Definition of Waste: Development Industry Code of Practice

One Day Training Course

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CONTAMINATED LAND: APPLICATIONS IN REAL ENVIRONMENTS

CL:AIRE TRAINING

In association with:

Homes & Communities Agency

DEC UK Environmental Contractor

Hydrock

DEFINITION OF WASTE: DEVELOPMENT INDUSTRY CODE OF PRACTICE

Agenda

Overview

The Code of Practice provides a streamlined mechanism for exiting the complex world of Waste Legislation for the re-use of excavated materials. It can be used beneficially and sustainably by individuals involved in development activities ranging from general earthworks to complex land remediation projects and is applicable to both Greenfield and Brownfield sites.

Since its introduction in September 2008, use in the industry has steadily grown, primarily driven by growing landfill costs, growing emphasis on sustainable development (including earthworks) and the removal of familiar and widely used waste exemptions. It is also increasingly being referenced in Planning Permissions and waste policy documents.

Version 2 of the Code of Practice was launched in March 2011 with an extended scope. The scenarios now covered are:

- Reuse of excavated materials on the site of production (contaminated and uncontaminated)
- Direct Transfer of clean naturally occurring soils
  - Reuse of naturally elevated substances in soils e.g. arsenic, lead
- Cluster projects (multiple reuse at different development sites within a similar time frame)
  - Brownfield to Brownfield transfers
  - Fixed Soil Treatment Facilities allowing the release of treated materials to the market place

The course also looks at other industry and regulatory initiatives including WRAP Quality Protocol, Standard Rules Permits and the interaction with new waste exemptions e.g. U1.

Who should attend?

The course is aimed at all organisations involved with the development of land and therefore particularly relevant to the following groups who expect to use or work with the Code of Practice:

- Civil Engineering & Earthworks contractors
- On-site screening and sorting operators
- Specialist Remediation companies
- Haulage companies
- Demolition Contractors
- Developers & Housebuilders
- Regulators
- Landowners
- Consultants
- Fixed Soil Treatment Facility operators (including potential operators).

The course is also valuable to those who need to understand the applicability of the Code of Practice in drafting planning decisions, waste policy documents and how it fits within the Waste Hierarchy.

Attendance on a recognised training course remains one of the requirements for individuals wishing to register as a Qualified Person, however, it is also recommended for those who previously registered as a Qualified Person under Version 1 given the far greater scope (with associated limitations and boundaries).

Attendance on this course will ensure that delegates are kept updated on future developments with the Code of Practice and its application.

Facilitators

The facilitators are Ged Duckworth (GD Environmental Ltd) and Clive Boyle (CRB Environmental Ltd), both of whom have worked on the development, implementation and revision of the Code of Practice and are well placed to explain both the new scope and the opportunities offered by the current version.

Programme

09:15 **Registration**

09:30 **Introduction - Benefits of use and scene setting**

10:15 **The Code of Practice - Principles and constants**
- Brief overview of the Definition of Waste case law
- The four 'factors'
- Process
- New Materials Management Plan template
- Verification Report
- Interaction with regulators

11:15 **Tea and Coffee**

11:30 **Attributes and role of the Qualified Person**

12:00 **Materials reuse scenarios**
1. Site of Origin
2. Direct Transfer

12.45 **Lunch**

13:45 **Case Studies and Exercise 1**

14.15 **Materials reuse scenarios (continued)**
3. Cluster, including fixed Soil Treatment Facilities
   - Establishment and operation
   - Brownfield to Brownfield movement of materials

15:15 **Tea and Coffee**

15:30 **Case Studies and Exercise 2**

16:00 **Exercise 3 – Review of a completed Qualified Person's Declaration**

16:20 **Summary and final questions**

16.30 **Close.**

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Speaker Biographies

Clive Boyle, CRB Environmental Ltd

Clive Boyle trained as an environmental chemical engineer and has pursued a career, over 30 years, in the environmental services sector. This has included 16 years in senior management roles with contaminated land remediation practitioners in UK, focused mainly upon the application of site based remediation technologies. Clive established a business applying soil washing, which led to the first UK commercial use of the technology in 1996 in Nottingham. Subsequently with QUEST and QDS, focusing on in-situ remediation, during which time the company pioneered the use of a range of techniques and the application of complex combinations of remediation technologies across sites and over the course of remediation programmes.

Since 2000 Clive has held the position of Vice Chair of the Contaminated Land Working Group of Environmental Industries Commission (EIC), which has brought a direct and high profile involvement in many of the major issues influencing and concerning the land remediation and brownfield regeneration industries in UK. This has included involvement in a number of Government led working groups and task forces, formed to help in the shaping of policy, better regulation and the promotion of innovation. Amongst these are:

- Defra/EA/SEPA: Working groups on regulation and licensing of contaminated land remediation (1998-2005)
- DTI: Innovation and Growth Team for the Environmental Goods and Services Sector (2002)
- ODPM: Landfill Directive and Regeneration Task Group (2003/4)
- Defra: Hazardous Waste Forum Working Group on Hazardous Construction and Demolition Waste and Contaminated Soils (2004)
- Cabinet Office: Remediation Licensing Task Force (2004/5)
- DTI: UK Environmental Goods and Services Mapping Project - Contaminated Land Remediation: Analysis of UK Capabilities and Development to 2015 (April 2006)
- CL:AIRE: Industry Code of Practice on Definition of Waste (from 2007)

Clive is now applying these strands of experience and knowledge in a freelance capacity, providing advisory services in contaminated land remediation, brownfield regeneration and waste management, with particular emphasis on strategy, policy, promotion of innovation and business development.

Clive has chaired and spoken at numerous conferences and industry seminars on contaminated land topics ranging from advances and innovations in remediation, to the impact of legislation changes and the cost of landfill disposal and regulation/licensing of remediation activities.

Clive Boyle
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GED DUCKWORTH

Ged is the author of the Definition of Waste: Development Industry Code of Practice, Compost Industry Code of Practice and joint author of The Cluster Guide.

He is registered as a “Qualified Person” and produced and reviewed numerous Material Management Plans for a variety of clients.

He has over 25 years experience in the waste management and land contamination fields, managing his own independent environmental consultancy company for the past 10 years.

Previously he was a member of the Cabinet Office Remediation Licensing Task Force and Special Advisor to Defra on their Waste Permitting Review project, which was the fore runner to the Environmental Permitting Regulations.

Clients range from small haulage contractors working under the Code of Practice to large multi-nationals redeveloping former power stations.

Currently Ged is working closely with a venture capitalist remediating and developing upon “dilute and disperse” landfill sites with a focus on renewable energy schemes.

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e-mail: ged.duckworth@btinternet.com

Presentation Slides

Definition of Waste: Development Industry Code of Practice (DoWCoP)

One Day Training Course

CONTAMINATED LAND: APPLICATIONS IN REAL ENVIRONMENTS

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Definition of Waste: Development Industry Code of Practice (DoWCoP)

Welcome, housekeeping and introductions:

Facilitators for the day:

– Clive Boyle, CRB Environmental Ltd

– Ged Duckworth, Ged Duckworth Limited

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Programme - Morning

09:15: Registration

09:30: Introductions - Benefits of DoWCoP Use and Scene Setting *Clive Boyle*

10:15: The Code of Practice - Principles and Constants *Ged Duckworth*

- **Brief overview of the Definition of Waste case law**
- **The four 'factors'**
- **Process**
- **Materials Management Plan**
- **Verification Report**
- **Interaction with regulators**

11:15: Tea and Coffee

11:30: Attributes and Role of the Qualified Person *Clive Boyle*

12:00: Materials Reuse Scenarios *Clive Boyle*

- **Site of Origin**
- **Direct Transfer**

12.45: Lunch

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Programme - Afternoon

13:45: Case Studies and Group Exercise 1 Clive Boyle

14.15: Materials Reuse Scenarios (continued) *Ged Duckworth*

Cluster, including fixed Soil Treatment Facilities

- **Establishment and operation**
- **Brownfield to Brownfield movement of materials**

15:15:Tea and Coffee

15:30: Case Studies and Group Exercise 2 *Ged Duckworth*

16:15: Summary and Final Questions *Clive Boyle*

16.30: Close

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Training Course Objectives

- Explain the context, benefits and principles of the DoWCoP
- Enable delegates to use the DoWCoP or work alongside it
- Apply the DoWCoP to three materials reuse scenarios
- Highlight features of Version 2 of the DoWCoP
- Familiarise with DoWCoP use through worked examples
- Encourage discussion and questions on use of the DoWCoP
- Meet one of the qualifying criteria for Qualified Person
- Register delegates for updates on future developments

Purpose of the DoW CoP

The DoW CoP sets out good practice for the development industry to use when:

- Assessing on a site specific basis whether excavated materials are classified as waste or not
- Determining on a site specific basis when treated excavated waste can cease to be waste for a particular use

Who is Using the DoWCoP?

This DoWCoP is directly applicable to:

- Those who commission earthworks (developers, landowners, utilities…)
- Their appointed engineers
- Consultants
- Contractors (including specialist remediation contractors)
- Regulatory authorities
- Soil treatment facility operators
- "Waste brokers"

See Watch Point 1: the person commissioning the excavation works is responsible for complying with this DoWCoP. It is incumbent upon all other persons employed in the chain of work to ensure that the requirements of the DoWCoP are met … the whole project team must understand the requirements of this DoWCoP.

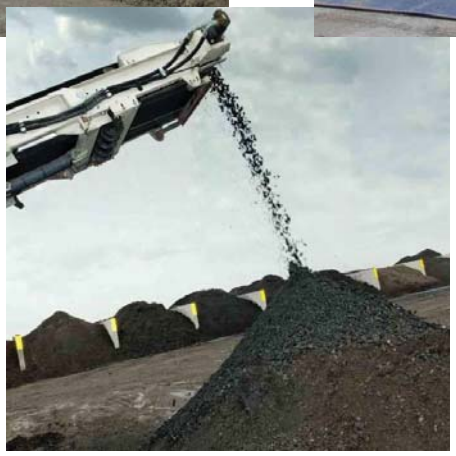
Who is Using the DoWCoP?

Excavation & reuse of material – on site or on another site

Brownfield and greenfield sites – contaminated or not

Images: PB, Hydrock, DEC,

Who is Using the DoWCoP?



Large or small projects – complex or "routine"

Treatment of contamination or not – on or off site

Images: Hydrock, DEC

Who is Using the DoWCoP?

Development projects

Remediation projects

Images: Wardell Armstrong, DEC

There are Other Options

- Disposal with import and use of new material
- The "on- site exclusion" from the requirements of WFD
- Use under an Environmental Permit
    - •Standard Rules
    - •Bespoke
- Use under a properly registered Exemption
- Engage in site specific negotiation with Regulator
- Use under WRAP protocol - for some materials
- Just do it! (Note facilitator disclaimer!)

Benefits of Using the DoWCoP

Application of good practice in a systematic manner by using the DoWCoP:

- Removes the debate over what is waste and what is not
- Provides consistency and certainty facilitating project decision making
- Improves efficiency and cost effectiveness
- Supports diversion from landfill
- Supports reduction in primary aggregate use
- Supports reduction in haulage costs
- Supports sustainable development

"The straightforward structure and ease of use of the DoWCoP has been as much a part of its success as the aims it was created to achieve....
Philip Norville, Business Development Manager, DEC UK Limited in Preface to Version 2 of DoWCoP, March 2011

Benefits of Using the DoWCoP

Environmental

- Promotes material use in accordance with waste hierarchy
  - Waste being minimised
  - Waste that is produced is recovered and reused
  - Less waste sent to landfill
- Natural resource consumption less (e.g. quarried product, fuel)
- Reduced vehicle emissions and
- Contribution to a reduced carbon footprint in development
- Pollution of environment and harm to human health prevented

Benefits of Using the DoWCoP

Social

- Bringing brownfield and contaminated land back into use
  - Hence preserving greenfield
  - Creating communities on the developed land
- Reduces "waste blight" in development
- Reduced vehicle movements
  - Less congestion
  - Less disturbance
  - Safety concerns

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Benefits of Using the DoWCoP

Economic

- Lower development costs
- Lower transport costs - less distance to travel
- Reduced need for import of materials (e.g. quarried product)
- Considered less costly process than other options, e.g. EP
- Clear and systematic use of "normal" land development documentation and procedures
- Quicker process
- Less complex than waste legislation
- Lower regulatory costs

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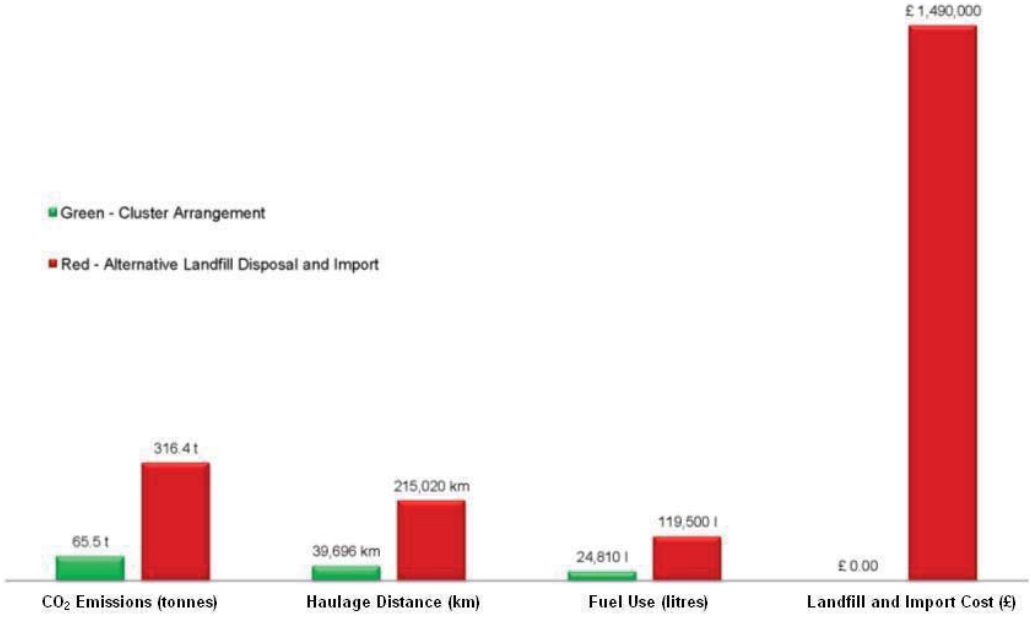
Benefits of Using the DoWCoP

According to CL:AIRE - Project cost savings from £100,000 to £1M+ have been reported from projects executed/planned under the DoWCoP



From CL:AIRE Case Study Bulletin CSB 09, May 2011

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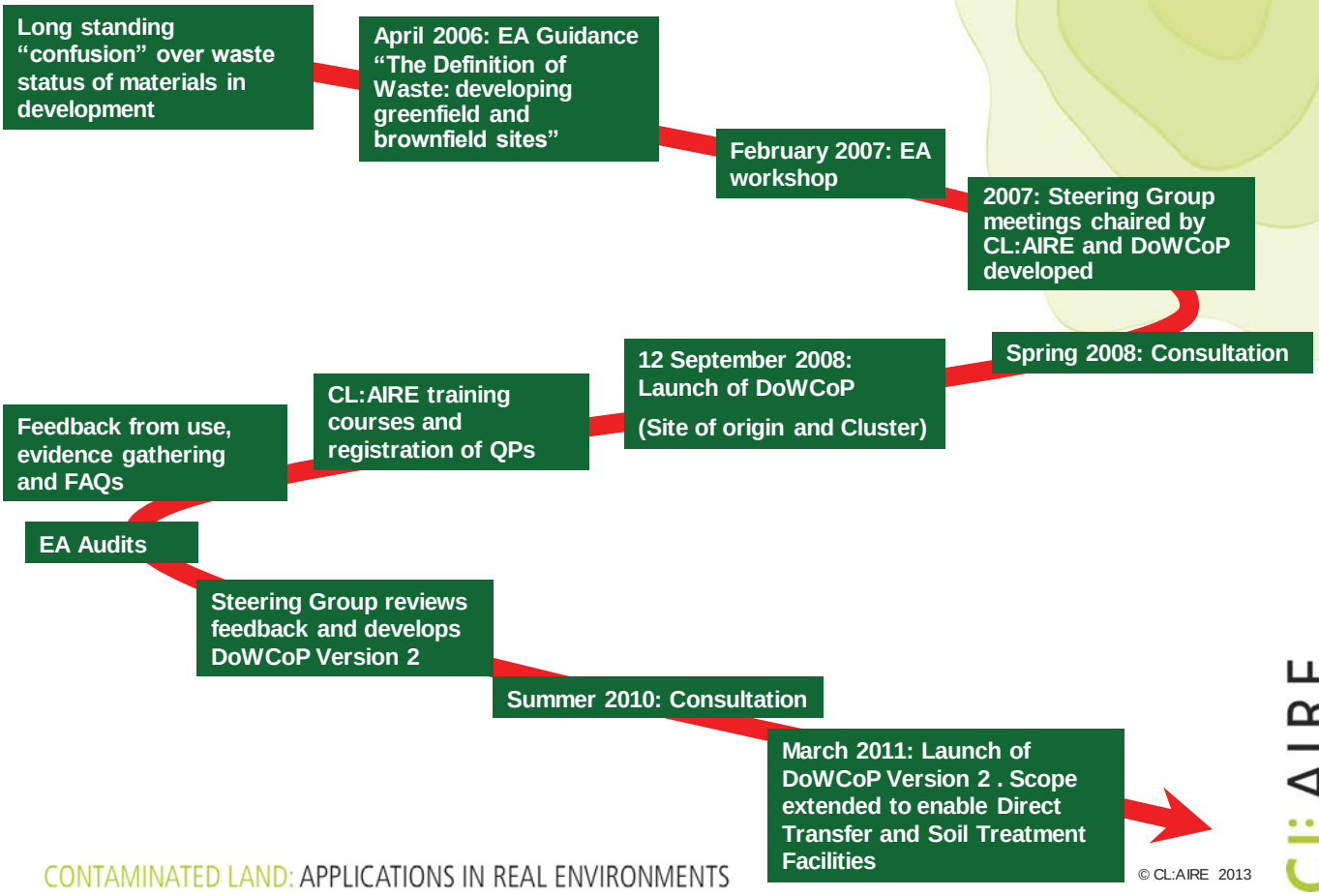
Scene Setting – a Little History



DoWCoP Steering Group

Nicholas Willenbrock	- CL:AIRE
Roger Dunn	- Representing STF operators
Richard Boyle	- Homes and Community Agency
Matthew Whitehead	- Environment Agency
Jonathan Atkinson	- Environment Agency
Ged Duckworth	- Ged Duckworth Limited (DoWCoP author)
Clive Boyle, Phil Crowcroft	- Environmental Industries Commission (EIC)
Peter Witherington	- Home Builders Federation (HBF)
Mike Higgins	- Representing STF operators
Lisa Hathway	- National House Building Council (NHBC)
Frank Evans (Chair 2015)	- National Grid
Doug Laidler	-Soil & Groundwater Technology Association (SAGTA)
Steve Livingstone	- Civil Engineering Contractors Association (CECA)
Peter Johnson	- UK Contractors Group (UKCG)
Michelle Griffiths	- Natural Resources Wales (NRW)

Sponsors of the Definition of Waste: Development Industry Code of Practice

Homes & Communities Agency

DEC UK
Environmental Contractor

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The Role of CL:AIRE

- Managing organisation for DoWCoP
- Receipt and processing of online Declarations (since 1/10/14)
- Dedicated web site: www.claire.co.uk/CoP
- Register of Qualified Persons
- Register of Evidence
- Register of Materials
- Ongoing work to monitor use of DoWCoP
- Further refinements and extension…

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CL:AIRE Register of Materials

Ref #	Date of Submission	Location	Quantity	Availability From - To	Material Type	Chemical Analysis Available?
D064	October 2015	South-west Reading, Berkshire	~50,000	early 2016	Natural River Terrace Deposits	Ground investigation data is available on request
D063	Sept 2015	Beaconsfield, Bucks	3,000	Mid October 2015	Natural Sand and Gravels	Ground Investigation data is available upon request
D062	Sept 2015	Cimla, Neath	1,400	Immediately	Sandy, gravely, firm to stiff, inert	Available on request.
D061	Aug 2015	Filey, North Yorkshire	27,000	From April 2016	Glacial Till - sandy gravelly clay of low plasticity, firm to stiff, inert	Ground investigation data available.
D060	Aug 2015	Billington, Lancashire	3,750	Start 12th August 2015 (duration 8 weeks)	Sandy / Gravelly Clay & Stiff Clay (greenfield virgin site)	Available On Request

32 Donor Sites with 933,937m^3

CL:AIRE Register of Materials

Ref #	Date of Submission	Location	Quantity needed	Availability From - To	Material Type	Specified End Use
R043	July 2015	Wembley	5,000 m3	july, Aug, Sept, Oct 2015	Inert / Non Hazardous soil with chemistry and logging information required.	General use
R042	March 2015	Chesterfield	150,000 m3	material needed now until Sept 2015	Clean fill (sub soil, topsoil and clays	Capping and public open space fill
R041	March 2014	Nr Hatfield	170,000 m3	2016 - 2017	Clay soil & stones	Engineering fill for landscape improvement project
R038	August 2014	Macclesfield	20,000 m3	August 2014 - October 2014	"as dug" soils excluding topsoil	Clean materials for an engineering fill
R037	June 2014	Whitehaven	60,000 m3	Early 2014/Late 2015	Clay/Soils & Stones	Profiling for biomass plantation
R036	June 2014	Thornton-Cleveleys	40,000 m3	Early 2014/Late 2015	Clay/Soils & Stones	Landfill restoration/public park creation

37 Receiver Sites with 5,874,713m^3

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CL:AIRE Register of Materials

Ref #	Date of Submission	Location	Yearly Intake	Timescale	Treatable Material/Contaminants	Notes
F013	Aug 2015	Leeds	30,000 te	Immediate	Treatment of a wide range of materials including soils, railway ballast, dredgings, treatment plant residues. Suitable contaminants include, TPH, PAH, TCE, PCE, Organohalogenated solvents and Kerosene.	The treatment process provides a cost effective, fully compliant, solution for off site soil disposal. All treated material is beneficially re used on the adjacent landfill and therefore is exempt from landfill tax..
F012	Aug 2015	Ware, Hertfordshire	60,000 te	Immediate	Treatment of a wide range of materials including soils, railway ballast, dredgings, treatment plant residues. Suitable contaminants include, TPH, PAH, TCE, PCE, Organohalogenated solvents and Kerosene.	The treatment process provides a cost effective, fully compliant, solution for off site soil disposal. All treated material is beneficially re used on the adjacent landfill and therefore is exempt from landfill tax..

13 Soil Treatment Facilities

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DoWCoP Adoption

Since launch in September 2008 to end September 2015:

- **DoWCoP Declarations made = 1762**
- **Approximate volume of material used under DoWCoP: 31,287,030 m^3**
- **Mean Declaration volume = 17,756 m^3**
- **Qualified Persons registered = 246**
- **Delegates on training courses = 828**

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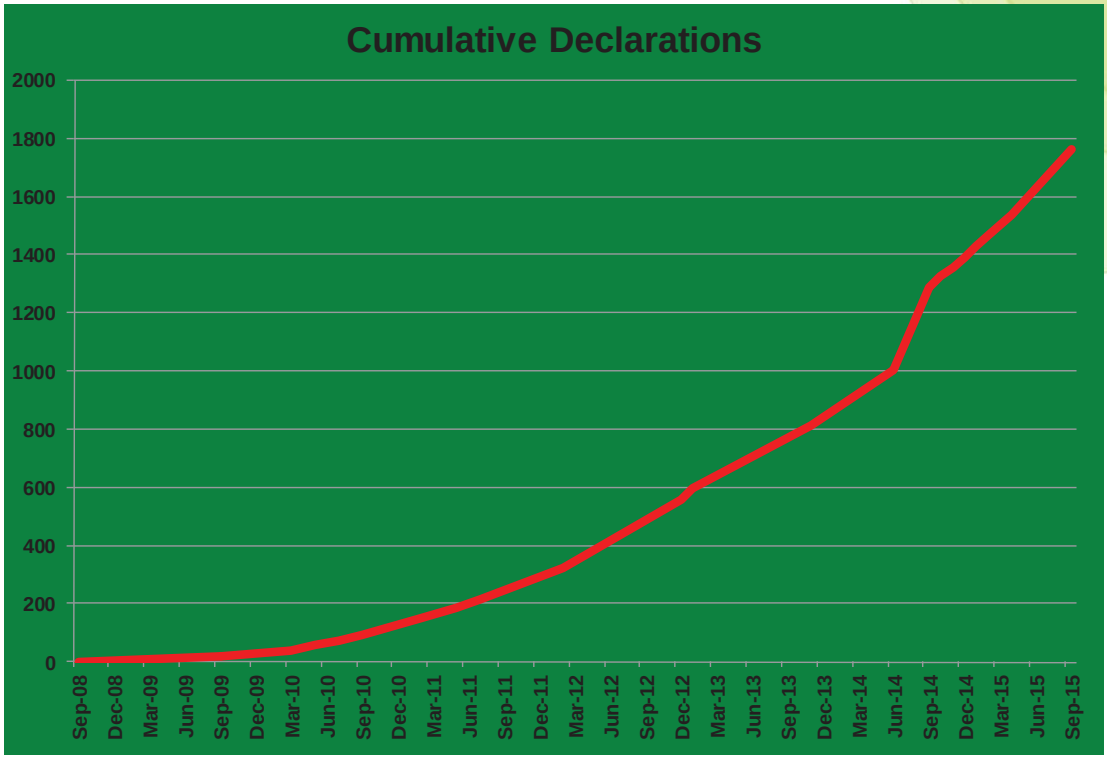
DoWCoP Adoption



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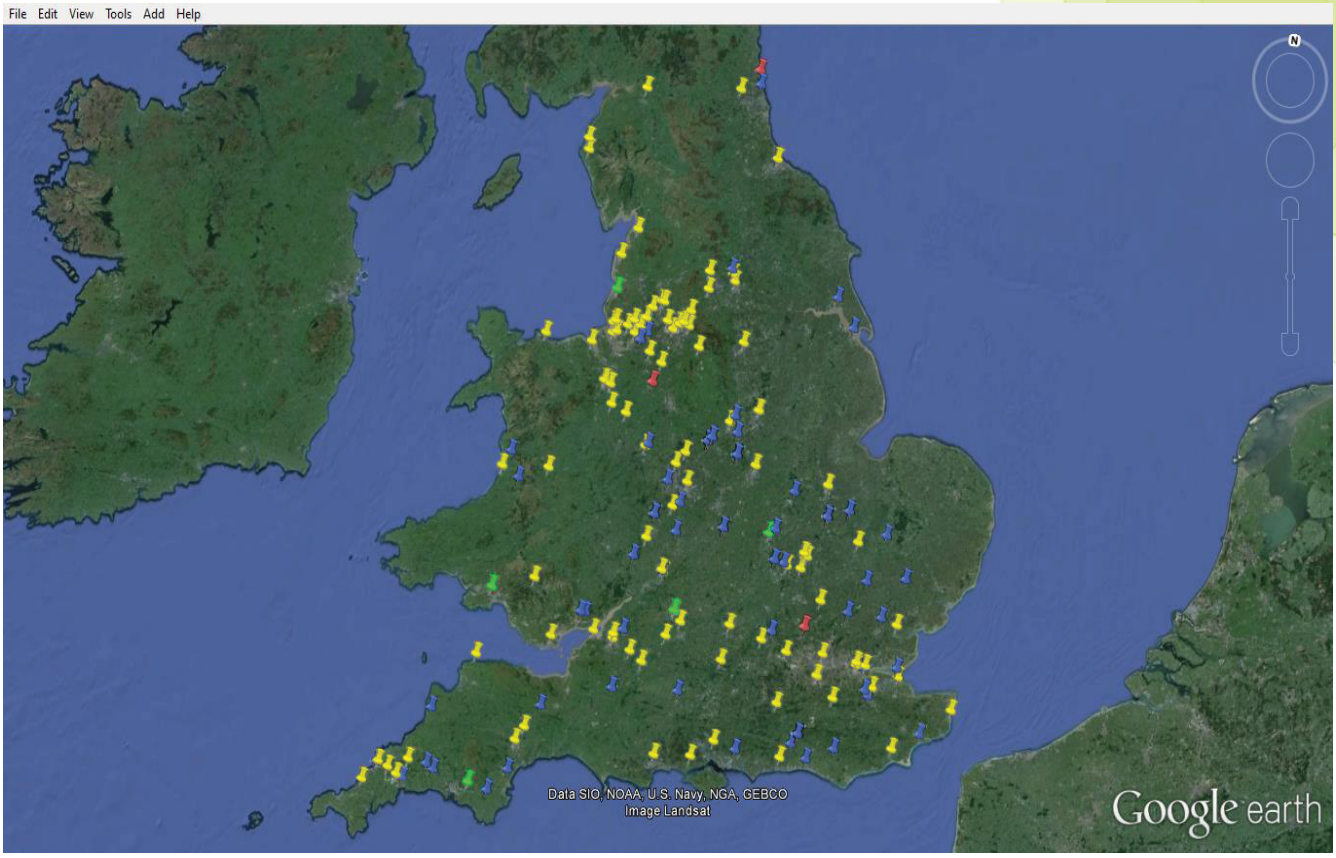
DoWCoP Adoption



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Finding Your Way Around

Acknowledgements
Document Control
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Section 1 Introduction
Section 2 Principles for the use of materials as non-waste
Section 3 Methods of demonstrating that material is not waste or has ceased to be waste
Section 4 Other regulatory issues

Appendix 1 Use on the Site of Origin
Appendix 2 Direct use of clean naturally occurring soil and mineral materials on another development site (Direct Transfer)
Appendix 3 Cluster Projects
Appendix 4 Example Schematics
Appendix 5 Declaration by Qualified Person
Appendix 6 Qualified Person Requirements
Appendix 7 Materials Management Plans and comparison with other plans
Appendix 8 Frequently asked questions regarding construction activities

Flow Diagram: Summary of process
Flow Diagram No1: Use on the Site of Origin
Flow Diagram No2 : Direct use of clean naturally occurring soil and mineral materials on another development site (Direct Transfer)
Flow Diagram No3: Cluster Projects

PRINCIPLES AND CONSTANTS

MATERIALS REUSE SCENARIOS 1&2

MATERIALS REUSE SCENARIO 3

ROLE OF THE QUALIFIED PERSON

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Key Features of the DoWCoP

- It is voluntary
- Applies only to England and Wales
- Degree of self regulation – with checks and balances
- Assumption of high levels of professionalism and integrity
- Sets out principles for demonstrating or achieving non-waste status
- Confirms a risk based approach to waste
- Allows materials re-use without Environmental Permit or Exemption
- Achieves non-waste status sooner (geography and time)
- Utilises existing frameworks, e.g. CLR 11
- Has been and is being beneficially used
- Living document – opportunities for expansion and improvement

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The DoWCoP Principles and Constants

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Contents

- Waste Legislation
- Principles and Constants
  - Factors
  - Scope – excavated materials
  - Process
  - MMP
  - Tracking System
  - Verification Report

Waste Legislation - Background

- Control of Pollution Act 1974
  - "once a waste always a waste"
- Directive Waste
- Waste Management Licensing Regulations 1994
- Circular 11 / 94
  - Chain of utility
  - Normal commercial cycle

Waste Legislation - Background

- Waste Framework Directive
- Preamble
  - Aims and objectives

- Holder of the substance or object:
  - Discards
  - Intend to discard
  - Required to discard

- Annex 1 - Disposal Operations
- Annex 2 - Recovery Operations

ECJ and UK Rulings

- Economic value but still waste
- Definition turns on "discard", not listed activities
- Special precaution / commonly regarded as waste / using a recognised waste recovery activity = evidence it is waste
- Decisions made in the light of all the circumstances
- Aims of the Directive / the Directive's effectiveness must not be undermined – not restrictively interpreted
- Long term storage / certainty of use / burden to the holder
- Remains waste until incorporated into new products
- Unintentional / accidental discard of fuel contaminating soil and groundwater
- Recovery if replaces natural resources that would otherwise be used
- OSS fuel oil

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Revised Waste Framework Directive

- Definition of waste remains the same
- Scope has changed
- Recovery and by-product defined
- End of waste criteria introduced
- Defra – Regulations 2011

Environment Agency View

- Courts ultimately decide
- Environment Agency does not make it waste, but have a view:
- Contaminated soil and groundwater
  - Waste upon excavation or pumped
- Clean excavated material
  - Upon leaving the site of production
- Need an Environmental Permit or exemption

EA CoP Position Statement

- **Modern Regulation agenda:**
  - **Focusing on outcomes**
  - **Using a risk-based approach that provides better protection at lower cost**
  - **Shifting from regulatory prescription to corporate responsibility**
  - **Being comfortable using alternatives to direct regulation**
- **Better Regulation – Self Regulation**

EA DoWCoP Position Statement

- **"When a Declaration is sent to us by a Qualified Person showing that excavated materials are to be dealt with as set out in the DoWCoP, we will take the view that the materials on the site where they are to be used will not be waste"**
- **Encourage the use of the DoWCoP**
  - **EA using sites operating under the DoWCoP themselves**
  - **EA have a registered Qualified Person**
- **Resources focused elsewhere – high risk activities**

Principles - The 4 Factors

For Excavated Materials

In all cases:

1. Does not undermine the aims and objectives of the Waste Framework Directive

- **Prevent harm to human health**
- **Prevent pollution of the environment**

2. Suitable for use – without further processing

3. Certainty of use

4. Quantity – that is absolutely necessary

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Suitable for Use (no further processing)

- Both chemically and geo-technically
- Risk based and aligned with CLR11
- Route A : Model Procedures
  - Remediation Strategy
- Route B: Design Statement
  - Design Statement

Quantity & Certainty

- Quantity
  - Cut and fill / mass balance calculations:
    - Pre-construction / final contours
    - Specified in planning
    - Remediation strategy / Design Statements
- Certainty
  - Specified in planning
  - Legally binding contracts:
    - Roles and responsibilities
    - Contingency plans
    - Who pays for off-spec' materials / no longer wanted materials

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The Constants

Excavated Materials – GENERALLY included

- Soil, parent material and underlying geology
- Soil and mineral based dredgings
- Ground based infrastructure that is capable of reuse within earthworks projects
  - e.g. road base, concrete floors
- Made ground
- Source segregated aggregate material arising from demolition activities
  - e.g. crushed brick and concrete, to be reused on the site of production within earthworks projects or as sub-base or drainage materials; and
- Stockpiled excavated materials that include the above

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Excavated Materials - Excluded

- Soils which have been contaminated with injurious invasive weeds
  - except for soils that are used on the site of production
  - best practice guidance, e.g. Japanese Knotweed Code of Practice
- Specific excavated infrastructure material, such as pipework and storage tanks
- General construction wastes
- Demolition wastes not included in the above
- Extractive waste (Mining Waste Directive)

Scenario Exclusions

- Direct Transfer
  - Not clean
  - Not naturally occurring
- Cluster
  - New contaminant above Hazardous Waste Threshold
  - Existing contaminant significantly above existing – see Watch Point 15

Process

- Adequate characterisation of material(s) and site(s)
- Risk Assessment – tiered
- Remediation Strategy / Design Statement
- MMP Form
- Declaration
- Verification Report

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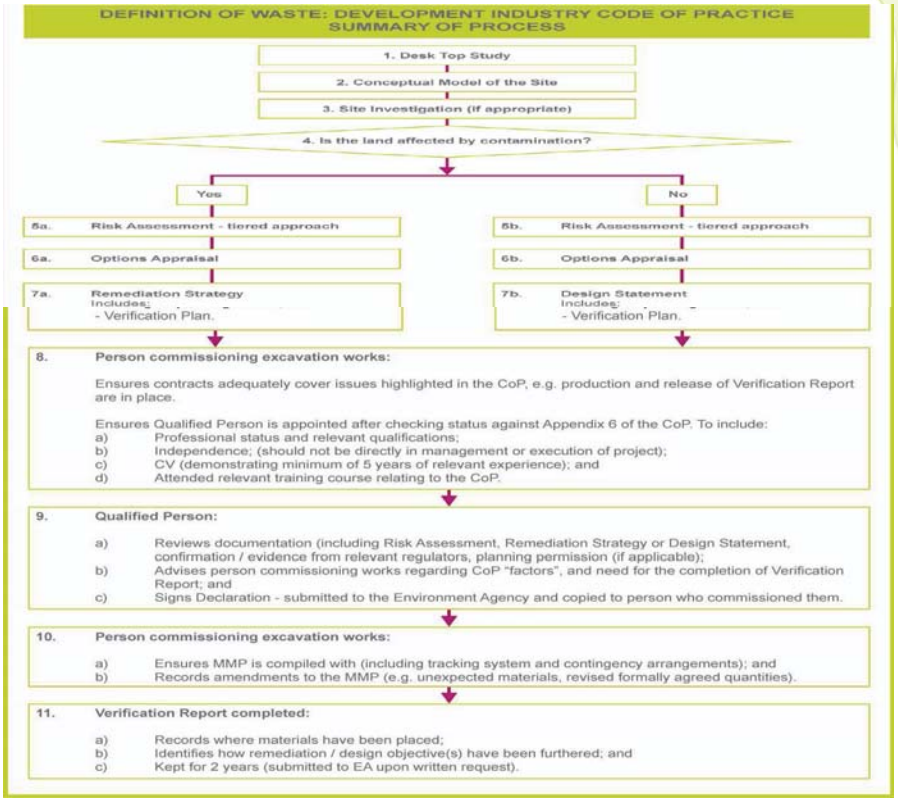
Process



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Characterisation of Materials

Box A – Categorisation of materials
To be used in:

- **The same site without treatment ***
- **The same site following ex-situ treatment ***
- **Another development site without treatment ***
- **Another development site following ex-situ treatment**
- **On another site e.g. Hub site ***

- **Not used and requires recovery or disposal off site as waste**

or

- **Surplus and requires recovery or disposal off site as waste**

***Having regard to the:**

- **Conceptual site model**
- **Risk assessment of the location where materials are to be used.**

MMP

- **Scenario covered**
- **Organisation**
- **Site details**
- **Landowners**
- **Summary and Objectives**
- **Plans and Schematics**
- **Parties and Consultation**
- **Lines of Evidence / Contingency arrangements**
- **Tracking system**
- **Records**
- **Verification Plan**
- **Environmental Benefits - optional**

Tracking System

- All materials subject to:
  - Excavation
  - Disposal
  - Treatment and/or
  - Reuse
  - Must be tracked throughout
- Evidence generated to provide an auditable trail
- Annotated plans

Tracking System

- Outgoing inspection procedures:
  - Visual and olfactory
  - Field tests (as appropriate) and
  - 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

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Tracking System

- Delivery tickets for non-waste materials (if moving from one site to another)
- Incoming inspection procedures for non-waste materials:
  - i. Visual and olfactory
  - ii. Field tests (as appropriate)
  - iii. Laboratory confirmation (as appropriate)
- Signed delivery tickets
- Record of where placed

The Declaration

- QP reviews MMP and supporting relevant documentation
- Confirms that the DoWCoP has been followed – to date
- Completes and submits a Declaration to CL:AIRE
  - "No objections"
- Copy Declaration Receipt to person who commissioned them.
- Advises that:
  - If the work is not carried out in accordance with the DoWCoP, then materials may be deemed to be waste
  - A Verification Report has to be completed – to record reality

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Verification Report

- Scope
  - Remediation Strategy vs Design Statement
- How objectives have been furthered or met
- Plans
- Records
  - Testing
  - Inspection
  - Rejected loads

Regulator (EA/NRW) Role

- Advise on remedial objectives for controlled waters where necessary
- Receive Declaration from CL:AIRE
  - Provide reference number
- Audit:
  - Risk Assessments
  - Material Management Plans
  - Verification Reports
  - i.e. goes beyond the role of a QP
- Check on developments where no Declaration
- Require permits or take enforcement action

Consultation

- Intention is not:
  - to add additional liaison or
  - remove the genuine need for it under other situations e.g. planning
- Different if Route A or Route B (see Table 2)

Table 2 Route A: Where contamination is present or suspected – "No objections"

- Actual correspondence agreeing
- Correspondence - regulator has been approached but has declined to comment
- Correspondence - a real attempt has been made to engage with the regulator but that no response has been received
  - allow a minimum 21 days and/or
- The planning permission where it provides a clear link to an approved Remediation Strategy (where planning is applicable)

Table 2 Route B: Where contamination is not present or suspected – "No objections"

- Actual correspondence showing land contamination is not an issue
- Correspondence - the regulator has actually been approached but has declined to comment
- A Desk Top Study and/or ground investigation interpretative report showing no contamination is suspected or present
  - "hence no need for consultation"
- A Design Statement 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 required)

Regulating Authority - Consultation

Planning	Human Health – LA Controlled Waters – EA
Permitted Development	Human Health – LA Controlled Waters – EA
Part 2A	Human Health – LA Controlled Waters LA
Special Sites	Human Health – EA Controlled Waters EA

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Tea and Coffee

15 Minutes

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The Qualified Person
Role and Attributes

Clive Boyle
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Tel:07786 012052

Role of the Qualified Person

Three principles:

- **QP actions must provide confidence to Environment Agency or Natural Resources Wales that best practice is to be followed and that there is an effective audit trail relating to what is planned**
- **Project responsibilities and possible liabilities associated with the development project should be no different than without use of DoWCoP**
- **In employing a QP, there should not be a need for a client to pay for work twice**

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What a Qualified Person Does…

The Qualified Person reviews the evidence provided relating to the proposed use of materials. If properly registered, confident and satisfied:

- **Completes the online Declaration**
- **Submits the Declaration to CL:AIRE to record and forward to Environment Agency or Natural Resources Wales – *notification***
- **Provides CL:AIRE with Declaration Fee payer details**
- **Declaration receipt will be issued by CL:AIRE - *confirmation* + *warning and reminder***

Declaration Fee

From 1/10/2014 a Declaration fee is to be paid

Fee: £10 per 1,000m^3 (declared volume)
No fee for 5,000m^3 and below

Declared volume up to	Fee (+VAT)
5,000m^3	£0
6,000m^3	£60
7,000m^3	£70
8,000m^3	£80
9,000m^3	£90
10,000m^3	£100
20,000m^3	£200
100,000m^3	£1,000

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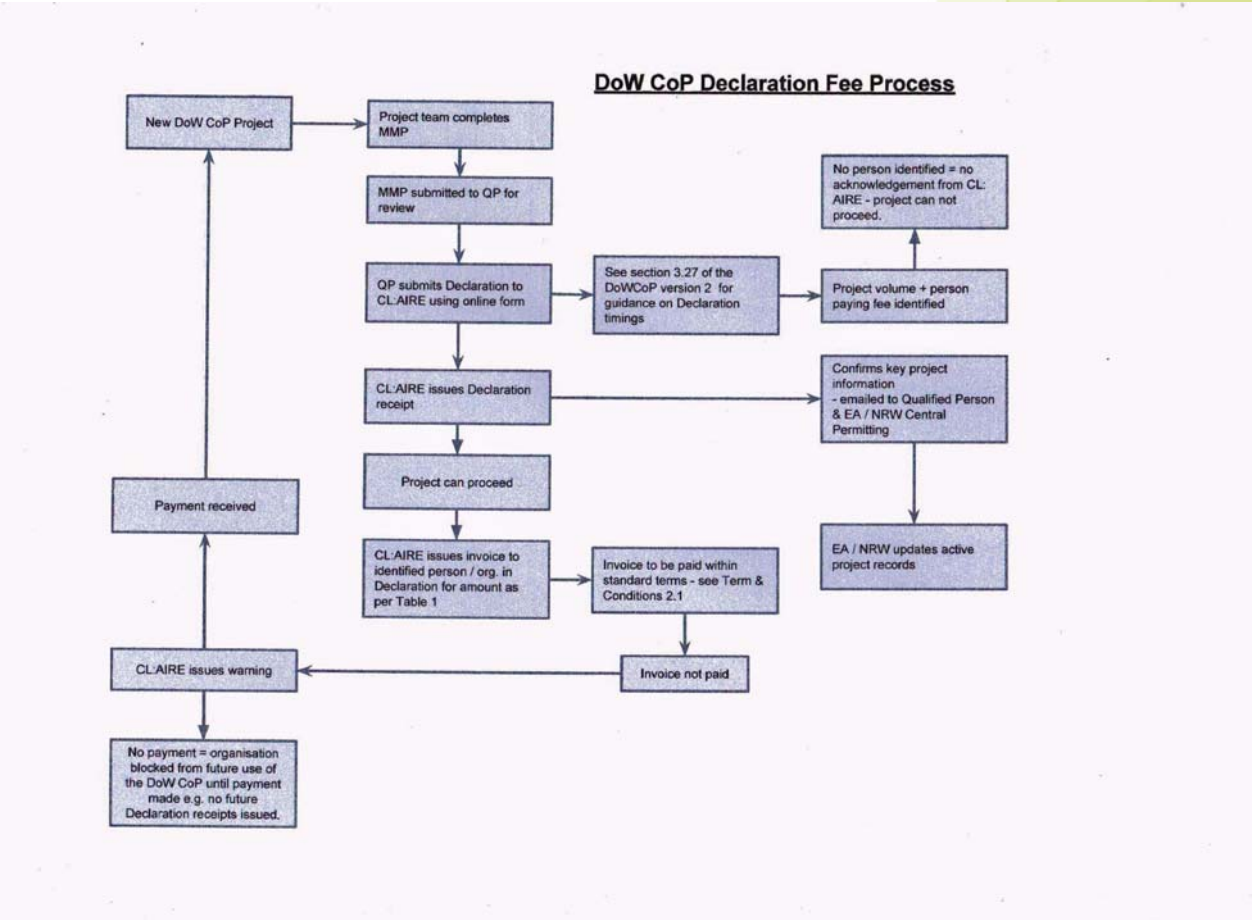

What a Qualified Person Does…

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?

..and What a Qualified Person Does Not Do

The Qualified Person does not need to:

- Rework 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
- Enter into a dialogue with Regulator or Planning Authority

See DoWCoP 3.25 on identifying fundamental errors

Timing and the Qualified Person

The Qualified Person's role is "before the event" completing and signing the Declaration:

- Prior to use for Site of Origin
- Prior to dispatch for Direct Transfer (for each Receiver site)
- Prior to dispatch from Hub site to each Receiver site in a Cluster (including fixed STF)
- Declaration to be submitted ideally no later than one week before use/dispatch of material

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Qualified Person Attributes

The Qualified Person is not expected to be a specialist, or expert in all aspects of the work, but:

- **Must be suitably qualified and experienced**
- **Requires a thorough understanding of the DoWCoP**
- **Must be confident in signing the Declaration**
- **Is expected to apply the principles of professionalism and integrity that underpin the DoWCoP**

Qualified Person Requirements

See Appendix 6 of DoWCoP

- **Corporate Authority**
  - **Authorised to sign on behalf of their company in this area of activity**
- **Professional Standing**
  - **Chartered status**
  - **Relevant and from a body with a professional code**
- **Relevant Qualifications**
  - **Academic qualifications relevant to this area of activity**
  - **No exclusive list**
- **Experience**
  - **Minimum of 5 years and current**
  - **Planning, management or oversight of relevant projects**
  - **Evidenced by CV**

Qualified Person Requirements

See Appendix 6 of DoWCoP (Version 2)

- **Independence**
  - Not directly involved in the execution or management of the project *prior to submission of the Declaration*

- **Not barred from acting**
  - By having individual convictions under waste or environmental legislation
  - As a result of previous activities in the role of Qualified Person

- **Training**
  - Attendance a recognised minimum one day training course
  - Evidence of attendance required
  - Special arrangements for QPs trained under Version 1

- **Registration**
  - Must be registered with CL:AIRE as a Qualified Person
  - Must have paid the annual registration fee

Qualified Person Registration

CL:AIRE is the recognised Central Registration Body for the Qualified Person

To register submit the following documentation:

- Completed Waste Declaration Capability Record
- CV
- Relevant Chartership certificate
- Training course attendance certificate
- Pay registration fee of £150 (private sector) or £105 (public sector). *Note regularised annual (Jan-Dec) subscription*

To remain registered

- Update registration annually
- Pay annual fee of £150 (private sector) or £105 (public sector)

Importance of the Qualified Person Role

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Materials Reuse Scenarios

1. Site of Origin

2. Direct Transfer

First Group Exercise

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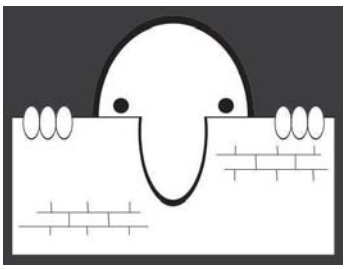
Materials Reuse Scenarios

Three key points:

- Principles and constants apply to all scenarios
- Remember the four factors
- and if it looks like …….



Use on the Site of Origin

The Site of Origin scenario is the simplest arrangement for DoWCoP use that has been available from the outset

…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 treatment, as part of the development of that land

See DoWCoP V2 1.13 for the specific exclusion from Waste Framework Directive requirements that may be relied upon in some circumstances related to site of origin use instead of using the DoWCoP

What is “Site of Origin”?

Image: Ecologia

What is “Site of Origin”?

For DoWCoP purposes … a single identifiable site. This can include:

- **The area covered by a specific planning permission**
- **By a single detailed Remediation Strategy**
- **By a single detailed Design Statement, (e.g. pipeline route, proposed road)**
- **By an agreed Environmental Permit Deployment Form**
- **Other as agreed with EA/NRW (e.g. close sites assembled to form a larger development scheme)**

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What is “Site of Origin”?

Image: Wardell Armstrong

What is “Site of Origin”?

Decisions about “Site of Origin” should ensure that the most sustainable solutions can be achieved in terms of material movement and use

Note: Some developments extend across very large areas with a diverse range of source materials and receiving areas. It may be more appropriate to deal with the transfer and use of materials under one of the other scenarios – Direct Transfer (Appendix 2) or Cluster (Appendix 3) rather than struggle to fit the activities to the Site of Origin case.

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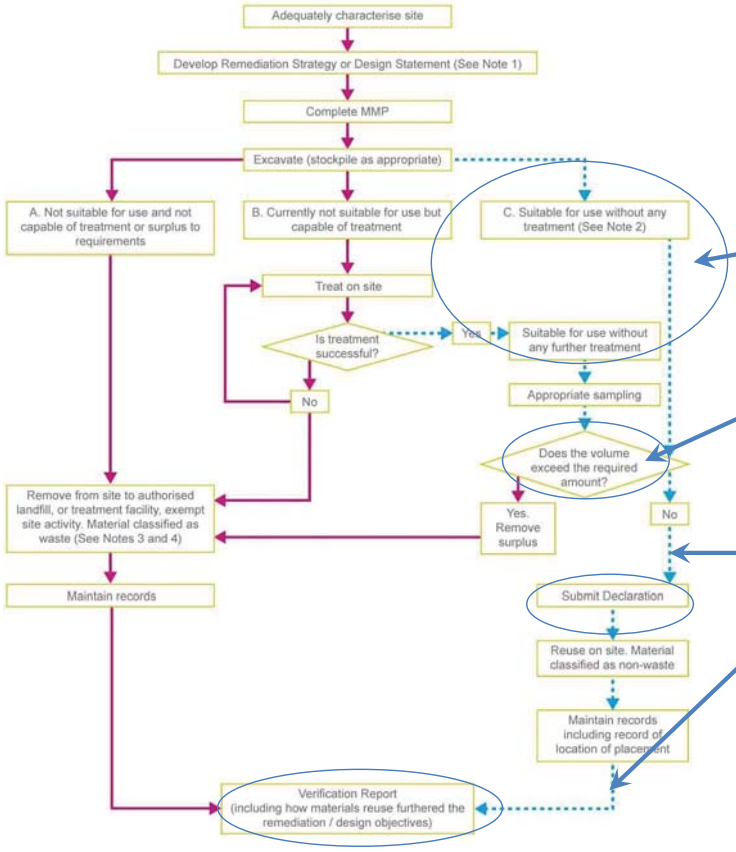
Use on Site of Origin – The Process



Flow Diagram No. 1
Use on the Site of Origin

SUITABLE FOR USE

QUANTITY REQUIRED

CERTAINTY THROUGHOUT

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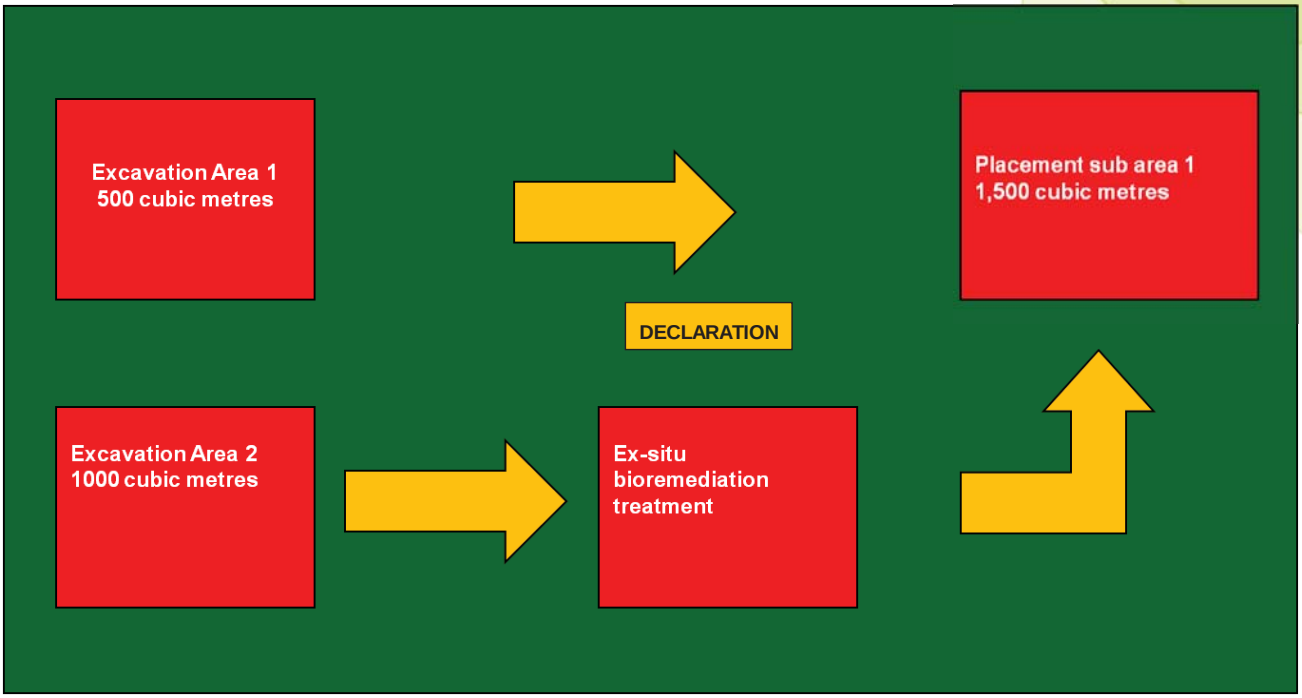
Use on Site of Origin – Example



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Use on Site of Origin – Case Study

Wyre Estuary Outfall (June – October 2009)

- Sewer pipeline construction through a former landfill
- Excavated material arising from laying sewer pipe and manholes
- Permitted development – no planning consent
- Material re-use preferred, but deemed to be waste
- Risk assessment - suitable for re-use on site without treatment
- DoWCoP employed with production of Materials Management Plan
- QP review and Declaration submitted (one of first)
- Work carried out with daily tracking documents completed
- 1,700m^3 excavated material from pipeline trench/manholes
- 1,400m^3 excavated material reused directly as trench backfill
- 300m^3 material disposed as waste
- Verification Report completed
- Project audited by Environment Agency - positive feedback

Use on Site of Origin – Case Study

- Financial benefits:
  - Disposal and import cost savings
  - Haulage cost savings
  - £75,000 savings in Landfill Tax
- Environmental benefits
  - Reduced vehicle miles
  - Less use of landfill
- Programme benefits
  - Programme savings
  - Model for similar and larger projects

Acknowledgements:
United Utilities – Client
MWH (Chris Stanford, John Allison) – Designer and environmental consultant

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Use on Site of Origin – Case Study

Fleetwood WwTW

Supply and demand (s&d) project to increase capacity
£40m target cost contract – part of £55M investment on Fylde Coast by United Utilities

- **Primary area – former mixed waste domestic landfill site**
- **Contaminants: Arsenic, PCB, Copper, Zinc, Phenols, TPH + brick, wood, concrete, plastic and other landfill waste**
- **Majority of 90,000m^3 excavated material *required as part of planning permission* to complete landscape bunds**
- **DQRA - *suitable for use***
- **57,500m^3 - landscape bund and non structural fill**
- **15,000m^3 - lime stabilised for us as structural fill**
- **17,500m^3 - *surplus* material *sent for disposal as inert waste***

Use on Site of Origin – Case Study

- **Financial benefits:**
  - **£ 10.5m saved in disposal**
  - **£ 650k saved in material import**
  - **£ 300k prelims saving**
- **Environmental benefits**
  - **8,500 wagon movements disposal**
  - **850,000 vehicle miles**
  - **8,500 wagon movements import**
  - **850,000 vehicles miles**
- **Programme benefits**
  - **Additional 2 wks to export material**
  - **Additional 2 wks to import material**

Acknowledgements:
United Utilities – Site owner and operator
MWH – Designer and environmental consultant
KMI – Principal contractor

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Use on Site of Origin – Points to Watch

- Timing of Declaration submission
- If treatment is required prior to use, that must be done under the appropriate Permit
- Recognise that treatment may result in volume change
- Certainty of use must be maintained throughout
- Not completed without the Verification Report

Direct Transfer

Version 2 of the DoWCoP introduced the Direct Transfer of clean naturally occurring soils and mineral materials from one site to another development site for use, without the need for the full application of waste legislation (i.e. the receiving development site does not require an Environmental Permit or Waste Exemption)

Note: For the purposes of the DoWCoP "clean" is defined as:

"devoid of anthropogenic contamination to a degree or level that is considered harmful to living organisms"

Direct Transfer - The Materials Covered

Clean naturally occurring soil and mineral material includes:

- Soil, both top soil and sub-soil
- Parent material
- Clays, silts, sands and gravels
- Underlying geology
- Made ground consisting of the above materials only

Direct Transfer – The Sites Covered

The materials must be sourced from:

- greenfield sites not subject to past contaminative use, or
- brownfield sites where the natural soils have been extensively characterised and proven to be clean, and
- must be capable of use without the need for treatment

Direct Transfer – Elevated Levels

Clean soils with naturally elevated concentrations of substances (e.g. geologically derived metals, metalloids etc.) may still be used under the Direct Transfer arrangements. This is provided that the representative concentrations (both total and leachable) of such naturally occurring substances at the source site are comparable or below those 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.

Principle: the use of such materials must not increase the level of risk to the environment at the site of use

Direct Transfer – Lines of Evidence

In the Direct Transfer scenario there is a strong emphasis on lines of evidence concerning past use of the source site and potential for contamination

- **Is the source site really a greenfield site?**
- **If brownfield, can contamination be reasonably discounted for the site as a whole, or clearly defined areas of the site?**
- **Has the presence of naturally occurring elevated substances been adequately considered and evaluated?**

Direct Transfer – 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)	Desk Top Study Visual and olfactory inspection during excavation Consider investigation / testing dependent upon confidence in desk top study	Appropriate Risk Assessment (likely to be qualitative) Confirm that material is as expected Visual and olfactory inspection	Satisfied that the source site has had no contaminative use on the basis of the information provided

Direct Transfer - Minimum Requirements

Direct Transfer Scenario	Requirement at Source site	Requirement at Receiving site	Qualified Person (specific to Direct Transfer – see also Box B)
Greenfield sites with elevated naturally occurring substances (for reuse at either greenfield or brownfield sites)	Adequate Site Investigation Visual and olfactory inspection during excavation	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 Confirmatory testing	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

Direct Transfer - Minimum Requirements

Direct Transfer Scenario	Requirement at Source site	Requirement at Receiving site	Qualified Person (specific to Direct Transfer – see also Box B)
Brownfield site with clearly defined areas of clean naturally occurring soils (for reuse at either Greenfield or Brownfield sites)	Adequate Site Investigation Delineation of naturally occurring soils for Direct Transfer Visual and olfactory inspection during excavation	Adequate Site Investigation (??) Appropriate Risk Assessment Confirm that material is as expected Visual and olfactory inspection Confirmatory testing	Satisfied that site as a whole or clearly defined areas has had no contaminative use on basis of information provided

Direct Transfer - Minimum Requirements

Direct Transfer Scenario	Requirement at Source site	Requirement at Receiving site	Qualified Person (specific to Direct Transfer – see also Box B)
Other brownfield sites and land affected by contamination	Direct Transfer without an Environmental Permit or Waste Exemption not permitted (see Appendix 3)	Direct Transfer without an Environmental Permit or Waste Exemption not permitted (see Appendix 3)	Does not sign Declaration Advises client that not allowed under Direct Transfer scenario (other scenarios may apply)

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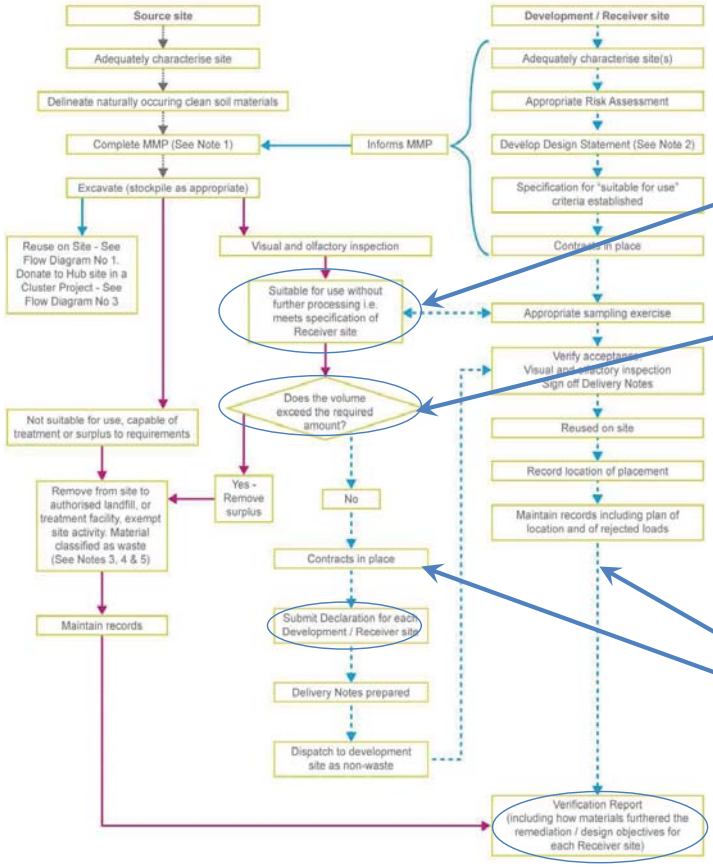
Direct Transfer – The Process



SUITABLE FOR USE

QUANTITY REQUIRED

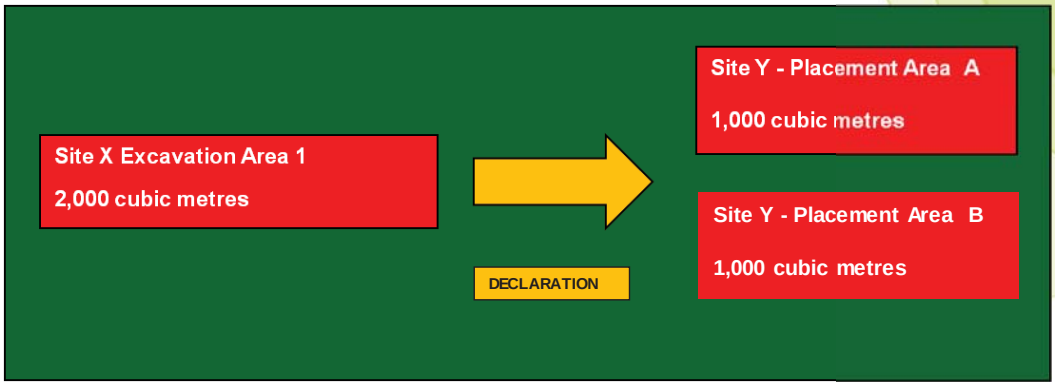
CERTAINTY THROUGHOUT

Flow Diagram No. 2

Direct use of naturally occurring clean soil & mineral materials on another development site

Direct Transfer – Examples

1



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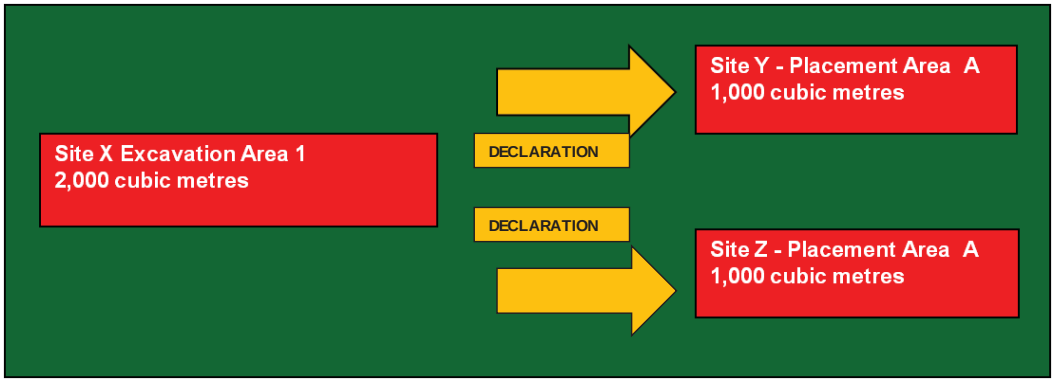
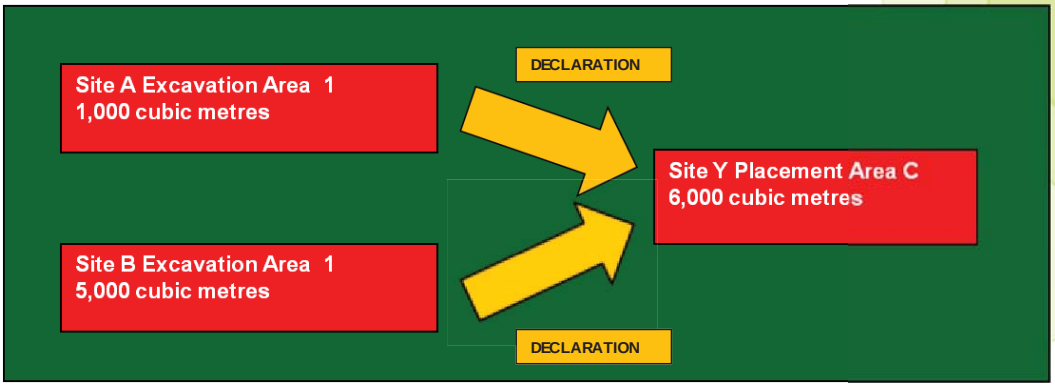


Direct Transfer – Examples

3



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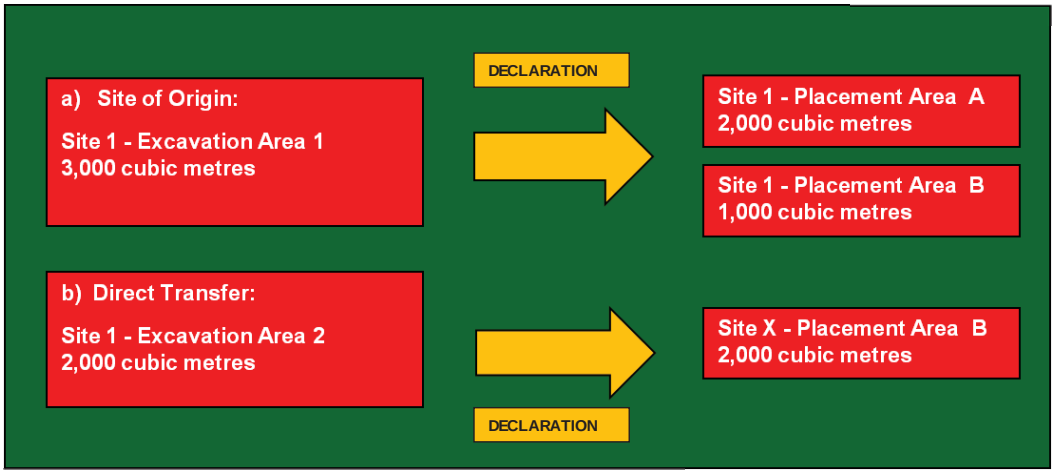
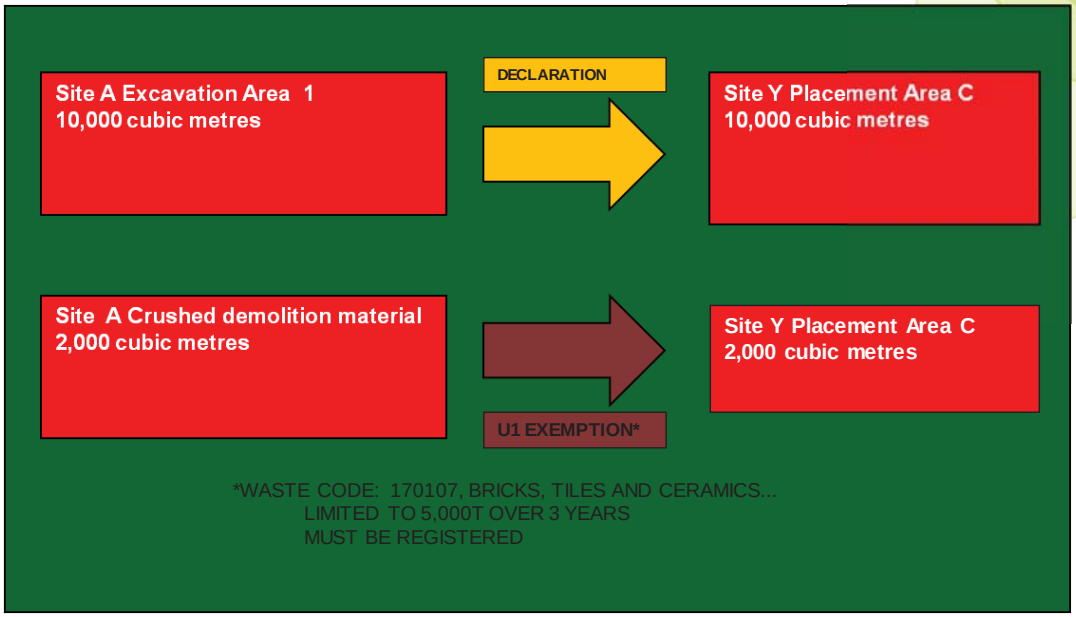


Direct Transfer – Examples

5



Direct Transfer – Points to Watch

- **Lines of Evidence**
  - **Greenfield?**
  - **Contamination reasonably discounted**
  - **Elevated levels checked**
- **Timing of Declaration submission**
- **Certainty of use must be maintained throughout the process**
- **Not completed without the Verification Report**

Lunch

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Case Studies

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Case Study 1

Former Landfill site, Worthing

Remediation of former landfill site to enable expansion of existing Household Waste Recycling Facility

6,000m^3 of material for treatment and reuse under DoWCoP or disposal and replacement by clean fill

Acknowledgements: Vertase FLI

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Case Study 1

	On site bioremediation and reuse under DoWCoP	Alternative – off site disposal of haz and non-haz material and import of fill
Total cost (treatment works)	£65,900	£552,000
Programme	6 weeks	6 weeks
Lorry movements	0	667
Carbon impact*	5 tonnes	21 tonnes
Cost of import of recycled aggregate (<25km)	0	£209,000
Carbon impact* of import	0	71 tonnes

**Based on EA Carbon Calculator*

Case Study 2

Former Engineering Works, Oldbury

Demolition and remediation of engineering works for redevelopment for housing

3,000m^3 of contaminated soil for treatment and reuse under DoWCoP or disposal and replacement by clean fill

9,000m^3 of demolition material processed and used to raise levels

Acknowledgements: Vertase FLI

Case Study 2

	On site bioremediation and reuse under DoWCoP	Alternative – off site disposal of haz and non-haz material and import of fill
Total cost (treatment works)	£80,000	£235,000
Programme	12 weeks	4 weeks
Lorry movements	0	333
Carbon impact*	7 tonnes	11 tonnes
Cost of import of recycled aggregate (<25km)	0	£100,000
Carbon impact* of import	0	36 tonnes

**Based on EA Carbon Calculator*

Case Study 3

Former Capewell Works, Telford

Remediation of site with long and varied history (iron works, gasworks, rubber works) works for redevelopment for residential with gardens

7,000m^3 of contaminated soil for treatment and reuse under DoWCoP or disposal and replacement by clean fill

Acknowledgements: Vertase FLI

Case Study 3

	On site bioremediation and reuse under DoWCoP	Alternative – off site disposal of haz and non-haz material and import of fill
Total cost (treatment works)	£150,000	£617,000
Programme	12 weeks	8 weeks
Lorry movements	0	778
Carbon impact*	7 tonnes	40 tonnes
Cost of import of recycled aggregate (<25km)	0	£244,000
Carbon impact* of import	0	83 tonnes

**Based on EA Carbon Calculator*

First Group Exercise

Image: DEC, Hydrock

Materials Reuse Scenarios

3. Cluster

Fixed Soil Treatment Facilities

Brownfield to Brownfield Transfer

Second Group Exercise

Ged Duckworth
Ged.duckworth@btinternet.com
Tel: 07733 363136

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Cluster

- **Designed to facilitate the remediation and / or development of a number of sites:**
  - **That are located in relative close proximity**
  - **Share a decontamination/treatment facility located on a single site**
  - **Activity is temporary**
  - **Predetermined plan**

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The Starting Point

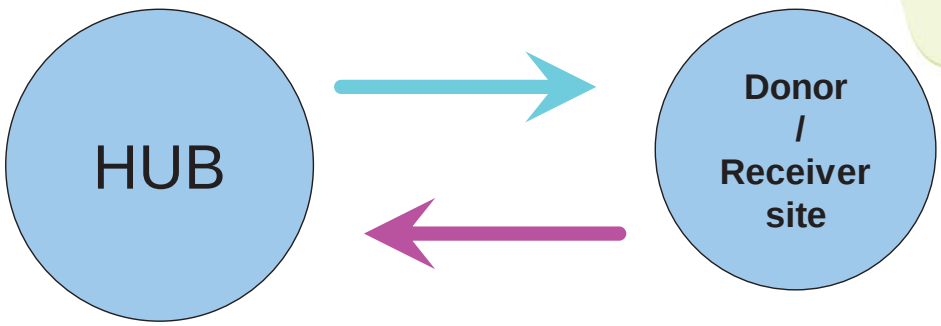
- Landowner / Developer / Contractor / Consultant / Local Authority

- Conceptualisation:
  - Group of sites
    - Close proximity
    - Similar composition of materials
  - Identify potential Hub and proactively identify Donor and Receiver sites
  - Standalone remediation activity

- Similar and flexible timeframes

Cluster

The simplest model:



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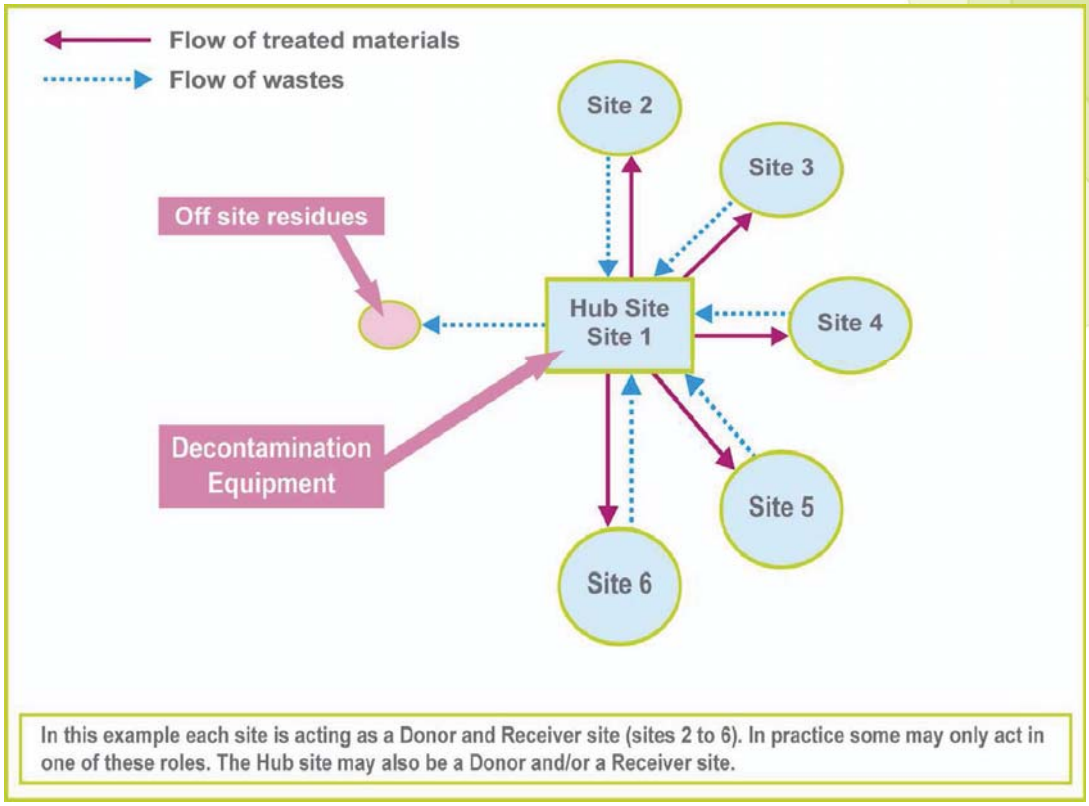
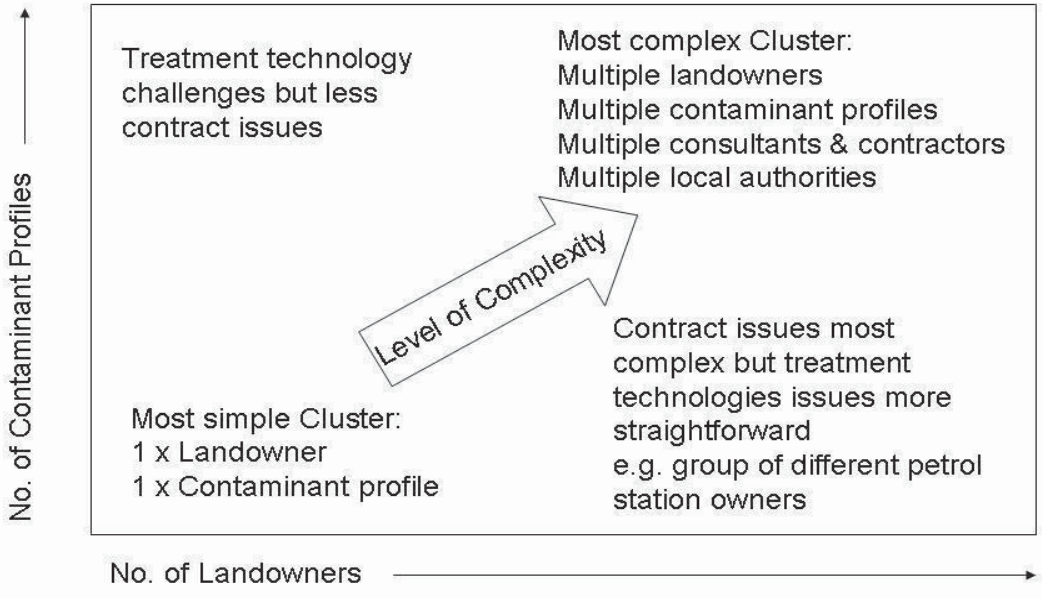


Complexity



Hub Site

- Environmental Permit / Exemption
- Any land
  - May be contaminated
  - Or simply a third party land to house the Hub site equipment
- The best land may be:
  - Near to sites to be developed / remediated
  - Already has a permit
  - Existing use which includes:
    - Waste treatment
    - Vehicle movements

Donor and Receiver Sites

- Use of materials must maintain or improve the quality of land at any Donor or Receiver site
- Donor site:
  - Surplus materials
  - Planning allows removal
- Receiver Site
  - Deficit of materials
  - Planning allows the import of materials

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Additional Criteria Relating to a Receiver Site

- Watch Point 15
- The hazards to human health and the environment must not be increased beyond those which already exist
- Deemed a "sham recovery" if 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

Additional Criteria Relating to a Receiver Site

- Must not introduce any new hazards beyond those that already exist by importing materials containing new contaminants present at problematical levels
- 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

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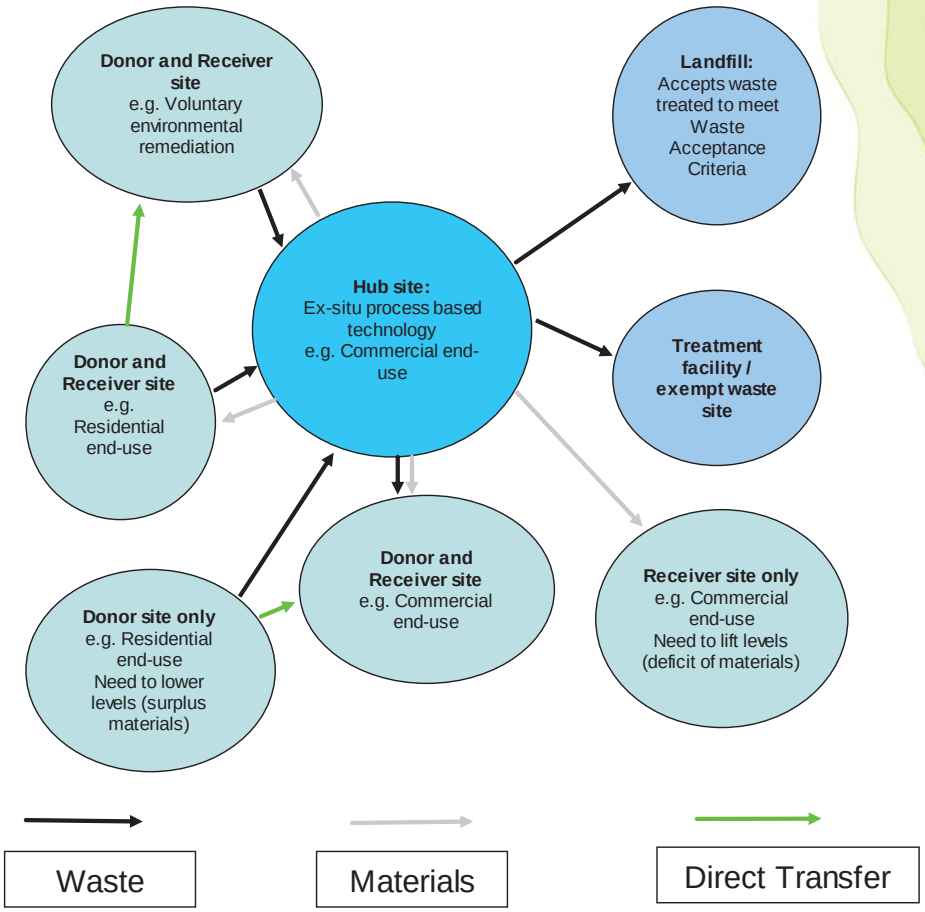

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Operational Considerations

- Size of site
- Low permeability surface
- Vehicle access to the site
- Staffing i.e. appropriately qualified, trained and experienced
- Services e.g. water, electricity
- Discharge consent
- Stockpiles management e.g. surface water runoff, dusts, odours
- Segregation e.g. wastes awaiting treatment, materials awaiting dispatch

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Brownfield to Brownfield Transfer

- New regulatory mechanism
- Not clean naturally occurring soils or mineral materials
- Site of Origin or receipt has an appropriate Environmental Permit or Waste Exemption
  - Complex such as a remediation technology or
  - Simple as a sorting, segregating and / or screening operation

Brownfield to Brownfield Transfer

- The site with the Permit or Exemption being a Hub-cum-Donor or Hub-cum-Receiver site
- Two site Cluster
- Hub-cum-Donor site the Declaration must be submitted prior to dispatch
- Hub come Receiver site the materials must be transferred as waste – Declaration must be submitted prior to material use

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Closing Down a Cluster

- **Donor sites**
  - **Exit once waste removed to the Hub**
- **Receiver sites**
  - **Exit once received the required quantity from the Hub site**
  - **Verification report produced**
- **But may continue under other DoWCoP scenarios if still have a surplus or deficit of materials**

Other Considerations for Closure

- **Relevant planning conditions have been discharged**
  - **e.g. contamination dealt with, surplus treated soils removed, final levels achieved**
- **Lease or Licence to Occupy conditions complied with**
- **Bond returned, if applicable**
- **Hub site Environmental Permit surrendered**
- **Returned to a "satisfactory state"**

Cluster Limitations (?)

- Essentially Site of Origin and Direct Transfer scenario would not apply
- No specified maximum number or size of sites
- No minimum or maximum volume of materials
- No minimum or maximum distance between sites

Case Study

- Hydrock reM20
- 75 ha
- West Hythe
- Residential, commercial and recreational
- Raise levels for flood defence purposes
- 1.12 million cubic metres
- Hub site come Receiver

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reM20

Fixed Soil Treatment Facilities

- **Permanent**
- **No predetermined plan of where materials will be used**
- **Greater variety of waste producers**
- **Greater number of Receivers site**
- **2 site Cluster arrangement - re-occurring**

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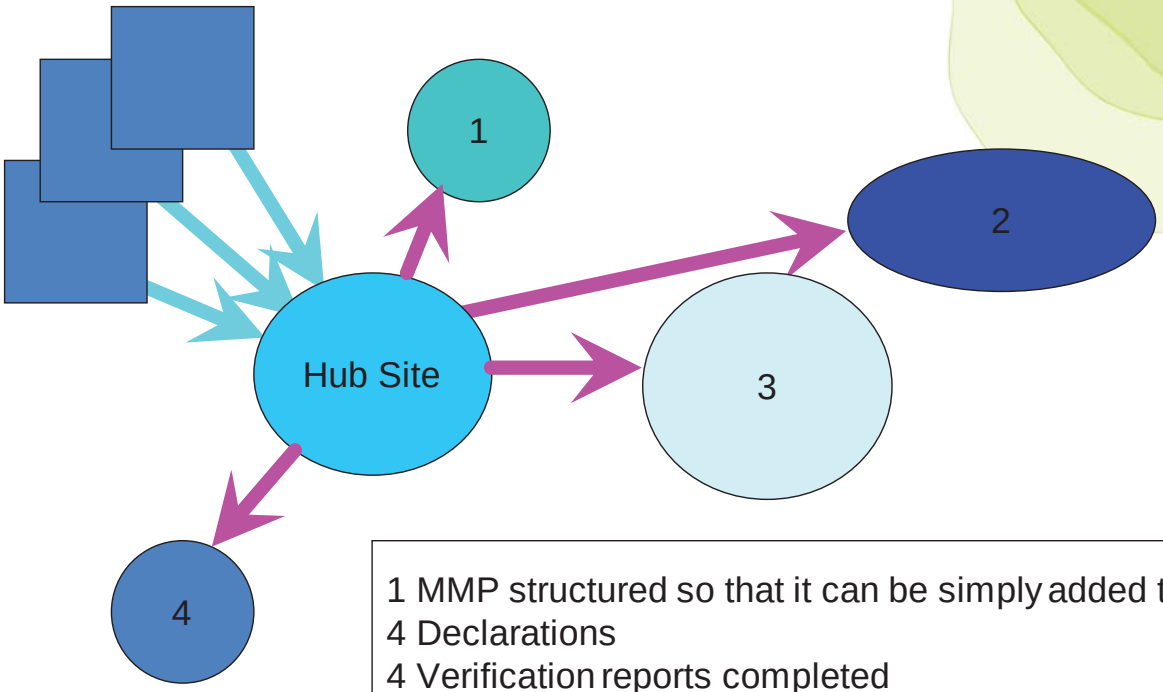
Fixed Soil Treatment Facilities



1 MMP structured so that it can be simply added to
4 Declarations
4 Verification reports completed

Fixed Soil Treatment Facilities

- Waste acceptance
- Treated and stockpiled
- Potential user provides their "suitable for use" criteria
- Specification met or further treatment
- Original MMP completed – Declaration submitted
- Dispatched
- Verification Report
- Subsequently MMP amended for each new development site

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Cluster Consultation

- **Planning Authority or Authorities**
  - **e.g. for movement of wastes and materials in and out of sites**
- **Environment Agency:**
  - **Determine proposal is a genuine Recovery operation**
  - **At design stage with Area office where Hub is to be located**
  - **Obtain an in principle agreement**
- **National Permitting Centre**
  - **Type of Environmental Permit for the Hub**
- **Adding a site**
  - **Area and National Permitting Centre / Planning Authority**

Decontamination / Treatment

Waste Exemptions

T5 Screening and blending of waste

EWC 17 05 04 Soil and stones

Place of production or where to be used

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Decontamination / Treatment

Environmental Permit Standard Rules:

Permit 2008 No27 (Mobile Treatment Licence) :

"Treatment plant for blending, mixing, bulking, screening, shredding, particle size reduction and / or particle separation in order to facilitate remedial action"

Standard Rules Permit 2010 No11 (Mobile plant for the production of soil, soil substitutes and aggregates)

"place where it is produced or at the place where the waste is to be used…sites of construction or demolition … to produce soil, soil substitutes or aggregate…"

75,000 tonnes can be treated

Provided the site is not within:

- **10 metres of any watercourse;**
- **50 metres of any spring or well, or any borehole not used to supply water for domestic or food production purposes; and**
- **250 metres of any well, spring or borehole used to supply water for domestic or food production purposes.**

Standard rules SR2010No12
Treatment of waste to produce soil, soil substitutes and aggregate

Fixed site based permit

75,000 tonnes of non-hazardous waste

Not within 500 metres of

European Site1,

Ramsar site or

Site of Special Scientific Interest (SSSI)

nor within a specified Air Quality Management Area (AQMA)2.

Provided the site is not be within:

- **10 metres of any watercourse;**
- **50 metres from any spring or well, or from any borehole not used to supply water for domestic or food production purposes; and**
- **250 metres from any well, spring or from any borehole used to supply water for domestic or food production purposes.**

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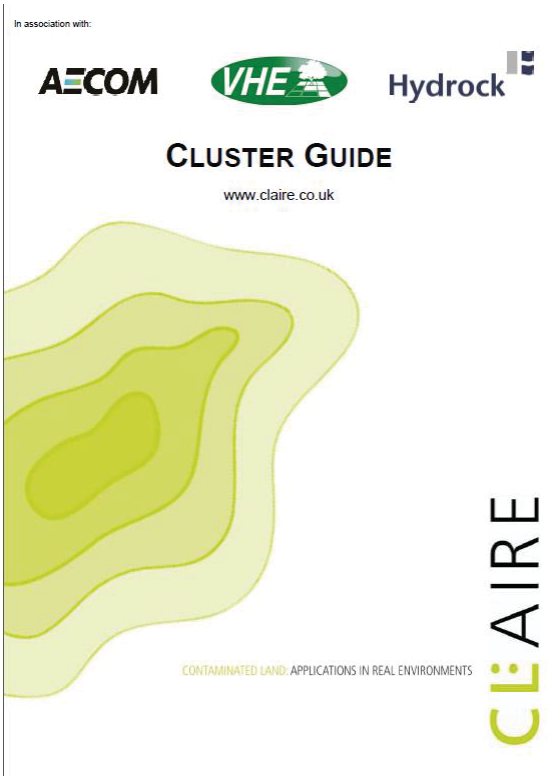
Cluster Guide

www.claire.co.uk/cop



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Tea and Coffee

15 Minutes

Second Group Exercise

Image: DEC, Hydrock

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Summary and Questions

Clive Boyle
cliveboyle@btinternet.com
Tel:07786 012052

Reminders

Feedback forms

2015 DoWCoP Training Courses:

•19 November, Manchester

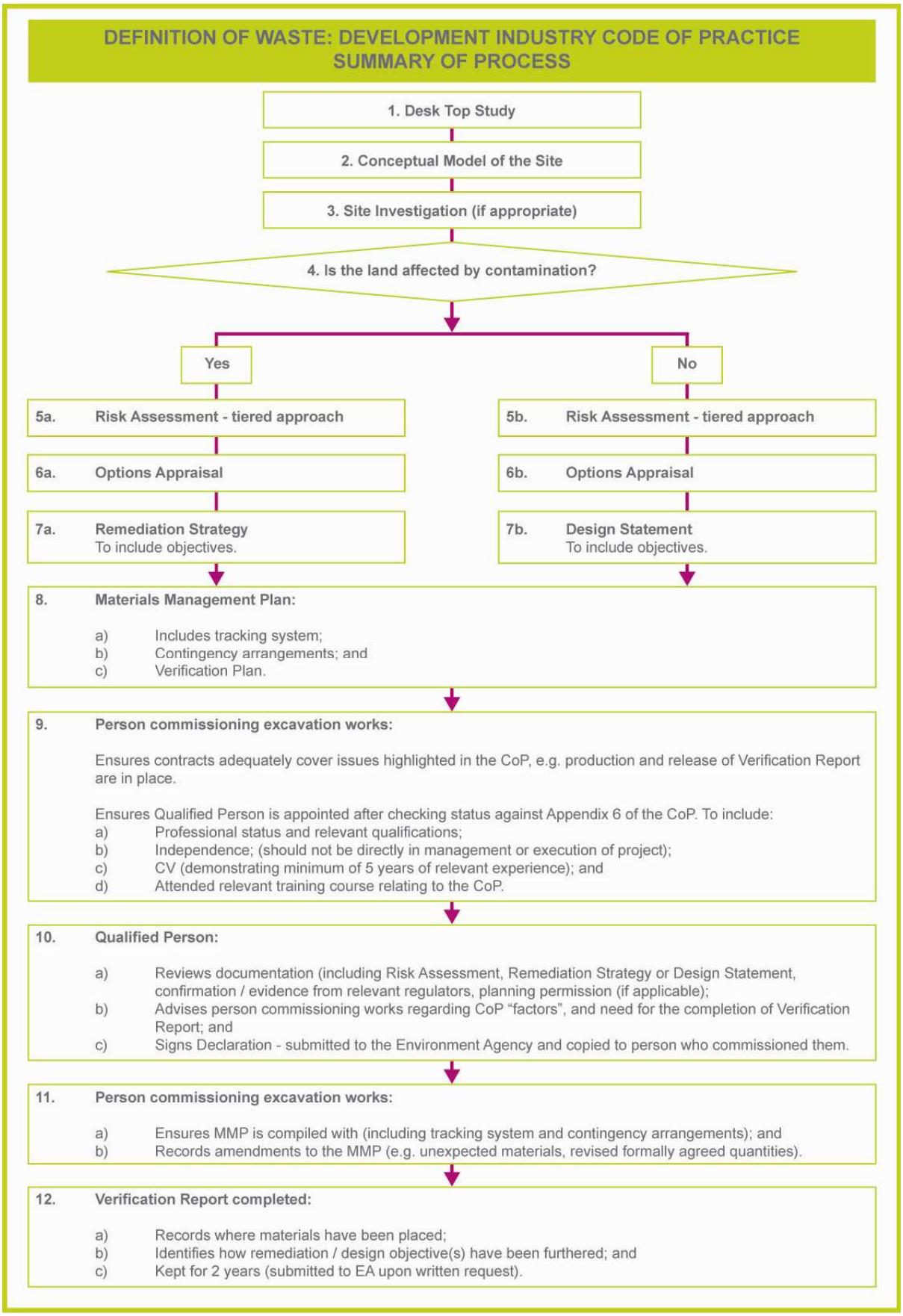
Dedicated Website: www.claire.co.uk/CoP

Contact: Nick Willenbrock nick.willenbrock@Claire.co.uk
Tel:0207 299 4250

Ged Duckworth
ged.duckworth@btinternet.com
Tel:07733 363136

Clive Boyle
cliveboyle@btinternet.com
Tel:07786 012052

Summary of Process


DEFINITION OF WASTE: DEVELOPMENT INDUSTRY CODE OF PRACTICE
SUMMARY OF PROCESS
1. Desk Top Study
2. Conceptual Model of the Site
3. Site Investigation (if appropriate)
4. Is the land affected by contamination?
Yes
No
5a. Risk Assessment - tiered approach
5b. Risk Assessment - tiered approach
6a. Options Appraisal
6b. Options Appraisal
7a. Remediation Strategy
To include objectives.
7b. Design Statement
To include objectives.
8. Materials Management Plan:
a) Includes tracking system;
b) Contingency arrangements; and
c) Verification Plan.
9. Person commissioning excavation works:
Ensures contracts adequately cover issues highlighted in the CoP, e.g. production and release of Verification Report are in place.
Ensures Qualified Person is appointed after checking status against Appendix 6 of the CoP. To include:
a) Professional status and relevant qualifications;
b) Independence; (should not be directly in management or execution of project);
c) CV (demonstrating minimum of 5 years of relevant experience); and
d) Attended relevant training course relating to the CoP.
10. Qualified Person:
a) Reviews documentation (including Risk Assessment, Remediation Strategy or Design Statement, confirmation / evidence from relevant regulators, planning permission (if applicable);
b) Advises person commissioning works regarding CoP "factors", and need for the completion of Verification Report; and
c) Signs Declaration - submitted to the Environment Agency and copied to person who commissioned them.
11. Person commissioning excavation works:
a) Ensures MMP is compiled with (including tracking system and contingency arrangements); and
b) Records amendments to the MMP (e.g. unexpected materials, revised formally agreed quantities).
12. Verification Report completed:
a) Records where materials have been placed;
b) Identifies how remediation / design objective(s) have been furthered; and
c) Kept for 2 years (submitted to EA upon written request).

Materials Management Plan (MMP) Form

Materials Management Plan (MMP) Form - October 2014

This form should be completed once the lines of evidence have been marshalled in relation to suitability for use, certainty of use and quantity required.

The answers to the questions posed within this form, together with the supporting information will constitute the MMP and must be provided to the Qualified Person.

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

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

The person / organisation agreeing to pay the Declaration Fee - Name, organisation and contact details inc. email address -	

☐ **I confirm I have read and understood the Terms & Conditions.**

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

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

☐ 1. Reuse on the Site of Origin

☐ 2. Direct Transfer of clean naturally occurring soil / mineral materials

☐ 3. Cluster Project

☐ 4. Combination of any of the above

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

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

2. Organisation and name of person preparing this MMP	(Full address and contact details)

Document Control

Date issued	
Revision date	
Summary of revision 1	
Summary of revision 2	

Insert additional lines to the table above for any subsequent revisions.

Note - revisions to the MMP do not trigger an additional Declaration by a Qualified Person, unless an additional site is added to the project.

Revisions to the MMP must be recorded and summarised in the Document Control box above.

Site Details

3. Site / Project name(s)	
Reuse / receiving site name :	
Donor site name (if Direct Transfer)	

Landowners

4a. Name of Landowner(s) (full address and contact details) – where excavated materials are to be reused	
4b. Name of Landowner(s) (full address and contact details) – where excavated materials are arising from	

Summary and objectives

5a. Provide a brief description of the planned project and how excavated materials are to be reused.	

General Plans and Schematics

6. **Attach** a location plan for the site(s) and a plan of the site(s) which identifies where different materials are to be excavated from, stockpile locations (if applicable), where materials are to be treated (if applicable) and where materials are to be reused.	Plan Document Reference(s):

7. **Attach** a schematic of proposed materials movement. Where there is only one source area and one placement area briefly describe it. For all other projects a schematic is required.	Description & Schematic Document Reference:

Parties Involved and Consultation – if more than one party please provide additional details for them and identify the location that they will be working e.g. where a site is zoned

8a. Main earthworks contractor(s) (full address and contact details) – Where excavated materials are to be reused	
8b. Main earthworks contractor(s) (full address and contact details) - Where excavated materials are arising from	

9. Treatment contractor(s) (full address and contact details) – for treatment on site of origin, or at a Hub site within a fixed STF / Cluster Project	

10. Where wastes and materials are to be transported between sites, provide details of the transport contractor(s) (full address, contact details and waste carriers registration details (if applicable))	

11. Provide Local Authority contact details (full address and named contacts) where excavated materials are to be reused	

12a. For the site where materials are to be reused and for Hub Site locations provide Environment Agency contact details (full address and named contacts):	
For all Cluster Projects: 12b. Attach any relevant documentation	EA references:

from the EA relating to the excavation and reuse of the materials to demonstrate no objection to the proposals (see 3.37 of DoW CoP) If the EA has not been consulted please explain why (see paragraph 3.39 of the DoW CoP).	

Lines of Evidence

There is no one single factor that can be used to decide that a substance or object is waste, or when it is, at what point it ceases to be waste; as complete a picture as possible has to be created.

The following sections require completion to ensure the correct decision is made.

If a requested item is not relevant it is important to clearly state why this is so (e.g. no planning permission required because permitted development status exists).

Suitable for use criteria

13. Please describe or provide copies of the required specification(s) for the materials to be reused on each site.	Document Reference(s):

Where contamination is suspected or known to be present 14a. Please provide copies of or relevant extracts from the risk assessment(s) that has been used to determine the specification for use on the site. **This must relate to the place where materials are to be used.** This must be in terms of (i) human health (ii) controlled waters and (iii) any other relevant receptors. If a risk assessment is not relevant for a particular receptor given the site setting please explain why below:	Document Reference(s):
14b. Please attach any relevant documentation from the LA relating to the excavation and reuse of the materials to demonstrate no objection (see 3.37 of the CoP)	LA Document references:
14c. Please attach any relevant	EA Document references:

documentation from the EA relating to the excavation and reuse of the materials to demonstrate no objection (see 3.37 and Table 2 of the CoP)	
14d. Please attach any relevant documentation from any other regulators (if relevant) relating to the excavation and reuse of the materials to demonstrate no objection (see 3.37 of the CoP)	Document Reference(s):

Where contamination is not suspected 15a. Please attach copies or relevant extracts from the Desk Top Study that demonstrates that there is no suspicion of contamination.	Document Reference(s)
15b. Please attach copies of or relevant extracts from the site investigation/testing reports that adequately characterise the clean materials to be used (if appropriate).	Document Reference(s)
15c. Please attach copies of any other relevant information (if available) confirming that land contamination is not an issue.	Document Reference(s)

NB: It is your responsibility to assess the nature of the material to be used and that it fits within the limitations of the scenario under which it is to be used

Certainty of use

Various lines of evidence are required to demonstrate that the materials are certain to be used. This includes:

- The production of this MMP
- An appropriate planning permission (or conditions that link with the reuse of the said materials)
- An agreed Remediation Strategy(ies)
- An agreed Design Statement(s)
- Details of the contractual arrangements

Please identify in the following sections what lines of evidence relate to the site(s) **where the materials are to be used**.

16a. Planning Permission(s) relating to the site where materials are to be reused Please provide a copy of the relevant planning permission	Document Reference:
16b. Explain how the reuse of the excavated materials fits within the planning	

permission(s) for each site.	
16c. If planning permission is not required for any one site please explain why below e.g. permitted development, clean up of a chemical spill, surrender of an Environmental Permit, re-contouring within the existing permission.	

Where contamination is suspected or is known to be present 17. Please provide a copy of any Remediation Strategy(ies) that have been agreed with relevant regulators.	Document Reference(s):

Where contamination is not suspected 18. Please provide a copy of any Design Statement(s) that have been agreed (e.g. with the planning authority or in the case of permitted developments the client).	Document Reference(s):

Quantity of Use

19. Please provide a breakdown of the excavated materials for each site and how much will be placed at each site or sub area of each site. Where this is not specific to a single readily identifiable source refer to an annotated plan, schematic or attach a tabulated summary.	Document Reference(s):

20a. How has consolidation/compaction being considered in the above mass balance calculations?	
20b. How has loss due to treatment being considered in the above mass balance calculations (if applicable)?	
20c. How has the addition of treatment materials being considered in the above mass balance calculations (if applicable)? Note - An exact figure is not required but	

one that is reasonable in the circumstances and can be justified if challenged.	

Contingency arrangements

Explain what is to happen in the following situations and **identify the appropriate clauses** in the contract(s) (Such clauses must be provided to the Qualified Person, preferably as a summary document): or

21a. What is to happen to, and who is to pay for out of specification materials?	Reference:
21b. What is to happen to, and who is to pay for any excess materials?	Reference:
21c. What happens if the project programme slips in relation to excavated materials or materials under -going treatment?	Reference:
21d. Other identified risk scenarios for the project (relating to excavated materials)?	Reference:

The Tracking System

Where contamination is suspected or known to be present, state the procedures put in place to:

22a. For all sites please describe the tracking system to be employed to monitor materials movements.	
Where contamination is suspected or known to be present, state the procedures put in place to: 22b. Prevent contaminants not suitable for the treatment process being accepted	
Where contamination is suspected or known to be present, state the procedures put in place to: 22c. Prevent cross contamination of materials not in need of treatment, wastes awaiting treatment and treated materials	
Where contamination is suspected or known to be present, state the procedures put in place to: 22d. Demonstrate that materials that do not require treatment and successfully treated materials reach their specific destination	
Where contamination is suspected or known to be present, state the procedures put in place to:	

22e. Ensure that waste for off-site disposal or treatment is properly characterised and goes to the correct facility	

23. Please attach a copy of the tracking forms / control sheets that are to be used to monitor materials movements. To include transfer of loads on site into stockpiles prior to treatment (if applicable), stockpiled after treatment (if applicable), stockpiled awaiting use (as appropriate) and final placement.	Document reference(s)

For Hub Sites within Cluster Projects & where materials need treatment before reuse 24. Please attach a copy of the Environmental Permit covering the treatment process. Alternatively if the treatment is covered by a	Permit reference / EA letter reference:

Mobile Plant Permit and associated Deployment Form, attach a copy of the EA agreement to the Deployment Form.	

Records

25. Where, and in what form, are records to be kept? Note – records e.g. transfer notes, delivery tickets, Desk Top Study, Site Investigation, Risk Assessment(s), Verification Report(s) need to be kept for at least 2 years after the completion of the works and production of the Verification Report	

Verification Plan

26. Provide or explain the Verification Plan which sets out how you will record the placement of materials and prove that excavated materials have been reused in the correct location and in the correct	Document Reference

quantities within the development works (see 3.4 of the DoW CoP).	

Environment Agency Position Statement

position statement

Environment Agency

Definition of Waste: Development Industry Code of Practice (V2)

Purpose of this note

CL:AIRE (Contaminated Land: Applications in Real Environments) published the Definition of Waste: Development Industry Code of Practice (the Code of Practice) in 2008. At the same time we published this position statement setting out how we would take account of the code when we take our waste regulatory decisions in England and Wales. This updated version is being published at the same time as version 2 of the Code of Practice.

Issue

Excavated material generated by the development of land may be waste and subject to waste regulatory controls which ensure that waste does not harm human health or the environment.

Whether or not a substance or material is waste is ultimately a question for the courts. It depends on whether the holder of a substance or material is discarding it or intends to or is required to discard it. This must be considered in the light of all the specific circumstances of each case.

The Code of Practice sets out good practice for the development industry to use when:

- assessing if materials are classified as waste or not
- determining when treated waste can cease to be waste for a particular use.

It also describes an auditable system to demonstrate that the code has been adhered to on a site by site basis. It applies to both uncontaminated and contaminated[1] material from man made and natural sources excavated:

- for use on the site from which it has been excavated, either without treatment or after on-site treatment[2], in the development of that land
- for use in the development of land other than the site from which the material has been excavated, following treatment at an authorised treatment Hub within a defined Cluster[3] agreed with us, and used in the development of land at a site within the Cluster.

[1] The need to distinguish between “contaminated” and “uncontaminated” soils is no longer considered necessary. We accept that 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)

[2] 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.

[3] In a Cluster project specified sites share a temporary treatment facility known as a hub. The question of whether or not any material is waste has to be made on a case by case basis and therefore each Cluster project will need to be considered individually and agreed with us. Treated soils are returned to the cluster sites.

The updated Code of Practice also applies to the re-use of “clean naturally occurring soil and mineral materials” in the development of land other than the site from which the materials have been excavated.

This position does not apply to the following activities which will remain subject to waste regulatory control:

- contaminated materials that go off site for direct use at another site as we consider such materials to be waste
- wastes that go to and from Fixed Soil Treatment Facilities unless it operates and material originates and is used within a defined Cluster
- the control of landspreading[4] activities
- the management of extractive wastes within the scope of Mining Waste Directive.

Our position

We want to encourage the appropriate remediation of brownfield land and the use of Cluster projects, and reduce the amount of material that is sent for disposal. We believe that a Better Regulation approach enables us to target our resources at sites and activities that pose the highest risk to the environment including poor performers and illegal operators.

We will therefore take account of the Code of Practice in deciding whether to regulate excavated materials to be used in development projects as waste. If materials are dealt with in accordance with the Code of Practice we consider that those materials are unlikely to be waste at the point when they are to be used for the purpose of land development. This may be because the materials were never discarded in the first place, or because they have been submitted to a recovery operation and have been completely recovered so that they have ceased to be waste.

When the declaration is provided to us by the Qualified Person demonstrating that the materials are to be dealt with in accordance with the Code of Practice we will take the view that the materials on the site where they are to be used will not be waste. To ensure that human health and the environment continue to be protected we will be undertaking a random audit of a number of the decisions made by the Qualified Persons working with the Code of Practice.

The success of this approach requires a high level of professional integrity by those involved. If we subsequently find the Code of Practice is being used improperly so that human health or the environment is being put at risk we will withdraw this position. If that happens we will revert to requiring our input into case by case decision making.

Further advice

Appendix 1 brings all of the aspects of waste management and land contamination together to provide some context and clarity for customers.

[4] The spreading of waste soil, dredgings or other materials on existing agricultural land for agricultural or ecological benefit is regarded as a distinct land treatment operation subject to separate legislative control i.e. permit or exemption

CL:AIRE (Contaminated Land: Applications in Real Environments). CLAIRE is an independent not-for-profit organisation established in 1999 to stimulate the regeneration of contaminated land in the UK by raising awareness of, and confidence in, practical and sustainable remediation technologies. Further advice on the application of the Code of Practice can be found on: http://www.claire.co.uk/

Position Statement: PS 006
Version 2
Issued March 2011

Appendix 1 - Development of Land and Waste Regulation – The big picture

Key issues
We want the land development industry to use sustainable waste management practices paying a high regard to protecting the environment and health and that this is seen as an issue to strive for continual improvement.

Our role
We are the authority responsible for enforcing waste management legislation in England and Wales. It is the responsibility of the holder of material that has been excavated to decide whether or not they are handling waste and conform to the requirements of waste legislation. Where there is a disagreement as to whether or not excavated material is waste it is ultimately a matter for the courts to decide.

Sustainable Waste Management in Land Development
Material may need to be managed because:-

1. The Local Planning Authority might suspect that the site being developed has been subject to previous contaminative uses and may require investigation and remediation (see Planning Policy Statement 23)

2. Voluntary remediation may be proposed at a site as part of the management of liabilities or as a result of a pollution incident

3. Remediation is required under Part IIA EPA1990 or WRA1991.

Management of material at the site should be undertaken in accordance with the sustainable waste management principles of (in order of preference) waste reduction, re-use, recovery and finally, disposal. Construction projects in **England** worth more than £300,000 must have a site waste management plan (SWMP) which outlines ways that waste can be reduced and site-gained materials can be reused or recycled as part of the project. This does not apply to Wales, though SWMPs are being promoted as an example of best practice in the construction industry.

Reduce waste generated
Reduce the generation of waste materials, perhaps by reviewing the layout of the development, ensuring that land use is related to the contamination identified or encountered and appropriate levels of site investigation to characterise and delineate contamination on site have been undertaken.

Re-use excavated material
In certain circumstances, excavated material re-used in the development of land may not be waste, and hence not subject to waste regulatory control, provided that the aims and objectives of the Waste Framework Directive are not undermined and that its use will not harm human health or the environment.

We consider this may be the case for excavated material used on the site where it was produced or at other sites when;

- it is used in appropriate amounts
- it is suitable for that use directly without treatment
- its use will not cause harm to human health or the environment.

The Model Procedures for the Management of Land Contamination provides the framework for deciding whether use of material is suitable for its intended use without harm to human health or the environment on the site being redeveloped.

The Verification Report, produced on completion of the development, will show that the material has been properly and suitably used and causes no harm to human health or the environment. If this can not be shown, we may conclude that the material is being discarded as waste and will take appropriate action.

The voluntary Code of Practice (CoP) (Definition of Waste: Development Industry Code of Practice) produced by industry provides a framework for determining whether or not excavated material used in land development is waste. It prescribes the circumstances under which re-use can be considered and the circumstances under which waste can be considered to have been recovered. It also describes an auditable system to demonstrate that the Code of Practice has been adhered to on a site by site basis.

This (Definition of Waste) position statement explains how we will take account of the Code of Practice when considering the need for an environmental permit to control the redeposit of excavated materials. When considering development activities we will apply modern risk based regulatory practices, focusing our effort on bad practice and on those activities that present the greatest threat to environment or health. We will be open, responsive, seek feedback and review our positions to ensure we react to technological advancement and change in the sector.

Recover material

Where the materials cannot be used directly without treatment then recovery options should be considered. We encourage the use of on-site treatment technologies and have issued a series of remediation position statements covering each of the main technologies, explaining how we apply the regulations.

In certain circumstances, segregation and sorting at the source may be sufficient treatment to produce a suitable material. Treatment of excavated material will normally require a Mobile Treatment Permit (MTL). The MTL will control the operations and emissions from the recovery activity. Operating under a MTL does not infer that the remediation processes used will be suitable for meeting any remediation objectives specified. These issues should be considered by the developer/consultant and by the relevant regulatory body and set out in the site Remediation Strategy which sets out the remediation options to reduce or control the risks from pollution linkages associated with the site as a whole. Further guidance on this topic can be found in the Model Procedures for the Management of Contaminated Land.

Material may cease to be waste after treatment if the requirements of the CoP are followed. This only applies to material excavated and treated on the site where it is to be used and to CLUSTER projects. The redeposit of material that remains a waste requires a permit, or an exemption or may be done under an enforcement position (see our remediation position statements for further detail).

Aggregates from recovered inert waste produced in accordance with the WRAP - Quality Protocol for the production of aggregates from inert waste, are not likely to be waste. A recent WRAP report on developing a Quality protocol for contaminated soils concluded that it would be difficult to produce a generic standard to ensure that all potential receptors ant any receiving site are adequately protected and that we should support the development of an alternative Code of Practice. The CL:AIRE CoP is the outcome of this work.

Dispose of material

This is the final option where excavated material has to be disposed of at an appropriately permitted facility. Before any decision can be made on the disposal option one has to adequately describe and classify the waste material. In particular one has to establish whether the waste material is a Hazardous Waste (see "Framework for the Classification of Contaminated Soils as Hazardous Waste"). In the case of inert or hazardous waste destined for landfill, only those materials within the numerical limits of the prescribed Waste Acceptance Criteria can be accepted.

Most waste materials must be treated before being landfilled. In certain circumstances, segregation at source may be considered as adequate pre-treatment and excavated material may not have to be treated any further prior to landfill. We have produced a factsheet (factsheet on contaminated soils) which explains more about these requirements.

Any movement of waste material from site to site will be subjected to control under Duty of Care and the developer may need to register as a hazardous waste producer if the material is hazardous waste.

References

- The Environmental Protection Act 1990
- The Environment Act 1995
- Environmental Permitting (England and Wales) Regulations 2010
- Definition of Waste Position Statement
- The Contaminated Land (England) Regulations 2006 (as amended), The Contaminated Land (Wales) Regulations 2006, DETR Circular 01/2006 & The National Assembly for Wales Guidance on the Remediation of Contaminated Land. Environment Agency Policies and Process Documentation on Part 2A
- Town & Country Planning Act 1990 & Planning & Policy Statement 23
- Water Resources Act (1991), The Anti-Pollution (Works Notices) Regulations 1999 (as amended)
- Environment Agency Groundwater Protection Policy and Practice
- Environment Agency Enforcement & Prosecution Policy
- Environment Agency: Guidance on the Enforcement and Prosecution Policy
- DTI Site Waste Management Plans – Guidance for Construction Contractors and Clients
- CL:AIRE Definition of Waste: Development Industry Code of Practice
- Environment Agency:Contaminated Land Report 11 – Model Procedures for the Management of Land Contamination
- WRAP The Quality Protocol – The production of aggregates from inert waste
- Environment Agency: Hazardous Waste. Interpretation of the definition and classification of Hazardous Waste - Technical Guidance WM2

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