This bulletin serves to provide the reader with some of the key information contained in the Definition of Waste: Development Industry Code of Practice (CL:AIRE, 2011).

1. INTRODUCTION

Since its initial release in September 2008 the Code of Practice has built a portfolio of successful sites which indicate a range of benefits to its users:

- **Economic**
  - Lower development costs, especially when compared with traditional landfillsing of materials. CL:AIRE has a Case Study Bulletin (CSB 9) showing savings of over a million pounds in landfill tax alone.
  - Lower transport costs as less distance to another development site than a landfill.
  - Reduced need for importation of other materials, e.g. quarried products.
  - Working to the Code of Practice is considered less expensive than applying for, working under and formally surrendering an Environmental Permit.
  - Provides a clear, consistent, systematic and more certain approach utilising documentation normally associated with land development procedures.
  - Quicker to marshal information into a Materials Management Plan and have it reviewed by a Qualified Person than applying for a Standard Rules Environmental Permit or Bespoke Environmental Permit.
  - Less complex than waste legislation.

- **Environmental**
  - Promotes the use of materials in accordance with the waste hierarchy
    - waste being minimised
    - waste that is produced is recovered and reused;
    - less waste will be sent to landfill.
  - Natural resource consumption will be less, e.g. quarried product and fuel.
  - Reduced vehicle emissions and contribution to a reduced carbon footprint of the development process.
  - Pollution of the environment and harm to human health is prevented.

- **Social**
  - Bringing brownfield and contaminated land back in to beneficial use
    - hence preserving greenfield land
    - creating communities on the developed land
  - Blight issues associated with the use of materials classified as waste on a development site will no longer exist.
  - Reduced vehicle movements (e.g. less congestion, improved air quality and less disturbance).

Overall the Code of Practice helps promote the sustainable development agenda; it can become an indicator for an organisation’s commitment to this subject as well as becoming part of their Corporate Social Responsibility.

2. BACKGROUND

This Code of Practice sets out good practice for the development industry to use when assessing whether excavated materials are classified as waste or not. It also allows the determination, on a site specific basis, when treated excavated waste can cease to be waste for a particular use. Further it describes an auditable system to demonstrate that this Code of Practice has been adhered to.

If materials are dealt with in accordance with this Code of Practice the Environment Agency (EA) considers that those materials are unlikely to be waste if they are used for the purpose of land development. This may be because the materials were never discarded in the first place, or because they have been submitted to a recovery operation which has been completed successfully so that they have ceased to be waste.
Good practice has three basic steps:

1. Ensuring that an adequate Materials Management Plan (MMP) is in place, covering the use of materials on a specific site;
2. Ensuring that the MMP is based on an appropriate risk assessment, that underpins the Remediation Strategy or Design Statement, concluding that the objectives of preventing harm to human health and pollution of the environment will be met if materials are used in the proposed manner; and
3. Ensuring that materials are actually treated and used as set out in the MMP and that this is subsequently demonstrated in a Verification Report.

To confirm that steps 1 and 2 have been taken, a “Qualified Person” reviews the relevant project documents and provides a Declaration to the EA prior to the use or dispatch of materials.

**Intended Audience**

The Code of Practice is directly applicable to those who commission earthworks, their appointed engineers, contractors (including specialist remediation contractors), consultants and regulatory authorities. All of these parties have a role to play if a site is being developed under this approach. It will be of particular interest to landowners and developers due to its potential to save significant amounts of money in comparison to traditional disposal alternative.

**Scope**

The Code of Practice is voluntary and applies to England and Wales only; the arrangements and requirements are different in Scotland and Northern Ireland for which separate guidance exists. It relates to excavated material, which includes:

- Soil, both top soil and sub-soil, parent material and underlying geology;
- Soil and mineral based dredgings (only if appropriate dewatering has taken place);
- Ground based infrastructure that is capable of reuse within earthworks projects, e.g. road base, concrete floors (permitted controls may apply);
- Made ground;
- Source segregated aggregate material arising from demolition activities, such as crushed brick and concrete, to be reused on the site of production within earthworks projects or as sub-base or drainage materials; and
- Stockpiled excavated materials that include the above.

The Code of Practice applies to both uncontaminated and contaminated material from man-made and natural sources excavated:

- For use on the site from which it has been excavated, either without treatment or after on-site treatment (required treatment is an indication a material is a waste) as part of the development of that land (i.e. Site of Origin scenario);
- For use directly without treatment at another development site subject to the material meeting the requirements set out in Appendix 2 of the Code of Practice (i.e. Direct Transfer scenario);
- For the use in the development of land other than the site from which the material has been excavated, following treatment at a Hub site which is covered by an Environmental Permit including a fixed Soil Treatment Facility (STF) acting in this capacity (i.e. Cluster Project scenario); or
- Combination thereof.

Depending on the sites involved and the nature of the projects other options may be more appropriate than using this Code of Practice in excavating and reusing those materials, for example:

- Waste Exemption — small volumes, non-hazardous waste classification, recovery only;
- Standard Rules Environmental Permit — replaces the traditionally used Waste Exemptions - Paragraph 9 and 13 but can take several months to obtain;
- Bespoke Environmental Permit — greater volumes than standard rules, applicable to more waste streams but can take several months to obtain; and
- WRAP Aggregates Quality Protocol — allows for inert aggregate waste to be recovered and used at any site subject to meeting set standards.

3. **THE PRINCIPLES FOR THE USE OF MATERIALS AS NON-WASTE**

Materials are only considered to be waste if they are discarded, intended to be discarded or required to be discarded by the holder. Once discarded, they remain a waste until fully recovered. This remains the case even when the holder of the waste changes and the subsequent holder has a use for it.

When deciding whether or not a material is discarded it is important to take account of the aims and objectives of the Waste Framework Directive and the need to ensure that they are not undermined. The primary aim of the Waste Framework Directive is the protection of human health and the environment.

There is no single factor that can be used to determine if something is a waste or when it ceases to be waste. However in the context of excavated materials used on sites undergoing development the following factors are considered to be of particular relevance.
Factor 1: Protection of human health and protection of the environment.

Ensure that the aim of the Waste Framework Directive is not undermined. All measures to protect the environment and prevent harm to human health have to be assessed and found to be adequate given the proposed use of the materials. If the use of the material will create an unacceptable risk of pollution of the environment or harm to human health it is likely to be waste.

Factor 2: Suitability for use.

The material must be suitable for its intended purpose in all respects, in particular, both its chemical and geotechnical properties. Certain excavated materials may be suitable for their intended use in the proposed development without any treatment at all. If they are used in that way those materials are unlikely to be waste. If treatment is needed in order to make the material ready for use the material will be waste but may cease to be waste once treated so as to be suitable for use.

Factor 3: Certainty of Use.

Demonstrate that the material will actually be used and that the use is not just a probability. For example, if materials are stockpiled with no pre-defined destination and use, they will still be waste.

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 still waste.

In order to demonstrate these four factors a Materials Management Plan is produced which helps to ensure that the above matters are considered and a correct determination is made in relation to the nature of the materials.

4. MATERIALS MANAGEMENT PLAN

The Materials Management Plan should set out the objectives relating to the use of the materials and should accompany a Remediation Strategy or Design Statement, which has been derived using an appropriate risk assessment. It should bring together all the relevant information to demonstrate that all four key factors will be met and include a tracking system and contingency arrangements. The Materials Management Plan template is hosted on the CL:AIRE website and available as a separate downloadable document.

A Verification Plan has to be set out in the Materials Management Plan. It must identify how the placement of materials will be recorded and the quantity of material to be used. Further, it should contain a statement on how the use of the materials relate to the remediation or design objectives. Once the development has been completed a Verification Report must be produced that demonstrates that the materials have been located in the correct place within the development or dealt with appropriately.

5. QUALIFIED PERSON

A Qualified Person must review the evidence relating to the proposed use of materials on a specific site and if satisfied, will sign a Declaration and submit it to the EA. A copy of the declaration is also immediately supplied to the person commissioning the excavation. The Declaration serves as a notification to the EA that a site is to be developed using the Code of Practice. The copy sent to the person commissioning the Qualified Person serves as a reminder that the Materials Management Plan must be followed and that a Verification Report has to be completed.

In order to act as a Qualified Person an individual must possess certain attributes which are fully outlined in the Code of Practice document – Appendix 6.

6. VERIFICATION REPORT

As mentioned in Section 4, a Verification Report must be produced which provides an audit trail to show that materials and wastes have gone to the correct destination. The Report needs to show how the use of materials links with the objectives defined in the Remediation Strategy or Design Statement such that they have been furthered or fully met.

The Verification Report is not part of the Materials Management Plan and is often prepared anyway as part of existing site requirements (e.g. as part of a planning consent or as part of the ‘as-built’ site file on handover). Nevertheless, the Verification Report must document any changes that may have been made to the Materials Management Plan i.e. what alterations to the project have been formally made and/or contingency arrangements have been implemented.

7. SCENARIOS COVERED BY THE CODE OF PRACTICE

Use on the Site of Origin

The Site of Origin for the purpose of this Code of Practice is a single readily identifiable site which can include:

- The area covered by a specified planning permission;
- The area covered by a single detailed Remediation Strategy;
- The area covered by a single detailed Design Statement, e.g. pipeline route, proposed road; and
- The area covered by an agreed Deployment Form in relation to the use of an Environmental Permit which encompasses the development activity where materials are to be used.

Excavated materials can be used directly within the development subject to it being suitable for use, or following on site treatment. The on site treatment should be progressed under an appropriate Environmental Permit or Waste Exemption.
Direct Use of Clean Naturally Occurring Soil and Mineral Materials on another Development Site (Direct Transfer)

Clean naturally occurring soils and mineral materials can be directly transferred from one site to another development site for use, without the need for waste legislation being applied (i.e. the receiving development site does not require an Environmental Permit or Waste Exemption). Clean for the purpose of this document is defined as “devoid of anthropogenic contamination to a degree or level that is considered harmful to living organisms”.

“Clean naturally occurring soil and mineral materials” includes:

- Soil, both top soil and sub-soil;
- Parent material such as underlying rock from which constituent parts make up part of the soil;
- Clays, silts, sands and gravels;
- Underlying geology; and
- Made Ground consisting of the above materials only, e.g. embankment which is to be removed and is suitable for use without any processing.

The materials must be sourced from either greenfield sites not subject to past contaminative use (for example, from chemical spillage, on-farm landfills / carcass burial), or from brownfield sites where the natural soils have been extensively characterised and proven to be clean. Such materials must be capable of direct use without the need for treatment in line with the key factors described in Section 3.

Cluster Projects

The Cluster approach is designed to aid the remediation and / or development of a number of sites that are located in relative close proximity by sharing a decontamination/treatment facility located on one of the sites - the Hub. A key principle of a Cluster Project is that the activity is temporary. It may be established in relation to the transfer and use of excavated materials between sites and the remediation of one or more sites affected by contamination. Excavated materials from Donor sites are sent for treatment at the Hub site as waste and upon successful treatment are returned or used at the Hub site as non-waste. The Hub site treatment activities are regulated under the Environmental Permitting regime.

Fixed Soil Treatment Facilities

Fixed Soil Treatment Facilities are established on a permanent basis and accept wastes from a variety of waste producers. A fixed Soil Treatment Facility may perform the role of a Hub site within a defined Cluster project as described in the previous section. Operators of Soil Treatment Facilities may not always have a pre-determined plan for where treated wastes will ultimately be used in relation to development sites.

Excavated wastes are taken to a fixed Soil Treatment Facility under waste legislation, e.g. by a registered waste carrier, Duty of Care Transfer notes (non-hazardous and inert waste) or consignment notes (hazardous waste). The wastes are treated, as appropriate, at the Soil Treatment Facility and are tracked from acceptance, through treatment and subsequent stockpiles. Potential receiving development site operators need to provide the Facility operators with their derived suitable for use criteria. The Soil Treatment Facility then approaches the EA to gain approval to transfer and use treated materials via establishment of a new Cluster project.

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Reference


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