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The Definition of Waste: Development Industry Code of Practice

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CONTAMINATED LAND: APPLICATIONS IN REAL ENVIRONMENTS

CL: AIRE

The Definition of Waste: Development Industry Code of Practice

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Foreword by CL:AIRE

The original version of the Code of Practice (CoP), which was launched in September 2008 has significantly helped organisations involved in the development of land and its remediation, increasing the sustainability of their methods and approaches. The record of use for the CoP shows that over time it has become a preferred approach to the management of materials on their site of origin and beyond using the Cluster method.

However, even whilst the original document was being launched, many people recognised that the scope could be further extended significantly. The past two and a half years have been an important period of confidence building in this new approach to regulation. It has been pleasing to note what has been successfully achieved and this has allowed the further extension to the scope of the CoP.

CL:AIRE has worked hard over the last two years, not only to train many of the individuals who have gone on to become 'Qualified Persons' but also in maintaining the register of these people. The register of environmental benefits for the initiative has also been assimilated and interrogated. We have worked hard on the promotion of the initiative, presenting at many national and regional events, and often acting as the first port of call for general enquiries on the subject.

We hope that the next two years will bring as much success as has been achieved to date. We encourage all users of the document to take responsibility for its continued good use and help with supporting its continuing development through financial contributions, technical feedback and registering of site information.

CL:AIRE would like to thank all members of the steering group for all their hard work in reaching the next milestone of this initiative. In particular, the Homes and Communities Agency, DEC UK Ltd and Hydrock have provided essential funding contributions, a key requirement for arriving at this stage.

We would like to acknowledge the commitment from the Environment Agency, who continue to work on developing this CoP, with Industry through CL:AIRE.

Should you have any enquiries regarding the CoP, please do email us at codeofpractice@claire.co.uk or call us on 020 7258 5321.



Foreword by the Homes and Communities Agency

I am delighted to provide a foreword to this Code of Practice (CoP); it is an important step forward in this area.

The Homes and Communities Agency is the national housing and regeneration agency for England and the re-use of brownfield land is essential to our work. For instance, our regeneration programmes, such as the National Coalfields Programme, directly tackle the problem of long term derelict sites that blight communities, turning them into places that people want to live in, work, and spend their leisure time. We are also the Government's Specialist Advisor on wider brownfield issues and work to assist local authorities to develop Local Brownfield Strategies to ensure that all available brownfield land is identified and that the development and environmental potential of each site is assessed. As we begin moving towards our new enabling role specified by Government, the support of initiatives like this will be crucial to maximise our impact.

The prevalence of brownfield sites and levels of deprivation often go hand in hand. This can especially be the case with small sites, where their adverse impact can affect large areas out of proportion to their physical size. The reuse of brownfield land promotes regeneration, providing homes and jobs, helping eliminate urban blight bringing social and health benefits and protecting the countryside while easing the pressures on our green belt.

However, the real, or often simply perceived costs, difficulties and regulatory uncertainties involved in redeveloping brownfield frequently puts off potential investors. The processes outlined in this document take significant steps to address all three issues and to make brownfield development much simpler. Now, for the first time, materials issues and sharing between sites can be considered outside of the regulatory context and rightly as a sustainability issue from the earliest stages of site or project development. This will assist not only developers, but also forward thinking local authorities in local development plans to consider how sites may be combined to facilitate development. We look forward to using this document and working with local partners to try to progress the Cluster approach to make more streamlined decisions and cost savings – something to be welcomed.

I am proud that the HCA is involved with this CoP, as well as that of the inter-related UK-Sustainable Remediation Forum, and want to make sure we continue to ensure we can develop policy which meets the critical objectives of sustainable development, environmental protection, cost effectiveness, whilst at the same time reducing the regulatory burden on industry.



Richard Hill
Deputy Chief Executive
Homes and Communities Agency



Homes &
Communities
Agency

Prefaces

Building upon the game-changing and thriving Code of Practice (CoP) that successfully and transparently allowed self-regulation, the revisions included with this second version will further allow sustainable remediation and development of land. The continued suitable reuse of recovered materials initially classified as waste or contaminated treats the soils as a resource the industry should be proactively managing and not passively dismissing.

The straightforward structure and ease to use of the CoP has been as much a part of its success as the aims it was created to achieve and this second version continues in this tradition. Although the CoP remains a voluntary process, I see very few arguments for professional teams not using it on even greater numbers of projects and in wider ranging applications such as treatment centres and more hub and Cluster sites as the sector continues to recover.



A handwritten signature in black ink, appearing to read 'Philip Norville'.

Philip Norville
Business Development Manager
DEC UK Limited

This version of the CoP builds on earlier work to allow the industry to use materials sustainably within an appropriately robust technical and regulatory framework. All involved in its production, and in particular the Environment Agency, should be proud of what has been achieved.



A handwritten signature in black ink, appearing to read 'Mike Higgins'.

Dr Mike Higgins
Director
Hydrock

Acknowledgements

This voluntary Code of Practice (CoP) has been prepared by CL:AIRE in consultation with and contributions from representatives from the development and remediation industries and the Environment Agency. Financial support for the preparation of this version of the CoP has been kindly provided by:

- Homes and Communities Agency;
- DEC UK Limited; and
- Hydrock.

Particular thanks are extended to the members of the CoP Steering Group and their respective organisations:

- Clive Boyle, Environmental Industries Commission
- Dr Richard Boyle, Homes and Communities Agency & SAGTA¹
- Phil Crowcroft, Environmental Industries Commission
- Ged Duckworth, GD Environmental
- Frank Evans, SAGTA¹
- Lisa Hathway, National House-Building Council
- Dr Mike Higgins, Hydrock (representing Cluster operators)
- Doug Laidler, SAGTA¹
- Philip Norville, DEC UK Limited (representing fixed Soil Treatment Facility operators)
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CL:AIRE or any members of the Steering Group do not accept any responsibility or liability in relation to how this document may be used by any third party.

¹ SAGTA: Soil and Groundwater Technology Association (<http://www.sagta.org.uk/>). This is a not-for-profit association of member organisations drawn from UK companies representing many major land holding sectors. Its members actively address challenges associated with the ownership and management of both contaminated operational land and brownfield development sites. Building on more than a decade of experience, SAGTA is the authoritative voice of contaminated land from a land holder's perspective.

Document Control

Document	The Definition of Waste: Development Industry Code of Practice	
	Issued	Revisions
Version 1	September 2008	
Version 2	March 2011	<ol style="list-style-type: none"> 1. Increased scope to include Direct Transfer of naturally occurring soil materials (including elevated natural contaminants). 2. Explanation about the use of a fixed Soil Treatment Facility within Cluster Projects. 3. A Materials Management Plan (MMP) template (available as separate download on CL:AIRE website). 4. Declaration specific to project scenarios (Qualified Person registration number must be quoted to confirm registered at time of completion). 5. Declaration submitted prior to use (not prior to excavation). 6. Declaration not required for the transfer from Donor to Hub site (Duty of Care still applies). 7. Role of Qualified Person updated and further clarity provided, including Qualified Person checklist, and who can appoint them. 8. Interaction of CoP with Site Waste Management Plans, Defra CoP and SEPA guidance tabulated in Appendix 7. 9. Frequently asked questions regarding construction activities that do not require an Environmental Permit (formerly Annex A of EA guidance) in Appendix 8. Updates, if necessary, will appear on the CL:AIRE website www.claire.co.uk/CoP.

The intention is to update this document as necessary. The document control sheet identifies the date of publication, current version number and a brief description of the changes made since the last revision. Reference should be made to the CL:AIRE website to obtain the most up to date version – www.claire.co.uk/CoP.

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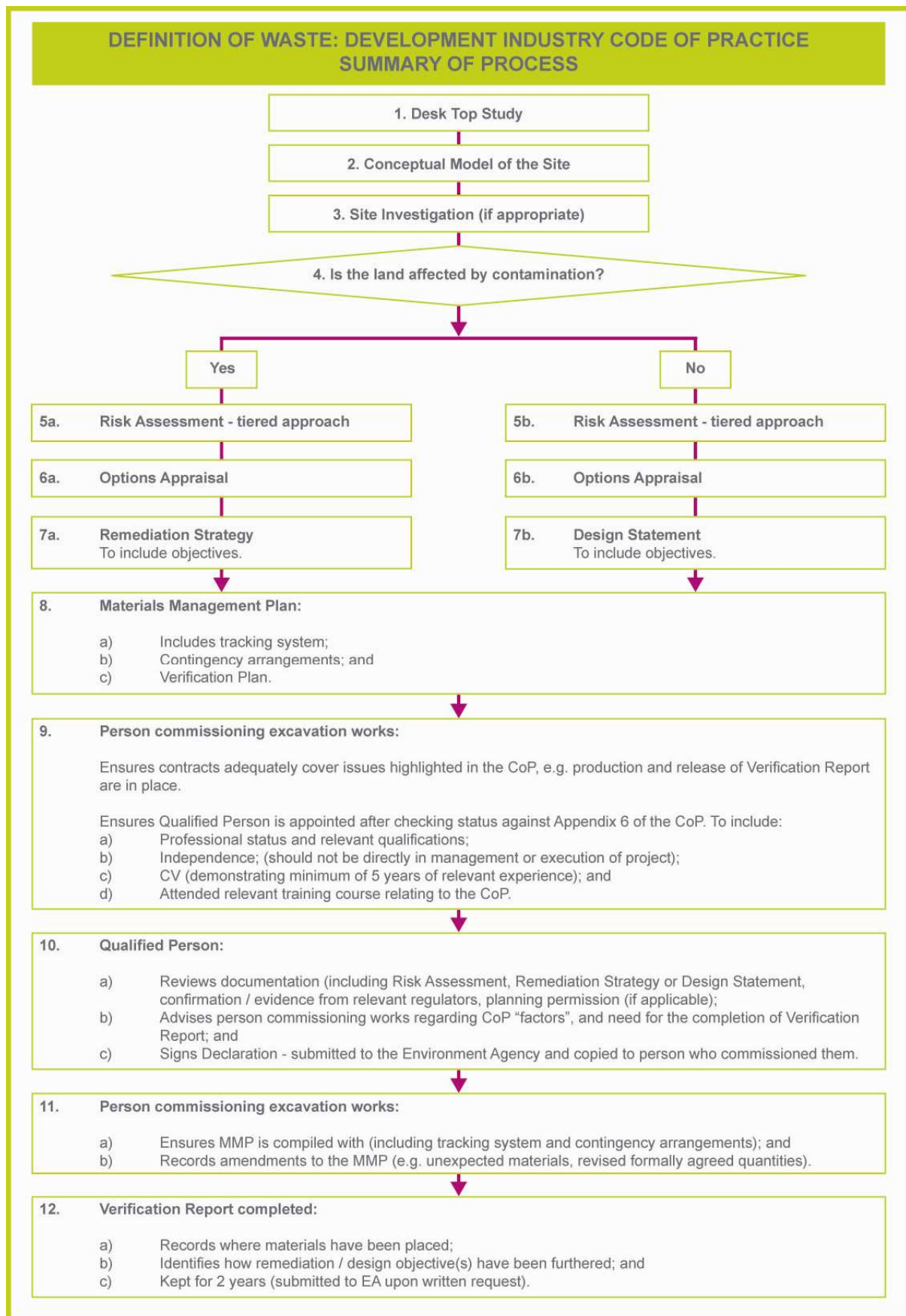
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1 Introduction

1.1 Purpose

1.1 This Code of Practice (CoP) serves the following purposes:

- It sets out good practice for the development industry to use when:
 - i. Assessing on a site specific basis whether excavated materials are classified as waste or not; and
 - ii. Determining on a site specific basis when treated excavated waste can cease to be waste for a particular use.
- It describes an auditable system to demonstrate that this CoP has been adhered to.

1.2 It is the responsibility of the holder² of a material to form their own view on whether that material is waste or not. This CoP allows the holder to come to that view and to demonstrate how they did so having regard to current law. This requires a degree of self-regulation and relies upon a high level of professional integrity on the part of those involved.

Watch Point 1: Understanding the requirements of this CoP

The person commissioning the excavation works is responsible for complying with this CoP.

It is incumbent upon all other persons employed in the project/scheme, e.g. engineer, consultant, contractor, to ensure that the requirements of the CoP are met.

Therefore, the whole project team must understand the requirements of this CoP.

1.3 The Environment Agency (EA) will take account of this CoP in deciding whether to regulate the materials as waste. If materials are dealt with in accordance with this CoP the EA considers that those materials are unlikely to be waste if they are used for the purpose of land development (see paragraph 1.12). This may be because the materials were never discarded in the first place, **or** because they have been submitted to a recovery operation and have been completely recovered so that they have ceased to be waste.

1.4 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.

² The 'waste holder' means the waste producer or the natural or legal person who is in possession of the waste (Waste Framework Directive 2008).

- 1.5 To confirm that steps 1 and 2 have been taken, a Qualified Person must review the relevant documents and provide a Declaration to the EA prior to the use of materials (see paragraph 3.26). When the Declaration is provided to the EA demonstrating that the materials are to be dealt with in accordance with the MMP, the EA subject to the comments in the following paragraph, will take the view that the materials are not waste.
- 1.6 If it turns out that materials were not used in accordance with the MMP and risk assessment, or if it is discovered that materials are not suitable for use, are used or planned to be used in excessive quantities (see paragraph 3.9), or are likely to cause harm to human health or pollution of the environment, the EA may conclude that those materials have been discarded and are waste. In order to prove that materials have been treated and used in an acceptable manner, a Verification Report must be prepared at the conclusion of works (as per step 3) and, if requested, provided to the EA. Completion of a Verification Report will not prevent consideration of the above matters by the EA.
- 1.7 If excavated materials are used without following this CoP, the EA may take the view that the excavated materials are waste and are thus subject to legislative control.

Watch Point 2: Treatment activities

Excavated materials that are to be treated on or off site are generally considered to be waste. The treatment facility operator must have an appropriate Environmental Permit or register a Waste Exemption allowing that particular treatment of the excavated materials. The Declaration can be produced and submitted prior to treatment on the assumption that treatment will be successful.

However, there are some notable exceptions to this position. Appendix 8 has various Frequently Asked Questions regarding construction activities that may not require an Environmental Permit or Waste Exemption.

NB - Crushing and screening of materials to make them suitable for use needs to be covered by an Environmental Permit or Waste Exemption.

1.2 Intended Audience

- 1.8 This CoP 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 CoP. It will be of particular interest to landowners and developers.

1.3 Scope

- 1.9 The CoP is voluntary and applies to England and Wales only³. It remains the case that demonstrating if a material is waste or not, or when it ceases to be waste, can be made without reference to this CoP on a case by case basis. It is likely, however, that an

³ The arrangements and requirements are different in Scotland and Northern Ireland. SEPA has published "Regulatory guidance – Promoting the sustainable reuse of greenfield soils in construction (March 2010) and Northern Ireland Environment Agency has published "Guidance on the Regulation of Greenfield Soil in Construction and Development" (June 2010). It is important to note that this CoP has a more formalised risk based approach than the SEPA and NIEA guidance and relates to a wider range of excavated and treated materials and a wider range of reuse scenarios (see Appendix 7).

acceptable site specific demonstration will draw upon very similar lines of evidence to those detailed in this CoP.

1.10 The CoP relates to excavated material, which includes:

- Soil, both top soil and sub-soil, parent material and underlying geology;
- Soil and mineral based dredgings⁴;
- Ground based infrastructure that is capable of reuse within earthworks projects, e.g. road base, concrete floors⁵;
- Made ground;
- Source segregated aggregate material arising from demolition activities, such as crushed brick and concrete⁵, 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.

1.11 The following materials are outside the scope of the CoP:

- Soils which have been contaminated with injurious invasive weeds except for soils that are used on the site of production in accordance with relevant best practice guidance, e.g. Japanese Knotweed Code of Practice;
- Specific excavated infrastructure material, such as pipework and storage tanks⁶;
- General construction wastes, e.g. plasterboard, glass, wood, etc;
- Demolition wastes not included in paragraph 1.10 above; and
- Extractive waste within the scope of Mining Waste Directive (2006), for which alternative regulatory provisions have been made.

1.12 This document applies to both uncontaminated and contaminated material from anthropogenic and natural sources excavated:

- For use on the site from which it has been excavated, either without treatment or after on-site treatment⁷ 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 (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 an authorised Hub site⁸ including a fixed Soil Treatment Facility (STF) acting in this capacity (i.e. Cluster Project scenario); or
- Combination thereof.

⁴ Dredged material will not be considered as suitable for use until the appropriate amount of dewatering has taken place and is a waste. The dredged material can subsequently be put to use in earthworks as a non-waste once it is confirmed that it will not need to undergo any further treatment.

⁵ Such materials may require processing in line with permitted controls before they can be considered suitable for reuse.

⁶ The EA's concerns centre on potentially polluting substances that can be associated with infrastructure e.g. pipes and tanks that may have residue products within them, concrete with adhered tar, etc. Other excavated infrastructure can be reused under the CoP, subject to meeting all relevant criteria.

⁷ The fact that the material has to be treated indicates that it is a waste i.e. it is not suitable for use until it is treated.

⁸ An authorisation means an Environmental Permit under the Environmental Permitting (England and Wales) Regulations 2010.

Table 1 shows the types of material and their use in different scenarios as set out in this CoP.

Table 1: Material types and CoP scenarios

Scenario / Material types	Soil	Dredgings	Made ground	Ground based infrastructure	Stockpiled excavated materials	Source segregated aggregate *
Site of Origin	✓	✓	✓	✓	✓	✓
Direct Transfer (clean naturally occurring materials only)	✓	✓	X **	X **	✓	X **
Cluster Project (including STF)	✓	✓	✓	✓	✓	X ***

Notes:
 * As described in paragraph 1.10.
 ** Not naturally occurring materials.
 *** CoP only relates to excavated materials. In this version the scope has been formally extended to allow the reuse of source segregated aggregate material on the Site of Origin. Movement of demolition material to another site should be carried out under waste legislation, unless the WRAP Quality Protocol (2004) for the production of aggregates from inert waste applies or the material has otherwise met the end of waste test.

- 1.13 It should be noted that this CoP relates to the issue of whether or not materials should be classified as waste. If the requirements of this Code are complied with the material will not be waste. If the material is waste an Environmental Permit will be required to lawfully deposit or re-use it unless the material is “uncontaminated soil and other naturally occurring material excavated in the course of construction activities where it is certain that the material will be used for the purposes of construction in its natural state on the site from which it was excavated”, which is excluded from waste regulation by the Waste Framework Directive (2008).
- 1.14 In this CoP “land development” includes redevelopment, remediation and regrading. This document therefore applies not only to development carried out under the development control regime (and sites benefiting from permitted development rights), but also to remediation activities which may occur outside of that regime⁹, e.g. remediation and reuse of materials as a direct result of a spillage or leak on an industrial site or at the surrender stage of a permit.
- 1.15 Please note that land development or remediation does not include landspreading, landfilling or other waste disposal operations. Such activities are beyond the scope of this CoP.
- 1.16 Appendix 1 explains in detail how this CoP is applied to the Site of Origin scenario.
- 1.17 Appendix 2 explains in detail how this CoP is applied to the Direct Transfer and reuse of clean naturally occurring soil and mineral materials between one site and another.
- 1.18 Appendix 3 explains in detail how this CoP is applied to Cluster Projects, including how this CoP applies to fixed STFs acting in the capacity of a Hub site within such projects.

⁹ It is recommended that the Local Planning Authority is consulted with regard to what activities need a new permission or not.

1.19 The following issues although relevant to the development of land are not addressed in detail within this CoP (as guidance can be found in other publications):

- Waste classification and European Waste Codes (although relevant in taking waste to a Hub site (or STF acting in that capacity));
- Pre-treatment prior to landfilling;
- Testing strategies (although relevant in demonstrating “suitable for use” criteria have been met);
- Remediation and construction methods;
- Environmental Permits and exempt waste operations under the Environmental Permitting (England and Wales) Regulations 2010 (formerly Waste Management Licences and Exemptions from licensing); and
- The status of unexcavated wastes subject to in-situ treatment.

1.4 Context

1.20 The CoP builds upon the EA guidance document “Definition of waste: Developing greenfield and brownfield sites” (2006). This CoP represents the further work identified in that document. Readers are referred to the EA Regulatory Position Statement on their website.

Watch Point 3: Quality protocols

The WRAP Quality Protocols Technical Working Groups for both contaminated soils and top soils recommended the further development of this CoP in preference to the production of a Quality Protocol for either waste stream.

One reason for this is the multifunctionality element of the Quality Protocol programme which does not align with the site specific “suitable for use” and “risk based approach” to land use and re-development in the UK.

However WRAP did produce a “Quality Protocol for the production of aggregates from inert waste”. This protocol relates to materials that are not “excavated” as well as those which are. It enables the reuse of aggregates between sites with no restrictions. Therefore, depending on the source of the material to be used compliance with the Quality Protocol may be a more appropriate route to enable the re-use of such aggregate type materials, e.g. demolition and processing of a building with resultant aggregate to be reused at another development site.

1.21 The CoP provides the following benefits:

- **Environmental:**
 - i. Promotes the use of materials in accordance with the waste hierarchy:
 - waste being minimised;
 - waste that is produced is recovered and reused; and
 - less waste will be sent to landfill¹⁰;
 - ii. Natural resource consumption will be less, e.g. quarried product and fuel;
 - iii. Reduced vehicle emissions and contribution to a reduced carbon foot print of the development process; and
 - iv. Pollution of the environment and harm to human health is prevented.

¹⁰ Consider signing up to reduce your waste going to landfill by 50%. See “Time for a New Age – Halving waste to landfill: seize the opportunity” WRAP 2009 www.wrap.org.uk.

- **Social:**
 - i. Bringing brownfield and contaminated land back in to beneficial use;
 - ii. hence preserving greenfield land;
 - iii. creating communities on the developed land;
 - iv. Blight issues associated with the use of materials classified as waste on a development site will no longer exist; and
 - v. Reduced vehicle movements (e.g. less congestion, air quality and disturbance).
- **Economic:**
 - i. Lower development costs¹¹;
 - ii. Lower transport costs as less distance to another development site than a landfill¹²;
 - iii. Reduced need for importation of other materials, e.g. natural quarried products;
 - iv. Working to the CoP is considered less expensive than applying for, working under and formally surrendering an Environmental Permit;
 - v. Provides a clear, consistent, systematic and more certain approach utilising documentation normally associated with land development procedures;
 - vi. Quicker to marshal information in to a MMP and have it reviewed by a Qualified Person than applying for a Standard Rules Environmental Permit or Bespoke Environmental Permit;
 - vii. Less complex than waste legislation¹³; and
 - viii. Lower regulatory costs.

Overall the CoP helps take forward the sustainable development agenda.

- 1.22 It is hoped that working to the CoP will itself become an indicator of an organisation's commitment to sustainable development and be recognised within an organisation's Corporate Social Responsibility policies and performance reporting.
- 1.23 In using this CoP, particularly for works involving land contamination, working knowledge of the following will be necessary:
- "CLR11: Model Procedures for the Management of Land Contamination" (Defra and EA 2004);
 - Cluster Guide (CL:AIRE, in preparation);
 - "Guidance on the sampling and characterisation of wastes";
 - "Remediation Methodologies" and EA "Remediation Position Statements" (EA website);
 - "Industry Profiles" (Department of the Environment) and "Contaminated Land Reports" (CLR series);
 - "Verification of remediation of land contamination" (EA, 2010); and
 - BS 10175:2001 "Investigation of potentially contaminated sites – Code of practice".

¹¹ Especially when compared with traditional landfilling of materials e.g. waste characterisation tests, Waste Acceptance Criteria tests, Duty of Care / Consignment note procedures, haulage costs, gate fee, landfill tax.

¹² Also note the anticipated reduction in available sites operating under a Waste Exemption (namely Paragraph 9 and 19).

¹³ Easier to understand, hence less likely to fall foul of the law.

Watch Point 4: Waste Acceptance Criteria

If materials not requiring any further treatment are to be used as non-waste in accordance with this CoP, there should be no automatic need to classify that material as inert, non-hazardous or hazardous or to determine if it meets with Waste Acceptance Criteria.

It is the “suitable for use” criteria that are important given the risk based approach adopted within the CoP. (Note, however, the limitations set out in relation to the Direct Transfer scenario detailed in Appendix 2).

- 1.24 It is envisaged that in the future additional good practice guidance may be published that will be of direct relevance to matters within this CoP. As these are published they will also be relevant references to consider in preparing documents required by this CoP.

Watch Point 5: Alternative waste regulatory options

This CoP is voluntary. Readers may wish to consider other options than using this CoP 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 19) 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.

Notes:

Treatment of waste requires an Environmental Permit e.g. Standard Rules Bespoke Mobile Treatment Permit or Waste Exemption.

* See EA (March 2010) “Defining Waste Recovery: Permanent Deposit of Waste on Land”.

2 Principles for the use of Materials as Non-Waste

- 2.1 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.
- 2.2 In deciding whether or not a material is discarded you should take account of the aims and objectives of the Waste Framework Directive and the need to ensure that these aims are not undermined. The primary aim of the Waste Framework Directive is the protection of human health and the environment¹⁴.
- 2.3 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.

2.1 Factor 1: Protection of human health and protection of the environment

- 2.4 The need to ensure that the aim of the Waste Framework Directive is not undermined is the overriding principle in all situations when considering whether a material is discarded. Therefore, in all cases 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.

2.2 Factor 2: Suitability for use, without further treatment

- 2.5 Suitability for use means that a material must be suitable for its intended purpose in all respects. In particular, both its chemical and geotechnical properties have to be demonstrated to be suitable, and the relevant specification for its use must be met.

Watch Point 6: Environment where materials are to be used

Suitability for use also includes consideration of the effect that the material may have on the environment where it is to be used.

In demonstrating suitability biological considerations also come in to play, e.g. presence of invasive species or other substances, e.g. Knotweed, anthrax spores, and also the effects of any radioactivity.

¹⁴ Article 14 of the Waste Framework Directive requires the necessary measures to be taken to ensure that waste is recovered or disposed of without endangering human health and without using processes or methods which could harm the environment, and in particular:

- a) without risk to water, air or soil, or to plants or animals;
- b) without causing a nuisance through noise or odours; and
- c) without adversely affecting the countryside or places of special interest.

- 2.6 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. For example some materials may be assessed as being suitable for direct use, e.g. engineered backfill beneath cover layers, capping layers, buildings and hard standing or for site regrading. Use for the purposes of reclamation, restoration or landscaping may fall within this category. Landfilling or disposal does not.
- 2.7 Other materials may not have the required characteristics for use without first being treated. If treatment is needed in order to make the material ready for use the materials will be waste but may cease to be waste once treated so as to be suitable for use (subject to the other criteria set out in this Section). This treatment may be biological, chemical, physical or any combination of these and will need to be carried out under an appropriate authorisation.
- 2.8 Some materials, although they do not require treatment to make them suitable for use, may nonetheless be regraded or compacted before or during their use as part of the development of a site. This regrading or compacting does not prevent the material being regarded as a non-waste.

2.3 Factor 3: Certainty of Use

- 2.9 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. For example, if materials are stockpiled with no pre-defined destination and use, they will be waste.
- 2.10 In the process of site development surplus material may be generated that cannot be used either directly or after treatment. For example, the material may not conform to the required specification following treatment and in such a case the material would remain a waste.
- 2.11 There may be unexpected arisings on a development site that were not picked up within the site investigation works. Any out of specification materials which are not suitable for use will be waste and will need to be disposed of or recovered in the proper manner and in accordance with waste legislation.

2.4 Factor 4: Quantity of Material

- 2.12 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.

2.5 Demonstrating the Four Factors

- 2.13 The production of a Materials Management Plan (MMP) will help to ensure that the above matters are considered and a correct determination is made in relation to the nature of the materials.

- 2.14 If the MMP (including the supporting evidence) does not demonstrate that all the factors have been considered and adequately addressed then the Qualified Person should not sign the Declaration.

3 Methods of Demonstrating that Material is Not Waste or has Ceased to be Waste

- 3.1 In order to demonstrate that the factors set out in Section 2 have been satisfied, a Materials Management Plan (MMP) has to be produced. The objectives relating to the use of the materials have to be set out in the MMP. The MMP should accompany a Remediation Strategy or Design Statement, which has been derived using an appropriate risk assessment. The MMP formally marshals all the relevant information to demonstrate that all four factors in Section 2 will be met and includes a tracking system and contingency arrangements. The MMP template is hosted on the CL:AIRE website and available as a separate downloadable document¹⁵.
- 3.2 A Verification Plan is an integral part of the MMP. Upon completion of these documents a Qualified Person is required to sign a Declaration. Once the development has been completed in accordance with the MMP a Verification Report must be completed that demonstrates that the materials have been located in the correct place within the development or dealt with appropriately.
- 3.3 Flow Diagrams No. 1, No. 2 and No. 3 (within Appendices 1, 2, and 3, respectively) illustrate the process set out in this CoP in relation to the use at the **Site of Origin**, **Direct Transfer** and within a **Cluster Project**, respectively.

3.1 Two Development Routes

- 3.4 This CoP is aligned with the Model Procedures for the Management of Land Contamination (Model Procedures EA, 2004). This applies where land is contaminated, or suspected of being contaminated. There is no similar published framework available where land is not suspected of being contaminated. Therefore this CoP adopts a similar approach in both cases, with the notable exception that a Design Statement replaces the Remediation Strategy in the second case.

Watch Point 7: Remediation Strategy or Design Statement?

Every project progressed under the CoP will need to follow one of these routes *:

- **Route A) Remediation Strategy - Model Procedures**
Where contamination is present or suspected then decisions about the categorisation of materials within the ground for use should be risk based and accord with the Model Procedures for the Management of Land Contamination **.
- **Route B) Design Statement**
Where contamination is not suspected the following approach should be adopted: Completion of a desk top study; site investigation (if applicable) and appropriate assessment to verify the materials suitability. Documentation of materials management proposals via a Design Statement. Subsequently a Verification Report has to be completed detailing materials use. The detail required for these documents is likely to be far less than for the Model Procedures route, e.g. the assessment of materials suitability (including inherent

¹⁵ The MMP Form has been produced as a separate document to allow updates to be made without the need for the whole CoP to be revised and a new version issued. The previous version of the CoP provided a framework to work within. However, the EA audits of the first year of use of the CoP found inconsistency and missing data, therefore a MMP Form has now been developed. It can be downloaded from www.claire.co.uk.

risks to the environment of its reuse) may be qualitative, not necessarily quantitative as would be the case when assessing risk to the environment from contaminated materials.

Notes:

* This includes where Permitted Development Rights apply.

** This includes those materials that may not be contaminated which are on the same site i.e. there is no need to prepare a Remediation Strategy only for the contaminated parts and a Design Statement for the uncontaminated parts.

3.2 Materials Management Plan

3.5 A MMP must be produced that documents how all of the materials to be excavated are to be dealt with. The MMP must be followed throughout the execution of the works.

3.6 The MMP must be produced prior to excavation. In summary the MMP provides:

- Details of the parties that will be involved with the implementation of the MMP;
- A description of the materials in terms of potential use and relative quantities of each category (see Box A below);
- The specification for use of materials against which proposed materials will be assessed, underpinned by an appropriate risk assessment related to the place where they are to be used;
- Details of where and, if appropriate, how these materials will be stored;
- Details of the intended final destination and use of these materials;
- Details of how these materials are to be tracked;
- Contingency arrangements that must be put in place prior to movement of these materials; and
- Verification Plan.

3.7 All material to be excavated should be capable of categorisation as indicated in Box A.

Box A: Categorisation of materials within the ground

Materials should be described as per one of the following categorises:

1. Material that is capable of being used in another place on the same site without treatment *;
2. Material that is capable of being used in another place on the same site following ex-situ treatment on site *;
3. Material that is capable of being used in another development site without treatment (see Appendix 2) *;
4. Material that is capable of being used in another development site following ex-situ treatment on another site, e.g. Hub site (see Appendix 3) *;
5. Material that is not capable of being used on the site or elsewhere and requires recovery or disposal off site as waste; or
6. Material that will be surplus to requirements and requires recovery or disposal off site as waste.

Note:

* Having regard to the conceptual site model (receptors and pathways) and appropriate risk assessment of the location where materials are to be used.

3.8 To aid better characterisation, materials may be stockpiled on the Site of Origin and tested prior to making a final decision of where materials are to be moved to. This

should be seen as a refinement to the decision making process and be detailed within the MMP. However a MMP must still be in place prior to excavation setting out the preliminary categorisation of materials as per Box A above.

- 3.9 The quantity of materials that are to be used will depend upon the development being undertaken. Projects must not use more material than is necessary. For simple regrading the inclusion of engineering drawings defining existing and final ground levels with cross Sections within the MMP should be sufficient to demonstrate what quantity is needed. For whole site developments mass balance calculations referenced to the final levels and compared with pre-existing contours prior to the start of the development should be detailed in the MMP.
- 3.10 For particularly large sites that may take several years to develop then a phased approach may be appropriate and a MMP may be developed for each phase, particularly where the responsibility for the materials to be used might change over time. This will ensure that the four factors set out in Section 2 can be properly demonstrated at that particular time in each MMP.

3.2.1 MMP Tracking System

- 3.11 All materials subject to excavation, disposal, treatment and/or reuse must be tracked throughout and evidence generated to provide an auditable trail. In the case of wastes this is achieved via compliance with the Duty of Care requirements, e.g. description of waste and EWC code, completed Transfer or Consignment Notes and accepted at appropriately authorised facility(ies) with waste acceptance procedures set out in the Environmental Permit or Waste Exemption.
- 3.12 The tracking system must include:
- Annotated plans of the site(s) identifying different excavation areas (referenced to site investigation data, as appropriate), stockpile locations, treatment areas (if applicable) and placement locations;
 - Inspection procedures;
 - i. Visual and olfactory;
 - ii. Field tests (as appropriate); and
 - iii. Laboratory confirmation (as appropriate).
 - Registered waste carrier and non-waste haulier (who may be the same person);
 - Tracking form / control sheets (including a running tally);
 - Movement through any authorised treatment facility will also have to be tracked, e.g. stockpiles 1 and 2 from site A and stockpiles (i) and (ii) from site B combined in to windrow A (if applicable) to ensure materials accountability;
 - Treatment results (if applicable);
 - Delivery tickets for non-waste materials (if moving from one site to another):
 - i. Drivers name and vehicle registration;
 - ii. Quantity (running tally for each receiving site / sub area); and
 - iii. Destination (receiving site and / or sub area).
 - Acceptance procedures for non-waste materials:
 - i. Visual and olfactory;
 - ii. Field tests (as appropriate);
 - iii. Laboratory confirmation (as appropriate);
 - iv. Signed delivery tickets (including instructions where to off load, as appropriate); and
 - v. Record of where placed.

- 3.13 Example schematics representing excavated materials and potential destinations are provided in Appendix 4.

Watch Point 8: Contingency arrangements

In recognition that best laid plans may not always work there is a need to have contingency arrangements in place in relation to the movement of wastes and materials. The contingency arrangements must be specific to the project *. The contingency arrangements should cover:

- Out of specification materials, e.g. providing for additional treatment, alternative acceptable location (subject to being demonstrably suitable for use in that alternative location);
- Surplus materials, e.g. recovery or disposal options;
- Who is responsible for such materials/wastes (i.e. who pays for extra treatment, transportation, recovery or disposal, acceptance of return loads);
- Project programme slippage, e.g. stockpile location and management;
- Extended treatment times, e.g. due to plant down time, extreme weather conditions; and
- Identified area for out of specification materials.

Note:

* It is assumed that pollution control measures are already covered in other documentation e.g. Environmental Permit and that there are adequate controls in relation to fugitive dusts, odours, spills and avoidance of the spread of invasive species

3.2.2 Verification Plan

- 3.14 A Verification Plan has to be set out in the MMP. The Verification Plan must identify how the placement of materials is to be recorded and the quantity of material to be used. It should contain a statement on how the use of the materials relate to the remediation or design objectives.

3.2.3 Amendments to the MMP

- 3.15 It is recognised that in some cases, it may not be possible to complete the works in accordance with the MMP. For example, if some out of specification treated material has to be discarded rather than used, or if different volumes of material are needed in certain parts of the site. In this event:

- Any deviations from the original MMP must be recorded in the document control Section of the MMP and may take the form of an addendum to the MMP; and
- Any such changes must subsequently be detailed in the Verification Report

3.3 The Role of the Qualified Person

- 3.16 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 (see Appendix 5) and submit it to the EA. A copy must be immediately supplied to the person commissioning the excavation.

- 3.17 The Declaration serves as a notification to the EA that a site is to be developed using the CoP. The copy to the person commissioning the Qualified Person serves as a reminder

that the MMP must be followed and that a Verification Report has to be completed. It will form part of the audit trail on the completion of the project.

- 3.18 The status and role of the Qualified Person have been developed having regard to the following criteria as set out by the CoP Steering Group and following consultation with industry:
- The actions of the Qualified Person must provide confidence to the EA that best practice is to be followed at sites using the CoP and that there is an effective audit trail relating to what was planned;
 - Responsibilities and possible liability associated with the development project should be no different to prior to the adoption of the CoP; and
 - In employing a Qualified Person there should not be a need for work to be paid for twice by the client.

3.3.1 The Qualified Person

- 3.19 In order to act in this capacity, an individual must possess certain attributes¹⁶ and be recorded as a Qualified Person with CL:AIRE. The requirements for an individual to act as a Qualified Person are contained in Appendix 6.
- 3.20 It is the responsibility of the person or organisation employing the Qualified Person to check that these requirements are met by the individual concerned.
- 3.21 The Qualified Person is required to review various documents but is not expected to be an expert in all of the disciplines associated with a development project that may be carried out under the CoP, e.g. waste legislation, human health and controlled waters risk assessment, all remediation technologies and techniques, remediation design and implementation. However they must be suitably qualified and experienced to be able to carry out the review of the specified documents and be confident in signing the Declaration.
- 3.22 The responsibility of the Qualified Person is limited to review of the documentation detailed in the Declaration. The application of a high standard of professionalism and integrity to this task is a fundamental requirement of this CoP. A Qualified Person who recklessly or falsely completes a Declaration may face disciplinary action from their professional body and may also be subject to waste legislation and hence prosecution under certain circumstances.

Watch Point 9: Working under the CoP

Responsibility for carrying out the development works in an appropriate manner, together with any duty or liability under waste legislation remains with the person commissioning the excavation works and all other persons employed in the chain of work.

The person commissioning the excavation works is responsible for allocating roles and responsibilities to their project team, including contractors and consultants. However, tasks may be sub-contracted. Hence the responsibility for production of documents (e.g. MMP and Verification Report) is not allocated to any particular person in this CoP. The only exception to this is in the case of the Declaration, which must be completed and submitted by the Qualified Person.

¹⁶ Individual “capabilities” may feature in future revisions of this CoP.

3.3.2 The Process

3.23 A checklist of what needs to be done by the Qualified Person is contained in Box B below.

Box B: Qualified Person checklist

The following is an aide-memoir for what needs to be checked by the Qualified Person before they should sign the Declaration:

- Has the correct scenario/development route been identified (A or B)
- Is the site where materials are to be excavated and used adequately described?
- Are the regulators details provided?
- Are all parties involved with the excavation, treatment (if applicable) and use detailed?
- Are the materials to be used within the scope of the CoP?
- Have the materials to be used been adequately characterised?
- Has the MMP being completed (using the template on the CL:AIRE website)?
- Has the MMP been developed on the basis of the correct development route (Route A or Route B)
- Have all the questions within the MMP template been answered satisfactorily?
- Has a satisfactory answer been provided, particularly where a “not applicable” (or similar) appears, e.g. no need for planning permission, no need to consult with a particular regulator?
- Is there evidence to demonstrate that the appropriate regulator(s) have been consulted (or has an adequate explanation been provided for the lack of consultation – see paragraph 3.38 below)?
- Are there appropriate lines of evidence to say that the material to be used is demonstrably “suitable”, e.g. it is not a “sham recovery” operation?
- Are there appropriate lines of evidence to demonstrate that the material is “certain” to be used?
- Are there appropriate lines of evidence to demonstrate that the material to be used is the correct “quantity”?
- Have sufficient lines of evidence been provided to determine that the regulators have no objection in relation to the use of the excavated materials?
- Has the relevant risk assessment been carried out?
- Does the conclusion of the risk assessment demonstrate that the use of the materials will not cause pollution of the environment or harm to human health in the proposed location (if appropriate, following successful treatment)?
- Does the MMP align with the Remediation Strategy / Design Statement?
- If you have signed the Declaration, have you submitted it to the Environment Agency and provided a copy to the person that commissioned you?

3.24 The Qualified Person does not need to:

- Re-work or audit risk assessments;
- Inspect sites or perform field checks;
- Audit or agree a Remediation Strategy or Design Statement;
- Produce, review or agree a Verification Report (however, the client may wish to appoint the Qualified Person to carry out such work given how familiar with the project they will have become. Such an arrangement would be beneficial and is to be encouraged but would be outside of the remit of this CoP); or
- Enter into dialogue with regulators or planning authorities.

3.25 The role of the Qualified Person is deliberately limited to that set out in the CoP. If the Qualified Person was to come across any fundamental error in any of the documentation (this is not just restricted to the risk assessment) then it is expected that they would raise

the issue with the person who commissioned them as a Qualified Person. However, that would be done outside of the requirements of acting as a Qualified Person.

3.3.3 Submission of the Declaration

3.26 A Declaration must be completed and signed by the Qualified Person in the following circumstances:

- Site of Origin scenario – Prior to use;
- Direct Transfer scenario – Prior to dispatch. One for each receiving site; and
- Cluster Project scenario – Prior to dispatch from a Hub site (including a fixed STF acting in that capacity) to each Receiver site within the defined Cluster Project.

3.27 The signed Declaration must be submitted to the EA before the use of materials on the Site of Origin or prior to dispatch in all other scenarios. This should be as soon as practicable ideally no later than one week prior to use / dispatch.

The Declaration should be sent to:

- **Post:** Environment Agency, Environmental Permitting Team, Quadrant 2, 99 Parkway Ave, Parkway Business Park, Sheffield, S9 4WF; or
- **Email:** psc@environment-agency.gov.uk with 'Qualified Person Declaration' in the subject line.

3.3.4 Who Employs the Qualified Person?

3.28 The Qualified Person may be employed by any party involved with the project which is to be progressed under the CoP. This can be the landowner, developer, main contractor, or consultant, working on the Site of Origin, site of dispatch (e.g. Hub site) or site of receipt. The independence criteria for the Qualified Person relates to all of the sites involved (see Appendix 6).

3.4 Verification Report

3.29 A Verification Report must be produced. This provides an audit trail to show that materials and wastes have gone to the correct destination. For the purpose of this CoP the Verification 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, e.g. 500 cubic metres of excavated materials that met the agreed specification was directly used (without treatment) for construction of acoustic bund as identified on drawing xxx; 10,000 cubic metres of treated materials met site specific action levels for use one metre below ground level in southern part of the site in a zone 150 metres from the river.

3.30 The Verification Report must document any changes that may have been made to the MMP as alterations to the project have been formally made and/or contingency arrangements have been implemented.

3.31 The following identifies what should be included within the Verification Report (it is recognised that not all of the requirements will be applicable for all developments proceeding via the Design Statement route and these are marked with an *):

- Appropriate site plans;
- Experience and qualifications of the person preparing the report in relation to the specific project;
- Description of the project;
- Description of how the use of materials links with the Remediation Strategy or Design Statement;
- Reference to site investigation data *;
- Reference to risk assessments (including qualitative risk assessments);
- Reference to the MMP and associated tracking system, including alterations made and why;
- Suitable for use criteria;
- Treatment records *;
- Laboratory analysis *;
- Reference to waste transfer documentation, including return loads (this may not be applicable to the use of materials within the Site of Origin scenario);
- Signed delivery tickets (possibly as an annex or alternatively there must be a clear reference out to them – this may not be applicable to the use of materials within the Site of Origin scenario);
- Record of contingency arrangement(s) that had to be implemented;
- Record of quantity of materials used; and
- Copies of signed Declaration(s) by Qualified Person(s).

Watch Point 10: Timing and content of the Verification Report

It is important to note that some remediation processes continue once a material has been placed in the ground, e.g. curing as part of ex-situ solidification and stabilisation, hence the Verification Report cannot be completed until after this has occurred.

It is also important to note that remediation and design objectives for a site may be far wider than those relevant to waste issues. In effect, verification issues associated with this CoP and materials use should be a clearly well-defined sub-Section of any wider Remediation Verification Report. For developments following the Design Statement route the Verification Report requirement may be a new requirement. However, it is expected that the document will be much shorter than for the Remediation Strategy route (possibly only a few pages).

3.5 Role of the Regulator

- 3.32 The aim of the CoP is to provide a consistent framework and documentary audit trail for decisions regarding whether or not excavated materials are “waste”, within the meaning given by the Waste Framework Directive. These decisions and the audit trail upon which they are based are important, as they influence whether or not the EA will require an Environmental Permit or Waste Exemption to control the use of such materials. Given that a project progressed under the CoP entails good practice and a high degree of professionalism, the EA should not need to enter in to a debate over the status of the excavated materials being used, but obviously reserves the right to do so in appropriate circumstances.
- 3.33 The intention is that the Qualified Person, acting in line with the CoP, will undertake the review of certain documents, which provides the EA with a necessary degree of assurance that the proposals to use excavated materials in that particular setting are

appropriate. This allows the regulator to focus their attention elsewhere on other activities posing a greater threat to the environment.

3.34 The EA will acknowledge receipt of all Declarations that it receives. There is no need to submit any other documentation to the EA under the CoP unless it is specifically asked for, e.g. as part of a formal audit. It is not the intention of the EA to duplicate the role of the Qualified Person in reviewing the MMP.

3.5.1 Liaison

3.35 The intention is not to add any additional steps or consultation with any regulator that was not required prior to the adoption of the CoP.

3.36 However, compliance with the CoP does not remove the need to liaise with the relevant regulator regarding compliance with other legislation, e.g. where contamination is involved. This includes the Town and Country Planning regime, the Contaminated Land regime or the Water Resources Act. For sites where the development requires planning permission liaison with the Local Planning Authority will be expected. They in turn may consult with other organisations in assessing the environmental impact of any reuse proposals. Where planning permission is not involved contact with the EA or the Local Authority will be expected to take place to agree assessments of the risk to controlled waters and human health respectively.

3.37 In particular, the Qualified Person needs to be confident that sufficient evidence is presented for review to show that where contaminated materials are involved (i.e. materials with the potential to cause pollution and/or harm) via “Route A” projects, contact has been made with the regulator to agree risk based remediation or reuse targets. Proof will be required that there have been “no objections” to such proposals.

Table 2: Examples of the types of evidence required for Routes A and B

Route	Type of Evidence
Route A: Where contamination is present or suspected	<ul style="list-style-type: none"> • Actual correspondence, e.g. letters, e-mails, minutes of a meeting etc. clearly showing that a remediation strategy has been agreed and/or there are no objections; • Correspondence showing that the regulator has been approached but has declined to comment in detail on the proposal or has provided generic advice only; • Correspondence showing that a real attempt has been made to engage with the regulator but that no response has been received (a minimum 21 day period should have elapsed before this could be demonstrated); and/or • The planning permission where it provides a clear link to an approved Remediation Strategy (where planning is applicable).
Route B: Where contamination is <u>not</u> present or suspected	<ul style="list-style-type: none"> • Actual correspondence, e.g. letters, e-mails, minutes of a meeting etc. clearly showing that it has been agreed that land contamination is not an issue and/or that there are no objections; • Correspondence showing that the regulator has actually been approached but has declined to comment in detail on the proposal or has provided generic advice only; • A Desk Top Study and/or ground investigation interpretative report which clearly indicates that no contamination is suspected or present, hence no need for consultation in relation to the use of the materials; and/or • A Design Statement which clearly sets out how the materials are to be dealt with which has never the less been agreed with the regulator, e.g. correspondence, minutes or there is a clear link from a planning permission concerning the use of those materials (where planning is applicable).

- 3.38 It is incumbent on those commissioning the Qualified Person to provide sufficient evidence that there is no suspicion of contamination at a site, or that appropriate consultation has taken place with the regulators if contamination is known to be present. Table 2 sets out examples of the type of evidence that may be appropriate in the different circumstances.
- 3.39 With respect to prospective Cluster projects, the EA must be consulted to obtain approval in principle for the project. In the first instance, contact should be made with the local office in which the Hub site is to be located. The purpose of the consultation is to ensure that the Hub site will have an appropriate permit, and that the project as a whole will not be regarded by the EA as a “sham recovery” operation. This does not remove any necessary consultation or approvals relevant to the Local Planning Authority.

Watch Point 11: CoP and Part 2A of the Environmental Protection Act 1990

For land that is formally Determined as Contaminated Land under Part 2A of the Environmental Protection Act 1990, the Local Authority will lead on human health and controlled water issues.

For formally determined contaminated land that has been designated as a Special Site the EA will lead on human health and controlled water issues.

The CoP may be applicable to the use of contaminated and uncontaminated excavated materials at such sites. However, the evidence that the Qualified Person needs may have been provided by a different regulator than if the project progressed through the planning regime.

Watch Point 12: Permitted Development Rights

It is recognised that consultation is unlikely with the Local Planning Authority where an organisation benefits from Permitted Development Rights. However, that does not remove the need to demonstrate that there are “no objections” to the use of the excavated materials at such sites (see paragraph 3.38 above). This is particularly important where utility companies may encounter contaminated materials in the course of laying new pipes and / or maintenance operations (including when carrying out such work on third party land)

3.5.2 Auditing by the Environment Agency

- 3.40 The CoP does not change the statutory powers or duties of the EA, who will continue to oversee and enforce the relevant environmental legislation as necessary.
- 3.41 Occasional inspection of individual sites following the CoP will take place, but normally the trigger for such action would be a complaint, incident or report of illegal activity. A random audit of a selection of sites will also be considered by the EA each year in order to assess the effectiveness of the CoP as a whole. If materials are subsequently found to have been used inappropriately, e.g. in excessive quantities or have caused pollution, harm or nuisance then the materials may be regarded as waste. In such circumstances enforcement action will be considered in line with the EA’s enforcement and prosecution policy. Hence the need to follow the MMP and produce a Verification Report to demonstrate how materials were actually used on site which is of vital importance.
- 3.42 EA officers will continue to inspect other permitted activities such as soil/groundwater treatment that may be co-located on sites being progressed under the CoP.

3.43 The EA position statement on the use of the CoP can be found in full on their website¹⁷.

¹⁷ www.environment-agency.gov.uk.

4 Other Regulatory Issues

4.1 Storage on the Site of Production

4.1 Whenever it is envisaged that the use of materials will occur in excess of one year from being stockpiled/stored, a time limit will have to be agreed between the EA and the person responsible for the MMP. The decision relating to the length of storage will be made within the context of the extant planning permission or agreed programme of works. Supporting information may be requested by the EA in the form of site plans, cross Sections and stockpile management issues, e.g. control of dust, suspended solids runoff.

4.2 On-Site Disposal Operations

4.2 Where contaminated material is disposed of and has to be contained and managed to prevent pollution of the environment or harm to human health, then the material will be viewed as having been discarded as waste¹⁸. This will be a landfill and require an Environmental Permit. (Also see Appendix 8 for other Frequently Asked Questions.)

4.3 Groundwater Protection

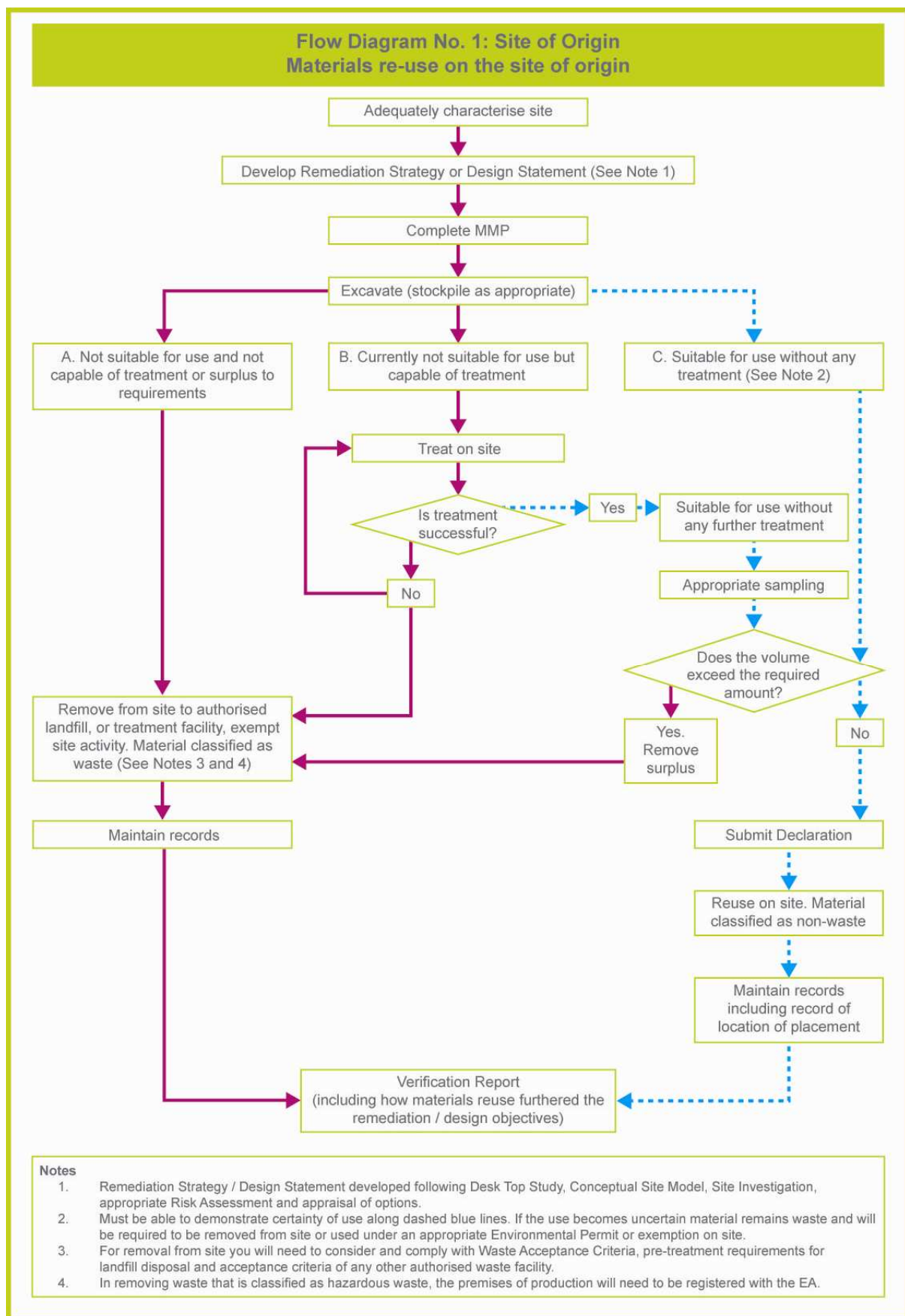
4.3 Whether or not material is deemed to be waste, the requirements of the Water Framework Directive and its Daughter Directive on Groundwater still apply with respect to discharges to controlled waters. The entry of hazardous substances into groundwater must be prevented (unless certain exemptions apply) and the introduction of non-hazardous pollutants must be limited so as to avoid pollution. This aspect of legislative requirements (also implemented via the Environmental Permitting Regulations 2010) must be borne in mind when considering suitability for use.

4.4 The above is not an exhaustive list of regulatory requirements associated with the development of land. Other regulatory regimes that must be complied with are outside the scope of this CoP.

¹⁸ This is not to be confused with the scenarios set out in paragraph 2.6.

Appendix 1: Use on the Site of Origin

- A1.1 The Site of Origin for the purpose of this CoP is a single readily identifiable site. This 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.
- A1.2 Where the site is not readily and easily identifiable it will be necessary to agree a definition of the “Site of Origin” with the EA. This may be the case where a number of parcels of land in close proximity to one another are assembled together to further a larger development scheme.
- A1.3 Decisions about what is meant by the “Site of Origin” should ensure that the most sustainable solutions can be achieved in terms of materials movement and use.
- A1.4 Some developments extend across a very large area and can contain a diverse range of source materials and receiving environments. Others can involve the transport of materials significant distances between disparate areas. In such circumstances it may be more appropriate to deal with the transfer and reuse of materials under the arrangements set out in Appendices 2 and 3, rather than to attempt to define a single “Site of Origin”. The arrangements made under these other Appendices allow for the safe transfer and use of both brownfield and greenfield materials, subject to appropriate checks and balances.
- A1.5 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.
- A1.6 Any surplus material should be taken to an authorised waste management facility. Alternatively it may be donated to a Hub site within a Cluster Project for processing and onward dispatch to an appropriate Receiver site. If it is clean natural soil material it may also be transferred directly to another development site which has a need for it subject to the restrictions imposed by Appendix 2.
- A1.7 In cases where material is to be used on the Site of Origin and at one or more of these scenarios, it is referred to as a “combination” scenario (see MMP template on CL:AIRE web site)



Appendix 2: Direct Use of Clean Naturally Occurring Soil and Mineral Materials on Another Development Site (Direct Transfer)

- A2.1 This version of the CoP includes the Direct Transfer of clean¹⁹ naturally occurring soils and mineral²⁰ materials 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).
- A2.2 “Clean naturally occurring soil and mineral materials” includes:
- Soil, both top soil and sub-soil;
 - Parent material²¹;
 - 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.
- A2.3 The materials must be sourced from:
- Greenfield sites not subject to past contaminative use²²; or
 - Brownfield sites where the natural soils have been extensively characterised and proven to be clean.
- A2.4 Such materials must be capable of direct use without the need for treatment in line with the principles of suitability, certainty and quantity etc. set out in Chapter 2.
- A2.5 The Direct Transfer provisions do not apply to manufactured soils (i.e. soils created by blending or mixing of other wastes or non-soil / mineral based constituents). It should also be remembered that extractive waste, within the scope of Mining Waste Directive are already excluded from this CoP²⁰ and hence from these direct transfer provisions.
- A2.6 In excavating, storing and using topsoil or sub-soils it is recommended that established good practice as set out in DEFRA’s “Construction Code of Practice for the Sustainable Use of Soils on Construction Sites” (Sept 2009) is followed.

Watch Point 13: Use of clean naturally occurring soils and mineral materials

The EA draws a distinction between the risks posed by the use of excavated materials on those sites which have not been subject to previous contaminative uses, e.g. the majority of greenfield sites, and those which have, e.g. some brownfield sites. This is why the Direct Transfer provisions of the CoP are restricted to the use of clean naturally occurring soils and mineral materials.

¹⁹ 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.”

²⁰ Please note that separate regulatory provisions are in place for similar materials that may arise as a result of mineral extraction activities regulated under the Mining Waste Directive.

²¹ The underlying rock from which constituent parts make up part of the soil, e.g. chemical spillage, on farm landfills / carcass burial, pyres.

²² For example, from a chemical spillage, on-farm landfills / carcass burial, or pyres.

A2.1 Clean soils with elevated levels of naturally occurring substances

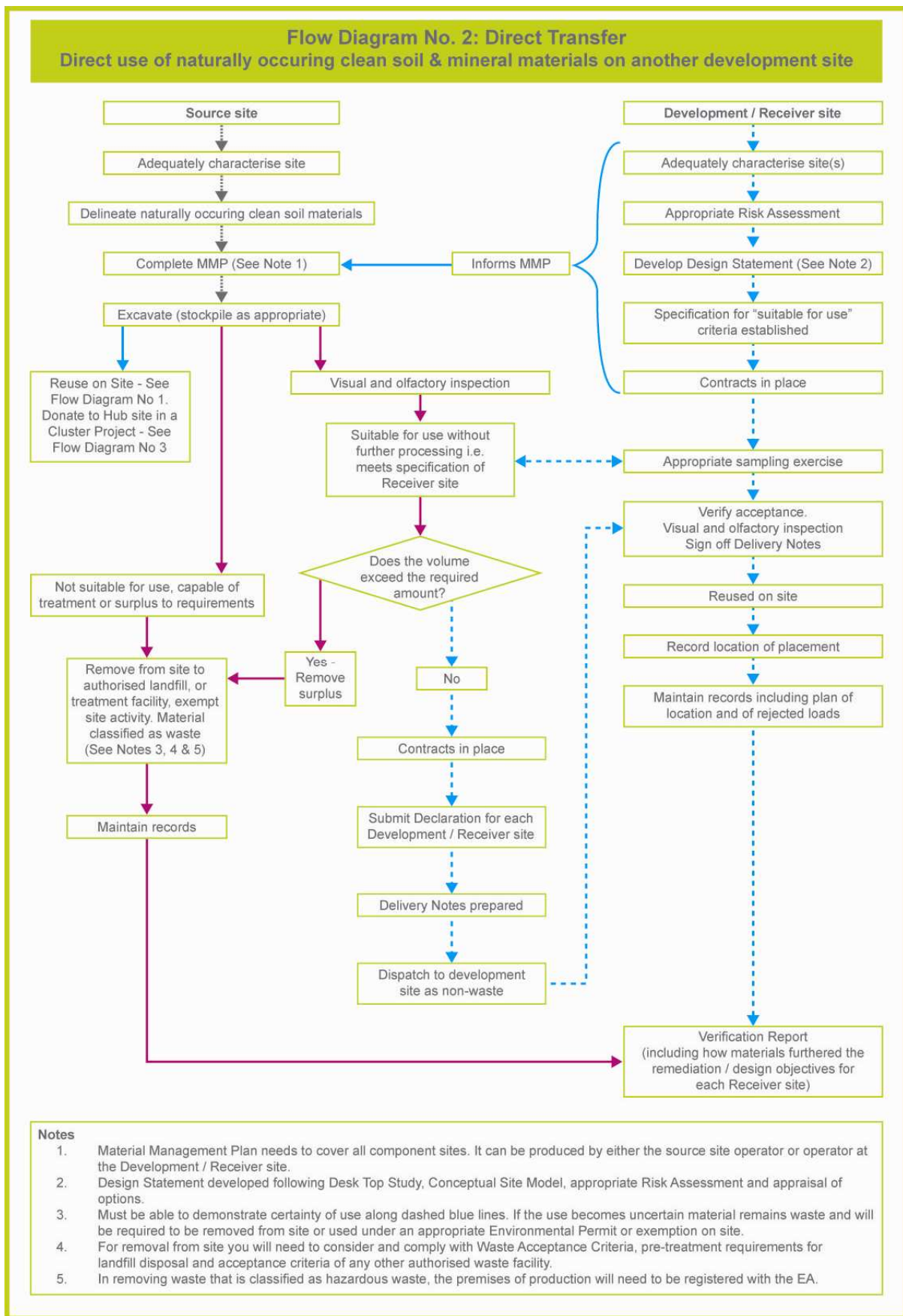
- A2.7 Where soils have naturally elevated concentrations of substances such as geologically derived metals, metalloids etc. that are proven to be widespread and typical of local ambient/background conditions they may still be used. This is provided that the representative concentrations (both total and leachable) of such naturally occurring substances at the source site are comparable or below that of the receiving development site soils. This will have to be demonstrated via adequate site investigation at both sites and appropriate risk assessment for use at the receiving development site.
- A2.8 The principle should always be that the use of such natural materials must not increase the level of risk to the environment that already exists at the site of use.

A2.2 Lines of Evidence

- A2.9 In all cases the past use of the source site (and hence its' potential for contamination) must be established via desk based research carried out in line with the Model Procedures (CLR11). If there is no suspicion of contamination, then provided visual and olfactory inspection is carried out during excavation (and this is described in the MMP) then the materials can be used, subject to the tests of suitability, quantity and certainty being met.
- A2.10 If the source site is a "brownfield site" then the quality of the soils on the site must be established and characterised via an adequate site investigation. Only if contamination has been reasonably discounted for the site as a whole, or clearly defined areas of the site, can those naturally occurring materials be considered for Direct Transfer and use.
- A2.11 The Qualified Person is required to confirm that the above lines of evidence are in place when making a Declaration relating to the Direct Transfer of materials.
- A2.12 Table A1 summarises the requirements relating to the source site and receiving site where Direct Transfer is to take place.
- A2.13 Use of excavated materials beyond the criteria set out above may be carried out under an Environmental Permit or Waste Exemption and therefore subject to a greater degree of regulatory scrutiny on a case by case basis. Appendix 3 (in particular Watch Point 14) identifies the mechanism by which brownfield materials may be transferred from one site to another.
- A2.14 The next version of this CoP may include an extended scope that covers the Direct Transfer of excavated materials that have been affected by contamination. However, this will be dependent upon amongst other things, the successful implementation of this version of the CoP.

Table A1: Summary of Direct Transfer process – Minimum requirements.

Direct Transfer Scenario	Requirement at Source site	Requirement at Receiving site	Qualified Person (specific to Direct Transfer – see also Box B)
Greenfield site with clean naturally occurring soils - No suspicion of contamination (for reuse at either Greenfield or Brownfield sites)	<ul style="list-style-type: none"> • Desk Top Study; • Visual and olfactory inspection during excavation; and • Consider investigation / testing dependent upon confidence in desk top study. 	<ul style="list-style-type: none"> • Appropriate risk assessment (likely to be qualitative); • Confirm that material is as expected; and • Visual and olfactory inspection. 	<ul style="list-style-type: none"> • Satisfied that the source site has had no contaminative use on the basis of the information provided.
Greenfield sites with elevated naturally occurring substances (for reuse at either Greenfield or Brownfield sites)	<ul style="list-style-type: none"> • Adequate Site Investigation; and • Visual and olfactory inspection during excavation 	<ul style="list-style-type: none"> • Adequate Site Investigation and appropriate risk assessment – Confirmation of comparable or higher naturally occurring elevated substances than those of the source site; • Visual and olfactory inspection; and • Confirmatory testing 	<ul style="list-style-type: none"> • Satisfied that source site has had no contaminative use on basis of information provided and receiving site has comparable or higher levels of such substances.
Brownfield site with clearly defined areas of clean naturally occurring soils (for reuse at either Greenfield or Brownfield sites)	<ul style="list-style-type: none"> • Adequate Site Investigation – Delineation of naturally occurring soils for Direct Transfer; and • Visual and olfactory inspection during excavation. 	<ul style="list-style-type: none"> • Adequate Site Investigation; • Appropriate risk assessment; • Confirm that material is as expected; • Visual and olfactory inspection; and • Confirmatory testing 	<ul style="list-style-type: none"> • Satisfied that site as a whole or clearly defined area(s) has had no contaminative use on basis of information provided.
Other brownfield sites and land affected by contamination	<ul style="list-style-type: none"> • Direct Transfer without an Environmental Permit or Waste Exemption not permitted (see Appendix 3). 	<ul style="list-style-type: none"> • Direct Transfer without an Environmental Permit or Waste Exemption not permitted (see Appendix 3). 	<ul style="list-style-type: none"> • Does not sign Declaration; and • Advises client that not allowed under Direct Transfer scenario (other scenarios may apply).



Appendix 3: Cluster Projects

A3.1 The Cluster approach²³ is designed to facilitate the remediation and / or development of a number of sites that are located in relative close proximity and share a decontamination/treatment facility located on a single site - the Hub site (shown as Site 1 in Figure A1). A key principle of a Cluster Project is that the activity is temporary. The Cluster Project may be established in relation to:

- The transfer and use of excavated materials between sites (see Watch Point 14); and
- The remediation of one or more sites affected by contamination.

A3.1 Transfer of Excavated Materials

A3.2 The transfer of excavated materials (which fall outside of the Direct Transfer scenario detailed in Appendix 2 above) is allowed where one site is acting as a Hub come Donor or Hub come Receiver site (see Watch Point 14 below).

Watch Point 14: Brownfield to brownfield transfers

The following regulatory mechanism has been developed to allow for a brownfield to brownfield transfer of materials:

Materials generated from a brownfield site that are not clean naturally occurring soils or mineral materials, may be used at another brownfield site where the Site of Origin or receipt has an appropriate Environmental Permit or Waste Exemption in place.

The activity covered by the Permit or Exemption may be complex such as a remediation technology or as simple as a sorting, segregating and / or screening operation. The activity should result in a material that is suitable for use, without any further processing. In the case of Hub come Donor sites, this may include materials that are confirmed as not needing any further processing at the point of excavation.

This is a two site Cluster Project. The site with the Environmental Permit or appropriate Exemption being a Hub come Donor/Receiver site.

In the case of a Hub come Donor site the Declaration must be submitted prior to dispatch to the site where the materials are to be used.

In the case of a Hub come Receiver site the materials must be transferred as waste in full accordance with Duty of Care provisions. The declaration must be made following successful treatment/recovery of the waste and prior to its use at the Receiver site.

A3.2 Remediation of One or More Sites

A3.3 Excavated materials from Donor sites are sent for treatment at the Hub site as waste. The Hub site activities are regulated under the Environmental Permitting regime. It is the responsibility of the operators of the Donor site and the Hub site to ensure the appropriate authorisation is in place. Treated materials complying with criteria that have

²³ CL:AIRE is producing a "Cluster Guide" that sets out in far greater detail how a Cluster project works.

already been established are then either returned to the site from whence they came, or sent to another site within the defined Cluster, referred to as a Receiver site.

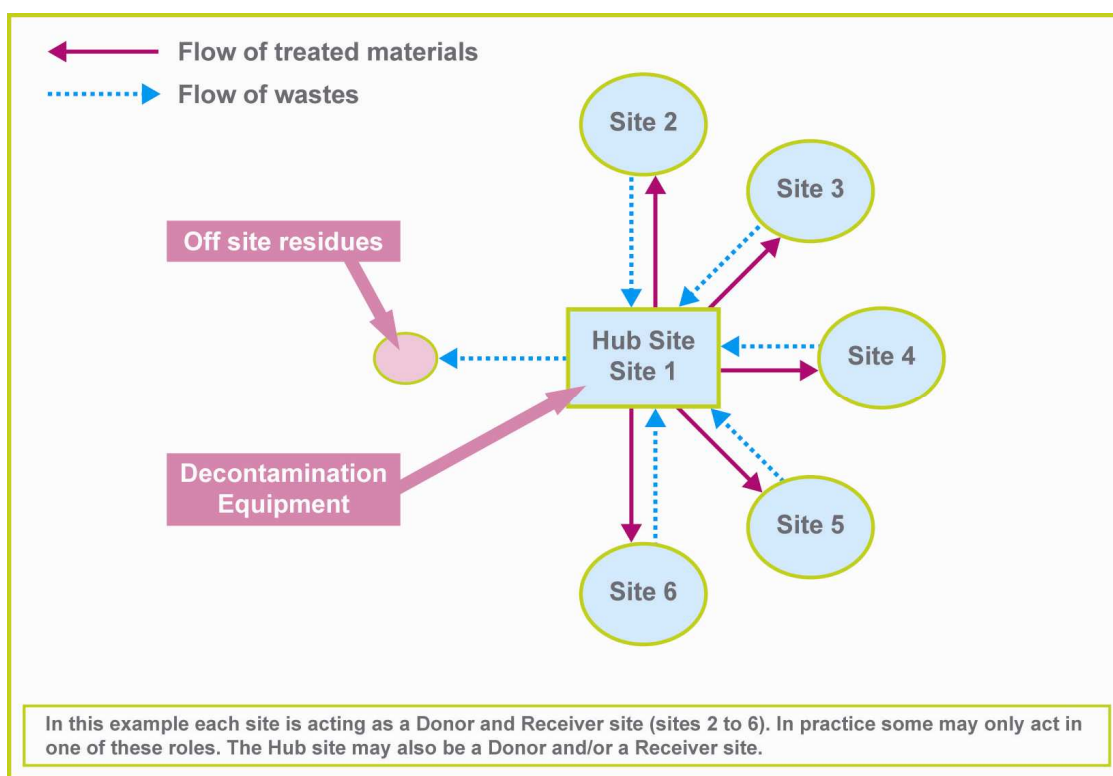


Figure A1: Potential flows of waste and treated materials at a six site Cluster.

Watch Point 15: Materials use at Receiver sites

All materials must be suitable for use and must not pose unacceptable risks to the environment in order to comply with the requirements of this CoP. In implementing the precautionary principle and in aiming for a high level of environmental protection (as set out in the Waste Framework Directive and case law) the EA would expect the use of materials within a Cluster project to maintain or improve the quality of land at any Donor or Receiver site. To this end the following general restrictions are applied to materials to be used under this CoP at any Receiver site:

- The hazards to human health and the environment must not be increased beyond those which already exist at the Receiver site, by importing materials with elevated concentrations of potentially harmful substances. A project may be regarded as “sham recovery” if it involves importation of soils with levels of contamination significantly above those already present i.e. to a degree that would require additional intervention should the site be redeveloped in future.; and
- The importation of materials at receiver sites must not introduce any new hazards beyond those that already exist at the Receiver site, by importing materials containing new contaminants present at problematical levels. In any case this includes the importation and use of materials containing new contaminants present above hazardous waste thresholds.

This applies irrespective of whether the site specific circumstances mean the material could be successfully utilised. These restrictions are intended to insure that (potential) waste materials are only used as a legitimate substitute for virgin raw materials. The intention is to avoid reusing materials in a way that could create problems in the future, whilst maintaining the advantages inherent in the use of brownfield soils at other receiving sites. If the levels of certain contaminants could be problematical, it is expected that appropriate treatment will take place at the Hub site to reduce/modify those contaminants to acceptable levels/forms prior to dispatch and reuse.

- A3.4 The question of whether or not any material is waste has to be made on a case by case basis and therefore at the Cluster Project conceptualisation stage the proposed operator will need to consult with the EA local Area office regarding the proposed project and the National Permitting Service regarding the Environmental Permit for the Hub site, e.g. Standard Mobile Treatment Permit, Bespoke Mobile Permit or site based Bespoke Permit. Subsequently if new sites are to be added to the Cluster project then further consultation will be required. Any Cluster project may be refused if the EA believes that it represents “sham recovery” (see paragraph 3.39).

Watch Point 16: Ceasing to be waste

The EA will regard the material as waste throughout its production and processing until a Declaration is submitted. Once a Declaration is submitted in relation to a transfer to a Receiver site the EA will take the view that the material that has been treated and recovered at the permitted Hub site is no longer considered to be waste. Flow Diagram No 3 illustrates the process.

- A3.5 The EA has already agreed that appropriately and successfully treated wastes at a pilot Cluster Project and those operated under Version 1 of this CoP have ceased to be waste immediately prior to dispatch to a Receiver site, given the specific details of the defined Cluster arrangement.
- A3.6 Donor site operators have to characterise (describe and code) their wastes sufficiently to comply with Duty of Care legislation and determine that the Hub site is capable of treating the wastes. The characterisation process is important in ensuring that wastes and treated stockpiles at the Hub site are not at risk of cross contamination from the incoming wastes from the Donor site.
- A3.7 The Hub site operator must be satisfied that materials are adequately characterised and that their permit allows them to accept such wastes. They must also be satisfied that they can successfully treat and recover such materials.
- A3.8 The degree of treatment will be dependent upon where the treated material is to be used at any one Receiver site. The specification must be determined by an appropriate risk assessment dependent upon the specific land use and environmental setting where the material will be placed and must take account of contaminants of concern potentially present at the Donor sites that form part of the defined Cluster.
- A3.9 The Hub site operator, as the holder of the waste and the Receiver site representative need to satisfy themselves that the treated material meets the actual specification. This can be demonstrated by an appropriate sampling exercise.
- A3.10 The quantity of treated materials must be defined. This must be identified within a contract between the Hub site operator and Receiver site. The contract must set out clearly the role of each party, allocation of responsibility for acceptance and rejection and who pays for additional treatment at the Hub site, or if necessary for disposal.
- A3.11 The Receiver site must inspect a representative proportion of incoming loads of material (visual and olfactory) and where appropriate carry out field testing, backed up by confirmatory sampling and laboratory testing. Inspection should be used to confirm and demonstrate that the material used on the site meets the specification.

- A3.12 The Receiver site is responsible for signing the delivery ticket and recording where the accepted materials are placed. The delivery ticket should include a facility to ensure that only the required amount is received, e.g. a running tally.
- A3.13 Procedures for the rejection of loads from the Receiver site must be defined. These loads will normally be returned to the Hub site or alternatively consigned for disposal elsewhere. Either way they must remain at the Receiver site until appropriate Duty of Care or Consignment notes have been prepared. Rejected loads should also be recorded in the Verification Report for the site that rejected it.

Watch Point 17: Including additional sites within a Cluster Project

During the operation of a Cluster Project additional sites may come forward, either as potential Donor sites and/or potential Receiver sites. Provided the wastes and materials can be accommodated within the timeframe agreed for the Cluster Project, and within any relevant planning conditions, it is acceptable to add these sites, with agreement from the EA and client.

Consultation and agreement from the EA is required to ensure the Cluster Project is not becoming a permanent activity (in which case a different permit type and additional permit conditions may have been more appropriate from the outset) and that the system is not being abused.

- A3.14 A copy of all documentation associated with following this CoP must reside at the Hub site. Upon completion of the Cluster Project all information must be retained at the principal or registered office of the Hub site operator for a period of two years after completion of the works. This includes copies of Verification Report(s) prepared for each Receiver site.

A3.3 Fixed Soil Treatment Facilities

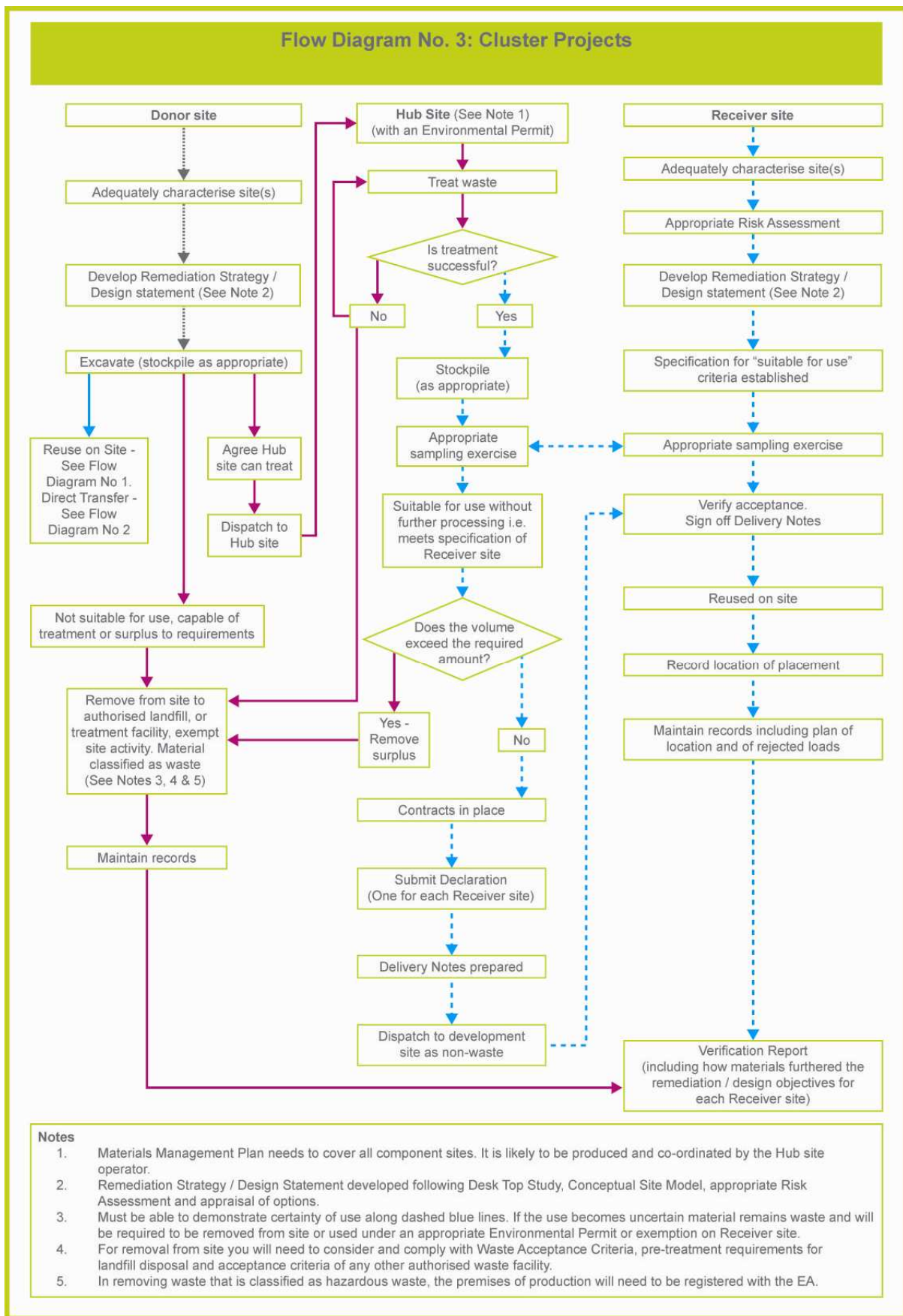
- A3.15 A fixed STF is established on a permanent basis and accepts wastes from a variety of waste producers. A fixed STF may perform the role of a Hub site within a defined Cluster project. Operators of STFs may not always have a pre-determined plan for where treated wastes will ultimately be used in relation to development sites.
- A3.16 The STF is regulated under a bespoke site based Environmental Permit²⁴. The permit will set strict limits on the type of materials the facility can accept and will control how that facility is operated in relation to the acceptance, treatment, tracking and storage of waste materials. The details of the controls to be applied will be specific to the individual STF and will be determined as part of the permit application process.
- A3.17 Excavated wastes are taken to a fixed STF under waste legislation, e.g. registered waste carrier, Duty of Care Transfer notes (non-hazardous and inert waste) or consignment notes (hazardous waste).
- A3.18 The STF operator assesses the site investigation data relating to the waste and confirms that they are capable of accepting and treating the waste. The waste producer, e.g. earthworks contractor, also satisfies themselves that the operator is capable of

²⁴ A Mobile Plant Permit can normally only operate for a defined period of time under any agreed Deployment Form. However a site based permit allows operations to continue indefinitely.

accepting their wastes. Waste is accepted in accordance with permit conditions. For example, visual and olfactory inspection of incoming loads is expected with confirmatory sampling of stockpiles awaiting treatment. Samples will need to be tested for contaminants appropriate to the source sites²⁵. The sampling frequency should be determined on a statistical basis, taking account of the heterogeneity of the stockpiled material, informed by the original source characterisation data and visual evidence, ensure sampling is representative. The Environmental Permit is likely to state a minimum testing frequency.

- A3.19 The wastes are treated, as appropriate, at the STF. The standard of treatment is at the discretion of the STF, although a number of operators already have established treatment criteria. The wastes are tracked from acceptance, through treatment and subsequent stockpiles.
- A3.20 Potential receiving development site operators need to provide the STF operator with their derived suitable for use criteria. Materials in the stockpile may be within the suitable for use criteria or the material may be subject to further treatment.
- A3.21 Unless the STF is already operating as part of a pre-defined Cluster project, the STF operator will have to approach the EA to gain approval for any transfer and use of treated materials via establishment of a new Cluster project. The simplest form of project will be a 2 site Cluster with the STF acting in the capacity of a Donor/Hub site. This scenario is outlined in Watch Point 14 above.
- A3.22 The MMP must be completed in relation to the Hub site, the material to be treated and dispatched and the receiving development site. A Declaration has to be completed and submitted to the EA prior to dispatch from the STF, for each two site Cluster Project. A Verification Report has to be produced for each receiving development site.

²⁵ In practice operators will segregate loads and stockpiles to ensure the most cost effective treatment process, i.e. to avoid treating the same materials twice and the whole stockpile becoming cross contaminated by a contaminant not identified in the analysis provided by the waste producer.



Appendix 4: Example Schematics

A4.1 The following examples present schematics for the movements of material as:

- Re-use of materials on the Site of Origin (Figure A2);
- Direct Transfer of naturally occurring clean soil materials (Figure A3); and
- Combination of a) reuse on Site of Origin and b) Direct Transfer (Figure A4).

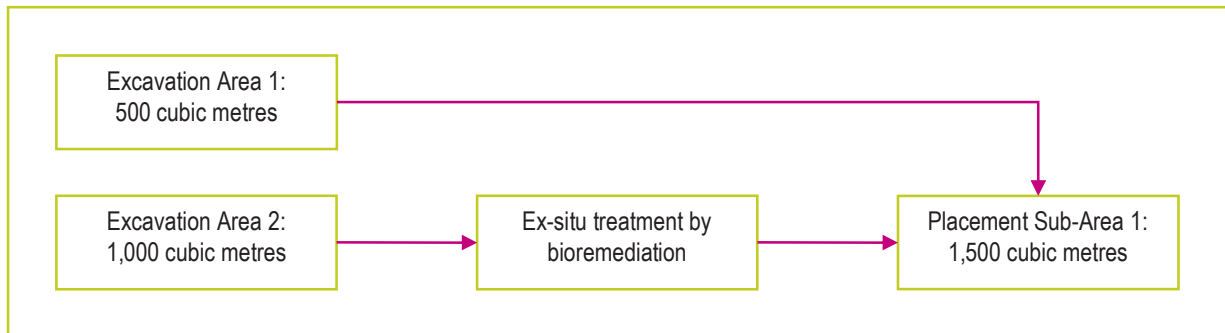


Figure A2: Example of the re-use of materials on the Site of Origin.

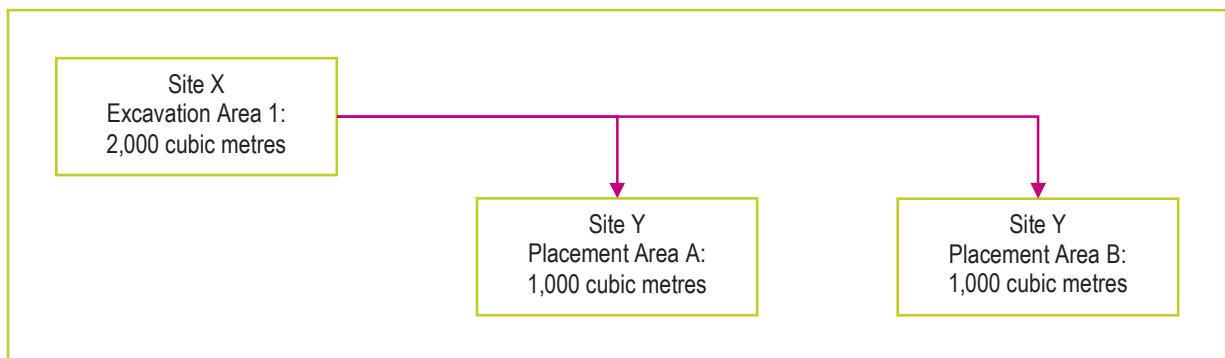


Figure A3: Example of the Direct Transfer of naturally occurring clean soil materials.

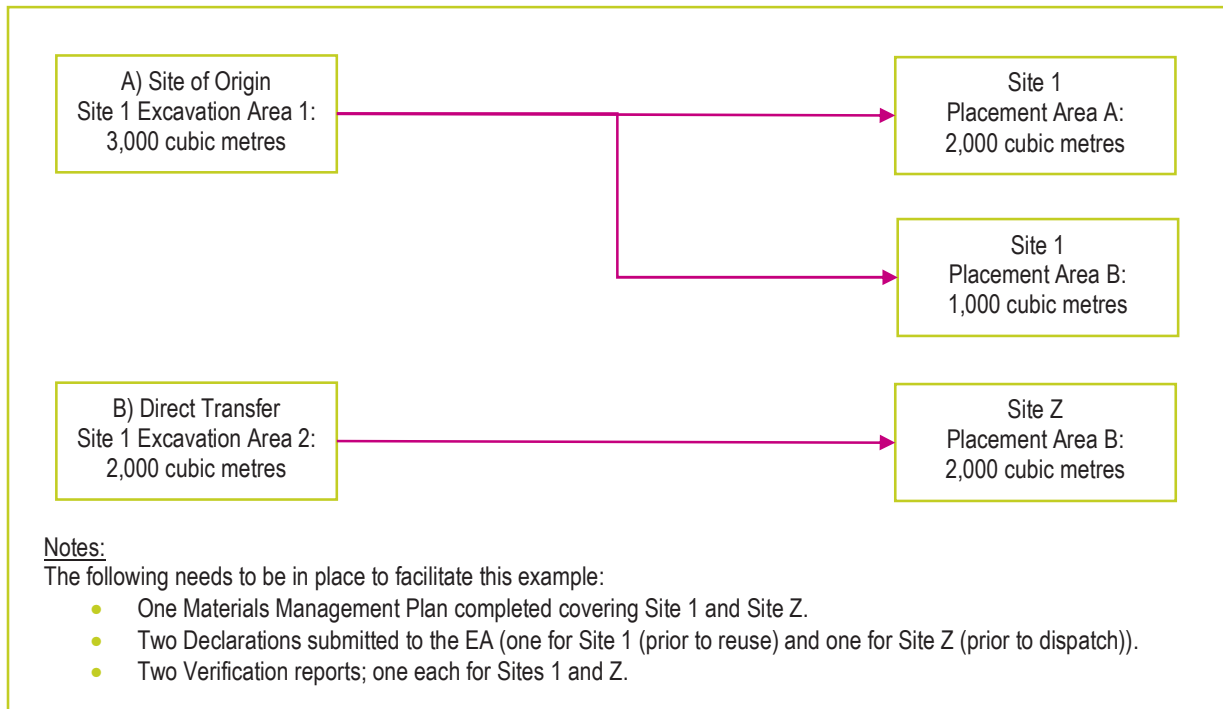


Figure A4: Example of a combination approach using; a) Reuse of materials on the Site of Origin and b) Direct Transfer of naturally occurring clean soil materials.

Appendix 5: Qualified Person Declaration

This Declaration relates to:

(Tick)

1. Site of Origin:

Route A: Land affected by contamination or suspected of being affected by contamination

Route B: Land not suspected of being affected by contamination

2. Direct Transfer:

Route A: Direct use of clean naturally occurring soils with elevated levels of naturally occurring substances on another development site

Route B: Direct use of clean naturally occurring soils on another development site

3. Cluster Project:

Cluster Project (including use of a fixed Soil Treatment Facility as a Hub site)

4. Combination:

Combination of the above (please specify below):

Site name(s) and address(s):

Name and address of Developer:

Name and address of Qualified Person:

Qualified Person Registration Number:

Local Authority name, address, lead contact name and contact details:

Environment Agency local office, lead contact and contact details:

(Continued ...)

To: **[name of person commissioning the Qualified Person]**

Declaration

(Tick)

- I confirm that I satisfy the Qualified Person requirements set out in Appendix 6 of the Definition of Waste: Development Industry Code of Practice (Version 2, March 2011) to complete this Declaration.

I have reviewed the following documents in relation to development work to be carried out at the above site:

(Tick)

- The Materials Management Plan (MMP) dated **[insert date]** and prepared by **[state name of company and individual]**.
- The risk assessment dated **[insert date]** and prepared by **[state name of company and individual]**.
- The Remediation Strategy/Design Statement covering the above site and prepared by **[state name of company and individual]**.
- I have requested correspondence / documentation relating to the development and how that relates to the use of materials from **[name of person commissioning the Qualified Person]**.
- The following correspondence / documentation relating to the development and how that relates to the use of materials from:
 - a) The Local Authority **[list]**;
 - b) Environment Agency **[list]**; and
 - c) Other relevant environmental regulatory body associated with the development, e.g. Defra, Natural England, Countryside Council for Wales **[list]**.
- The planning consent including planning conditions **[Reference or state Not Applicable]**.
- Correspondence concerning the planning consent regarding the development from
 - a) The Local Authority **[list]**;
 - b) Environment Agency **[list]**; and
 - c) Other relevant environmental regulatory bodies **[list]**.

Planning consent is not required because **[explain why]**:

(Continued ...)

I confirm that:

1. The MMP contains all the information required;
2. The risk assessment assesses human health and environmental risks in relation to the proposed uses of all the materials in the MMP. The risk assessment concludes 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. The Local Authority, the Environment Agency and other relevant environmental regulatory bodies have not objected to the proposed development/land remediation on the basis that the use of any material is likely to cause harm to human health or pollution of the environment. **[This confirmation should be given regardless of whether planning consent is required for the activity. Also see paragraph 3.37 of the CoP.]**

This Declaration has been made for the purposes of the Definition of Waste: Development Industry Code of Practice (Version 2, March 2011) and will be submitted to the Environment Agency under that CoP.

You are advised that if materials are not used in accordance with the MMP or risk assessment or if it is discovered that materials were not suitable for use, were used in excessive quantity or in such a manner as to harm human health or pollute the environment, the Environment Agency may conclude that those materials were discarded and were waste.

You are also reminded that a Verification Report must be prepared on completion of the work as set out in the Remediation Strategy/Design Statement covering the site and that this Verification Report must be provided to the Environment Agency upon request.

Signed: _____

Name: _____
(BLOCK CAPITALS)

Organisation: _____

Date: _____

This Declaration should be sent to:

Post: Environment Agency
Environmental Permitting Team
Quadrant 2, 99 Parkway Avenue
Parkway Business Park
Sheffield
S9 4WF

Email: psc@environment-agency.gov.uk with 'Qualified Person Declaration' in the subject line.

Appendix 6: Qualified Person Requirements

- A6.1 As set out in Section 3 of the CoP, for an individual to act in the capacity of Qualified Person, they must possess certain attributes and be registered as a Qualified Person in the context of this CoP. The current requirements are as follows:
- A6.2 **Corporate authority:** The Qualified Person must be authorised to sign on behalf of their company in this area of activity.
- A6.3 **Professional standing:** The Qualified Person must have chartered status, awarded by and registered with a body that sets restrictions on areas of activity and has the capacity to apply sanctions in the event of unprofessional conduct.
- A6.4 **Relevant qualifications:** It is expected that the Qualified Person will have academic qualifications relevant to the area of activity. There is no exclusive list of such qualifications at this time.
- A6.5 **Experience:** The Qualified Person must have a minimum of 5 years of relevant experience and be currently engaged in the planning, management or oversight of remediation projects, or projects involving site materials management. Evidence of this experience is to be provided by means of a detailed CV with references.
- A6.6 **Independence²⁶:** The Qualified Person should not be directly involved in the management or execution of the project prior to the submission of the Declaration²⁷.

Following the signing of the Declaration they may subsequently be involved in the project (but not if they intend to be the Qualified Person relating to a Cluster Project that involves more than two Receiver sites). Such an appointment is outside the scope of the CoP.

The Qualified Person may advise on the applicability of the CoP to a particular project and still be considered independent. In reviewing the MMP, and other relevant documentation, the Qualified Person can advise on issues which are lacking or inadequately covered and subsequently review the amended MMP.

- A6.7 **Not barred from acting:** The Qualified Person must not have any individual convictions under waste or environmental legislation²⁸, or be barred from acting in the capacity as a result of previous activities in the role of Qualified Person.
- A6.8 **Training:** The Qualified Person must have attended a recognised minimum one day training course on the CoP and role of the Qualified Person. Evidence of attendance is to be provided.
- A6.9 **Registration:** The Qualified Person should be registered with CL:AIRE and have paid the annual registration fee.

²⁶ A person could act as a peer reviewer provided it was strictly a peer review role, with no detailed involvement and in such cases independence of the project would need to be clearly demonstrated.

²⁷ The principle here is that there should be no possibility of the Qualified Person reviewing their own work.

²⁸ Within the previous 5 years.

Appendix 7: Comparison of the Materials Management Plan with Other Plans

A7.1 Table A2 provides summary comments comparing the following plans:

- Site Waste Management Plans;
- CL:AIRE's "Definition of Waste: Development Industry Code of Practice";
- DEFRA's "Construction Code of Practice for the Sustainable Use of Soils on Construction Sites";
- SEPA's "Regulatory guidance – Promoting the sustainable reuse of greenfield soils in construction"; and
- Northern Ireland Environment Agency's (NIEA) "Guidance on the Regulation of Greenfield Soil in Construction and Development".

The interaction between this CoP and WRAP Quality Protocols is dealt with in Watch Point 3.

Table A2: Summary of various plans / documents.

	SWMP	CoP	Defra CoP	SEPA and NIEA Guidance Documents
Area	<ul style="list-style-type: none"> England 	<ul style="list-style-type: none"> England and Wales 	<ul style="list-style-type: none"> England 	<ul style="list-style-type: none"> Scotland and Northern Ireland (as indicated below)
Status	<ul style="list-style-type: none"> Mandatory 	<ul style="list-style-type: none"> Voluntary 	<ul style="list-style-type: none"> Voluntary 	<ul style="list-style-type: none"> Voluntary
Purpose	<ul style="list-style-type: none"> Aid resource efficiency and prevent fly tipping. 	<ul style="list-style-type: none"> Identify if excavated materials are non-waste, if waste when ceases to be waste. Used without the need for an Environmental Permit or Waste Exemption 	<ul style="list-style-type: none"> Promote the protection of soils and ensure adequate soil function, e.g. plant growth, water attenuation, biodiversity, during and after construction. 	<ul style="list-style-type: none"> Promoting the sustainable reuse of greenfield soils in construction. Reused without the need for a Waste Management Licence or Waste Exemption.
Materials	<ul style="list-style-type: none"> All materials used in "Construction project". 	<ul style="list-style-type: none"> Excavated materials (contaminated and uncontaminated). Source segregated aggregate for reuse on Site of Origin. 	<ul style="list-style-type: none"> Soils (uncontaminated). 	<ul style="list-style-type: none"> Soils from "greenfield" sites SEPA i.e. agricultural land, forestry land and other undeveloped land (no others) NIEA – the above are examples.
Quantity limitations	<ul style="list-style-type: none"> Unspecified. 	<ul style="list-style-type: none"> That which is absolutely necessary for the specified development and no more. 	<ul style="list-style-type: none"> Unspecified. 	<ul style="list-style-type: none"> SEPA - Top soil to a depth of 100 to 150mm Sub soil to a depth of 300 to 450mm (if any greater depth then would require a Waste Exemption). NIEA – Unspecified
Applicable sites/usage	<ul style="list-style-type: none"> All construction sites where project value exceeds £300,000. 	<ul style="list-style-type: none"> Any development Direct Transfer to another development site (of uncontaminated excavated materials) Site of Origin, Cluster Projects and fixed Soil Treatment Facilities (uncontaminated and contaminated – provided demonstrably suitable for use). 	<ul style="list-style-type: none"> On construction sites. Essentially on Site of Origin, but also relates to imported soils. 	<ul style="list-style-type: none"> SEPA - Roads and verges, landscaping (including front and back gardens and Sustainable Urban Drainage (no others). NIEA – engineering works under a planning permission, capping requirements for remediation, SuDS, landscaping, roads and road verges under permitted development rights.

Table A2: Summary of various plans / documents (Continued).

	SWMP	CoP	Defra CoP	SEPA and NIEA Guidance Documents
Need for a Permit	<ul style="list-style-type: none"> Unlikely for storage on site of production. Likely for treatment or recovery operation on site of production. 	<ul style="list-style-type: none"> Yes for treatment. No for use within development (Site of Origin or Direct Transfer). 	<ul style="list-style-type: none"> Unlikely for use of the Site of Origin. Likely if used on another site. 	<ul style="list-style-type: none"> Not for reuse within specified developments. Treatment should not be necessary (but Licence or Exemption likely to be needed if carried out).
Documentation	<ul style="list-style-type: none"> SWMP Update if <£500,000 whenever waste is removed from the site. If >£500,000 whenever waste is removed from site and as often as necessary to reflect progress of the project but not less than six months. Within three months of the completed works. 	<ul style="list-style-type: none"> Material Management Plan (may form part of the SWMP). Updated if project changes. Declaration signed by a Qualified Person Verification Report must be produced. 	<ul style="list-style-type: none"> Soil Resource Plan (May form part of MMP). 	<ul style="list-style-type: none"> Declaration signed by either the producer or receiver of the soil.
Record keeping	<ul style="list-style-type: none"> Two years following completion of the construction. 	<ul style="list-style-type: none"> MMP and Verification Report kept for two years following completion of the development. 	<ul style="list-style-type: none"> Two years if forms part of the MMP and / or SWMP. If not, unspecified. 	<ul style="list-style-type: none"> Two years following the completion of the specified construction.

Appendix 8: Frequently Asked Questions Regarding Construction Activities²⁹

A8.1 The following presents Frequently Asked Questions regarding construction activities²⁹:

1. Does placing of material beneath cover layers amount to discarding of waste?

Material placed beneath buildings and hard standing such as car parks and roads within the land being developed is not waste, if the material is demonstrated to be non-waste by evidence of suitability for use and the works are carried out in accordance with the requirements of the CoP.

Where there is any dispute regarding the use of material in this way then readers are referred to the Environment Agency guidance “Defining Waste Recovery: Permanent Deposit of Waste on Land”.

2. Is material a waste if it is placed in or on the ground and has to be contained to prevent harm to human health or the environment?

Where excavated material is not suitable for the proposed use it will be waste and hence the CoP will not be applicable. For example if the material has to be placed in an engineered cell and managed to prevent harm to human health or pollution of the environment then this would be viewed as having been discarded as waste. This will be a landfill and require an environmental permit. There is a distinction between this scenario and that relating to cover layers above.

3. Why does the Code of Practice make no distinction between contaminated and uncontaminated material?

The need to distinguish between “contaminated” and “uncontaminated” soils is no longer considered necessary. These are self-defining terms on a site specific basis having regard to the risk assessment, e.g. some soil may not be considered contaminated for a given land use, but would be for a more sensitive land use, on the same site.

4. Is recovered aggregate a waste if it is produced in accordance with the WRAP “Quality Protocol for the production of aggregates from inert waste”?

No it is not likely to be waste. Typical uses of recovered aggregate include pipe-bedding and selected backfill to sewer excavations; carriageway sub-base construction; and the construction of vertical, granular filled drains to aid consolidation of compressible clays.

²⁹ Produced from EA Frequently Asked Questions (originally contained in EA “Guidance Definition of Waste: Developing Greenfield and Brownfield Sites”) and updated to align with this CoP. Readers are advised to check the EA and / or CL:AIRE websites for any updated guidance.

5. Is the installation of a barrier to prevent groundwater movement or contain contaminants a waste activity?

Bentonite slurry cut-off walls: Bentonite / cement slurries are used to construct vertical barriers in the ground to prevent groundwater movement or to contain contaminants. Depending upon the site-specific circumstances, this would either not require an Environmental permit or may comply with the EA Enforcement Prosecution Policy Functional Guidelines. Reference should be made to the EA Remediation Position Statement Guidance for details.

6. Are soil improvement techniques treatment activities and do they require a permit?

Construction activities carried out on uncontaminated soils solely for the purpose of improving geotechnical properties are not generally regarded as waste treatment operations and do not require a permit. These include:

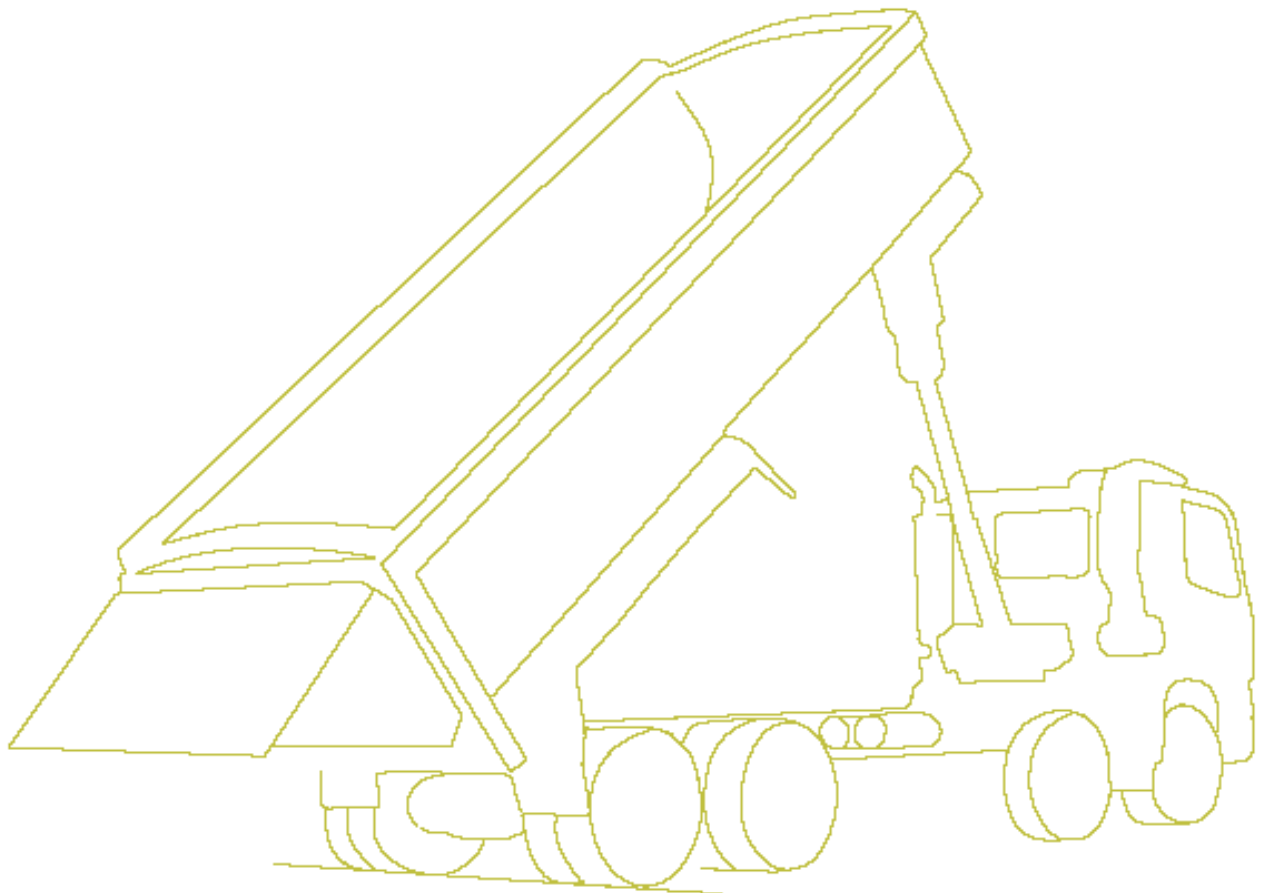
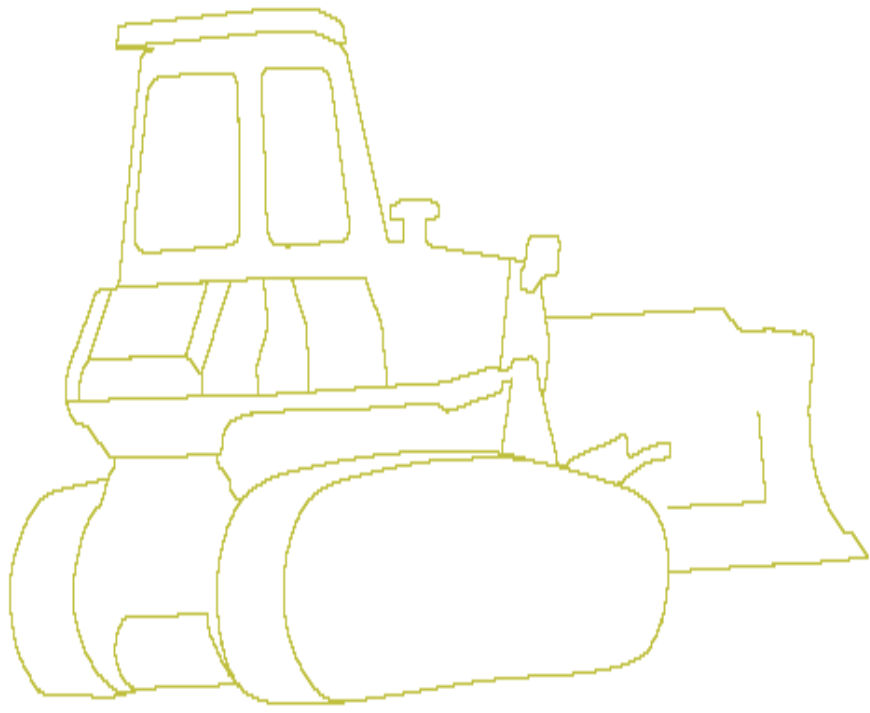
- **Lime/Cement Stabilisation:** Stabilisation of soils with high moisture content to improve their compaction characteristics by mixing with lime-cement or cement only. If the lime is considered to be a waste material, or if the treatment is required specifically to recover a discarded material this may need to be reconsidered.
- **Vibro Compaction:** Vibratory techniques to improve the bearing capacity of weak soils (often made ground). These techniques use a vibratory poker that is lowered into the ground under its own weight. In most cases, stone is introduced into the ground either down the centre of the poker or into the hole when the poker is removed. The poker applies further compactive effort until adequate resistance is achieved. The combined effects of the vibration and the introduction of the stone result in an increase in the density of the soil and a consequent improvement in bearing capacity. This activity must be carried out in accordance with requirements of the EA published guidance "Piling and Penetrative Ground Improvement Methods on Land Affected by contamination: Guidance on Pollution Prevention. NC/99/73".
- **Dynamic Compaction:** This technique involves dropping a heavy weight from considerable height to compact weak soils (often made ground). A series of 'footprints' are formed which are subsequently filled with granular fill. This may either be a primary aggregate or a re-cycled material. Dynamic compaction is not a waste treatment activity (unless it is being done on a landfill site for example) and any risk to controlled waters must be addressed during the assessment of the Planning permission.
- **Surcharging:** This technique involves placing soils in a mound to compress weak soils thus reducing future settlement potential. If the material used for the surcharging is generated and then reused (in line with the CoP) on the site it should not require a WFD permit or Exemption. However, if the material is to be imported or exported from the site after use there may be requirements for waste permitting.

- **Piling:** There are various forms of piling which are used to transfer structural loads through weak soils to more competent materials at depth. These range from driven displacement, bored and continuous flight auger bored piles. A WFD permit will not be required for this activity. The piling activity must be carried out in accordance with requirements of the EA published guidance "Piling and Penetrative ground Improvement Methods on Land Affected by contamination: Guidance on Pollution Prevention. NC/99/73".
- **Soil Reinforcement:** This technique involves the introduction of geotextiles or 'geogrids' to layers of soil (often made ground) to improve load distribution and bearing capacity. This technique is also often applied to improve the slope stability of soils to facilitate construction of steep sided embankments. A variation, to improve the stability of cuttings, is the use of 'soil nailing' whereby rods are 'fired' into the ground at regular intervals.
- **Reinforced Concrete Raft Foundations:** This is a common foundation solution used on weak or potentially expansive soils. Certain ground conditions, in particular expansive clay soils require the foundation to be constructed on a bed of compacted granular material made from primary aggregate.

7. Does dewatering of an excavation require a permit?

The removal of more than or equal to 20m³/day water may require the granting of an Abstraction Licence under the Water Resources Act 1990. However, the current Environment Agency position is not to require a permit for pumping water that has gathered in an excavation if the water is to be disposed of solely to prevent interference with building operations. Any changes to this position will be publicized via the EA or DEFRA websites.

- **Dewatering of excavations:** Where extractions have to penetrate below standing groundwater levels, dewatering will be required. A number of techniques ranging from sump pumping, to the use of external well points or deep wells can be used. Discharge of the pumped water may require a permit but the activity does not fall within the remit of the WFD.
- **Infiltration Drainage:** Sustainable urban drainage solutions (SUDS) often call for infiltration of collected surface water to maintain surface water discharges from a developed site as closely as possible to the rates prior to development. This can occur on greenfield and brownfield sites, although we would not encourage this on contaminated sites. Discharge consents may be required but these activities do not fall within the WFD.



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