

- Factor 1: Protection of human health and protection of the environment
 - Measures to protect the environment and prevent harm to human health have to be assessed and found to be adequate for the proposed use.
- Factor 2: Suitability for use, without further treatment
 - A material must be suitable for its intended purpose.
 - Both its chemical and geotechnical properties have to be demonstrated to be suitable, and the relevant specification for its use must be met.

Four Tests

- Factor 3: Certainty of Use
 - The holder of the material must be able to demonstrate that the material will actually be used and that the use is not just a probability, but a certainty.
- Factor 4: Quantity of Material
 - Materials should only be used in the quantities necessary for that use, and no more.
 - The use of an excessive amount of material will indicate that it is being disposed of, and is waste.

What about “Unsuitable” Contaminated Soils – can these be used?

- Yes.
- If treatment is needed the materials will be waste, but may cease to be waste once treated to render them suitable for use.
- Treatment will need to be undertaken using an Environmental Permit e.g.,
 - bio-remediation;
 - Stabilisation;
 - sorting and segregation (often overlooked)



The MMP

The DoWCoP is administered by CL:AIRE on behalf of the Environment Agency.

The MMP is a standard form for recording the lines of evidence.

Materials Management Plan (MMP) Form

This form should be completed once the lines of evidence have been marshalled in relation to suitability for use, certainty of use and quantity required. The answers to the questions posed within this form, together with the supporting information will constitute the MMP and must be provided to the Qualified Person.

A Qualified Person may comment on draft versions of this MMP, but will not complete the Declaration until all the relevant documents, demonstrating lines of evidence have been provided for each site.

The person / organisation who will pay the Declaration fee should confirm that they have read and understand the Terms and Conditions relating to the payment of the Declaration fee to [CL:AIRE](#). These can be found on the [CL:AIRE](#) website.

The person / organisation agreeing to pay the Declaration Fee - Name, organisation and contact details <u>inc.</u> email address	
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I confirm I have read and understood the Terms & Conditions.

Each question must be answered. If the question is not applicable please state this and provide a brief explanation.

1. Specify the scenario to which this MMP relates, as described in the Definition of Waste: Development Industry Code of Practice (DoW CoP) (1, 2, 3 or 4):

- 1. Reuse on the Site of Origin
- 2. Direct Transfer of clean naturally occurring soil / mineral materials
- 3. Cluster Project
- 4. Combination of any of the above

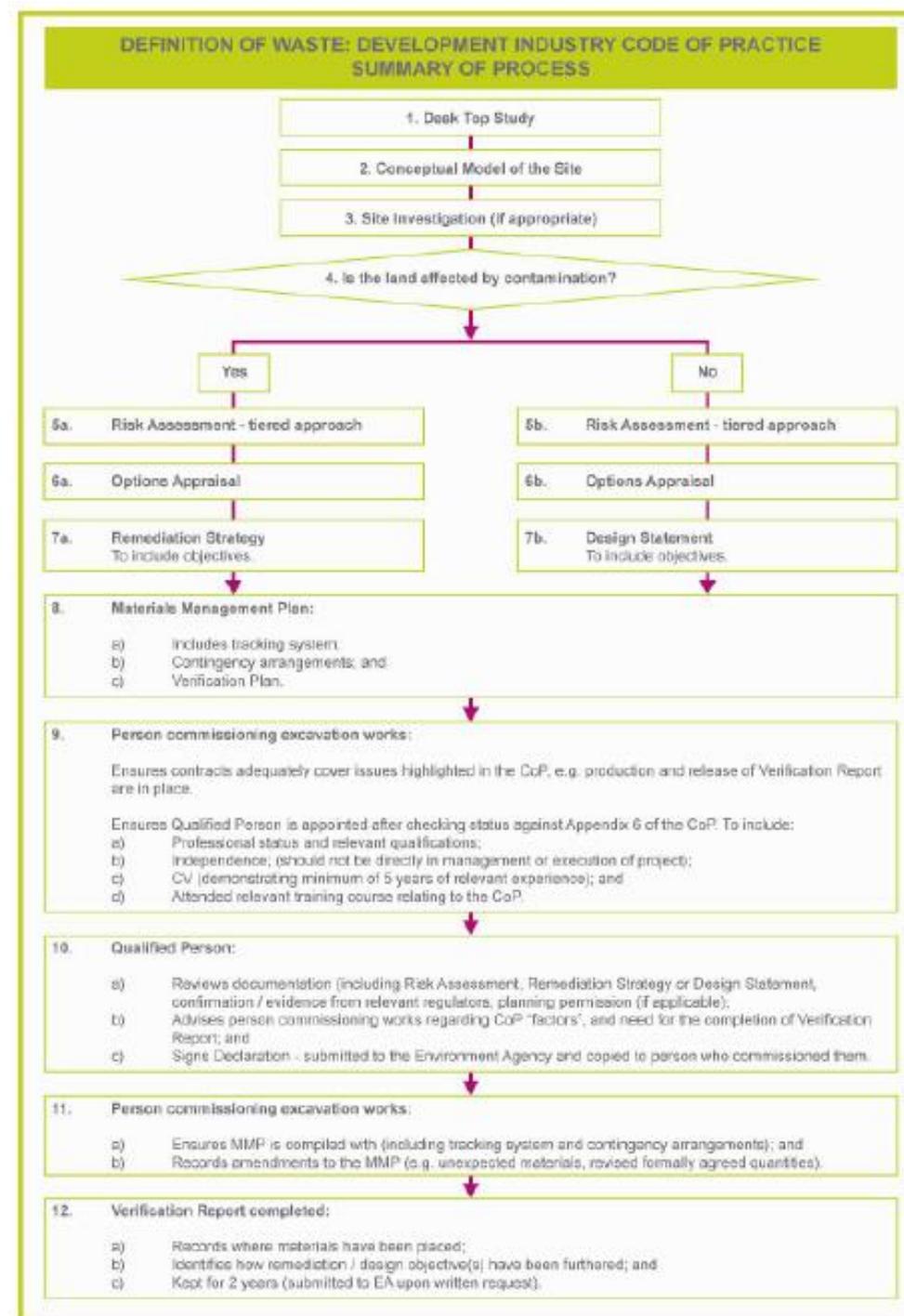
In the case of a combination of reuse scenarios, please describe it below (e.g. (i) Reuse on Site of Origin and Direct Transfer of clean naturally occurring unpolluted soils, (ii) Reuse on the Site of Origin with Direct Transfer of clean naturally occurring soil to x number of development sites etc:

(NB: A Declaration is required for reuse on the Site of Origin and for any [2 site](#) arrangement i.e. there is no facility for a combination Declaration)

2. Organisation and name of person preparing this MMP	
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Route to Compliance

- Background information:
 - Desk Study;
 - Site Investigation and Risk Assessment;
 - Options Appraisal;
 - Remediation Strategy / Design Statement;
 - Geotechnical Design and Earthworks Specification.
- Materials Management Plan
 - Proof the Four Factors are satisfied.
- Qualified person declaration.
- Verification.
- CL:AIRE registration.



Pitfalls

- Lack of Client 'buy in' – seen as a 'Tick Box' exercise.
- Too little time to obtain evidence (timescales to collate the MMP) – most information is out there, just not in the form needed - time to collate / check / edit.
- Lack of Remediation Strategy or Design Statement.
- Geotechnical performance of materials often overlooked. Lack of geotechnical design and Specification.

Pitfalls

- Badly planned and incorrectly modelled materials quantities from the client / contractor (late changes).
- Finding out where materials are originating and their intended destination.
- Lack of evidence of regulator engagement / approval. This is both in terms of:
 - Planning permission and discharge of conditions e.g. acceptance of the desk study, SI and remediation strategy.
 - Usage of materials and no objection from the EA e.g. fits with their opinion on the material not being and never becoming a waste.



Pitfalls

- Requirement for environmental permit (if needed) – processing?
- Lack of commitment to verify work.
 - Chemical testing.
 - Geotechnical testing.
 - Movement and placement logs.
 - Final level surveys.
- Importance of watching brief and verifying what has occurred during construction (good record keeping).

Summary

- A significant majority of soils can be re-used.
- Re-use is subject to meeting DoWCoP.
- Four Factors and Lines of Evidence is crucial.
- The MMP must have a declaration by a Qualified Person.
- The pitfalls can be summarised as a lack of:
 - Information to prove the four factors.
 - Time to collate / obtain evidence.
 - Materials management planning.
 - Evidence of regulator engagement.
 - Understanding (requirement / roles / verification / risk).