

Materials Management

A Consultant's View

YOUR PRESENTER



DANNY HOPE

- Chair of CIWEM's Contaminated Land Panel
- Regional Director - Land Quality, Hydrock Manchester
- SiLC, SQP and QP with 20 years land contamination experience
- QP10 registered in 2008

07501 453584

dannyhope@hydrock.com

MMPs: WHAT ARE THEY

- Introduced in 2008
- England & Wales government response to the EU Waste Directive introduced in 2005
- To avoid the potential for waste prosecution
- Allows a 'self-regulatory' approach
- Administered by CL:AIRE
- Guidance in the Definition of Waste: Development Industry Code of Practice

WHY ARE THEY NEEDED

- There is widespread mis-management of materials, inadvertent or deliberate waste crime and misuse of the code of practice
- There is now a strong focus on clamping down and tightening up on the approach in England and Wales
- This is not another regulatory burden, a good MMP is a blueprint for good management of earthworks and remediation and helps clients control costs, outcomes and efficient sign off of conditions

KEY POINTS

- Two routes
 - For potentially contaminated sites – desk study, SI, remediation strategy required
 - For clean sites – desk study, design statement required
- Four tests:
 - Suitable for use without further treatment
 - Certainty of use
 - Quantity of material
 - Protection of human health and the environment
- Must be pre-planned, retrospective MMPs are not allowed

WHEN ARE THEY NEEDED

- Any materials movements – greenfield and brownfield
- Re-use of materials within a site (site of origin)
- ‘Direct transfer’ of clean, naturally occurring materials between sites
- Under direct transfer scenario, MMP and QP declaration needed at either the donor or receiver site but not both
- Allows transfer of Made Ground between sites but only under strict conditions (environmental permit required)
- Hub and cluster arrangements
- Materials from a fixed soil treatment facility

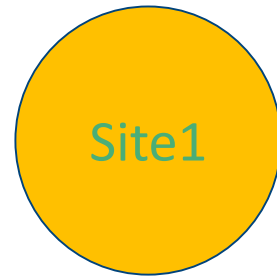
INTERPRETATION OF WFD

- Soil is excluded from the Waste Framework Directive under Article 2(1)(c) when:
 - Uncontaminated
 - Excavated during construction activities
 - Certain to be used in its natural state for construction purposes on the same site
- However, it is up to the developer to prove that the material is not a waste
- The best way to do this is by completing a MMP

SITE OF ORIGIN SCENARIO

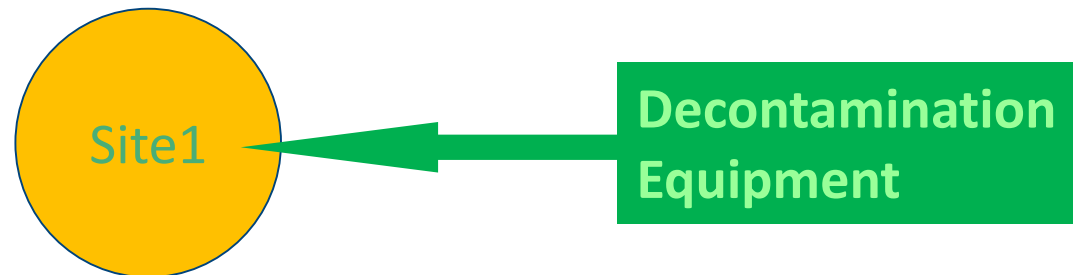
Site of Origin

(Suitable for use with no Treatment - no Permit)



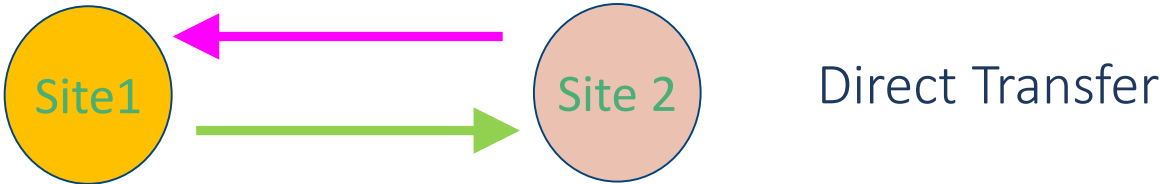
Site of Origin

(Suitable for use with Treatment - Permit Required)

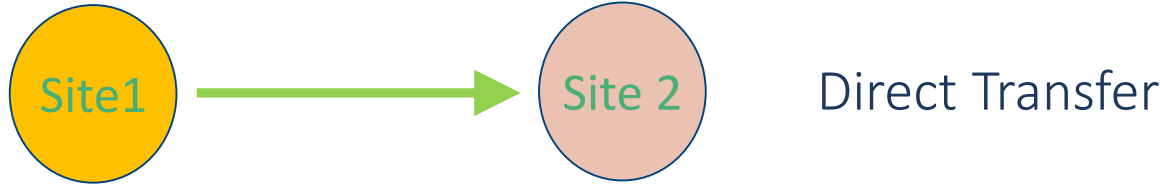


DIRECT TRANSFER SCENARIOS

Greenfield to Greenfield (no Permit)



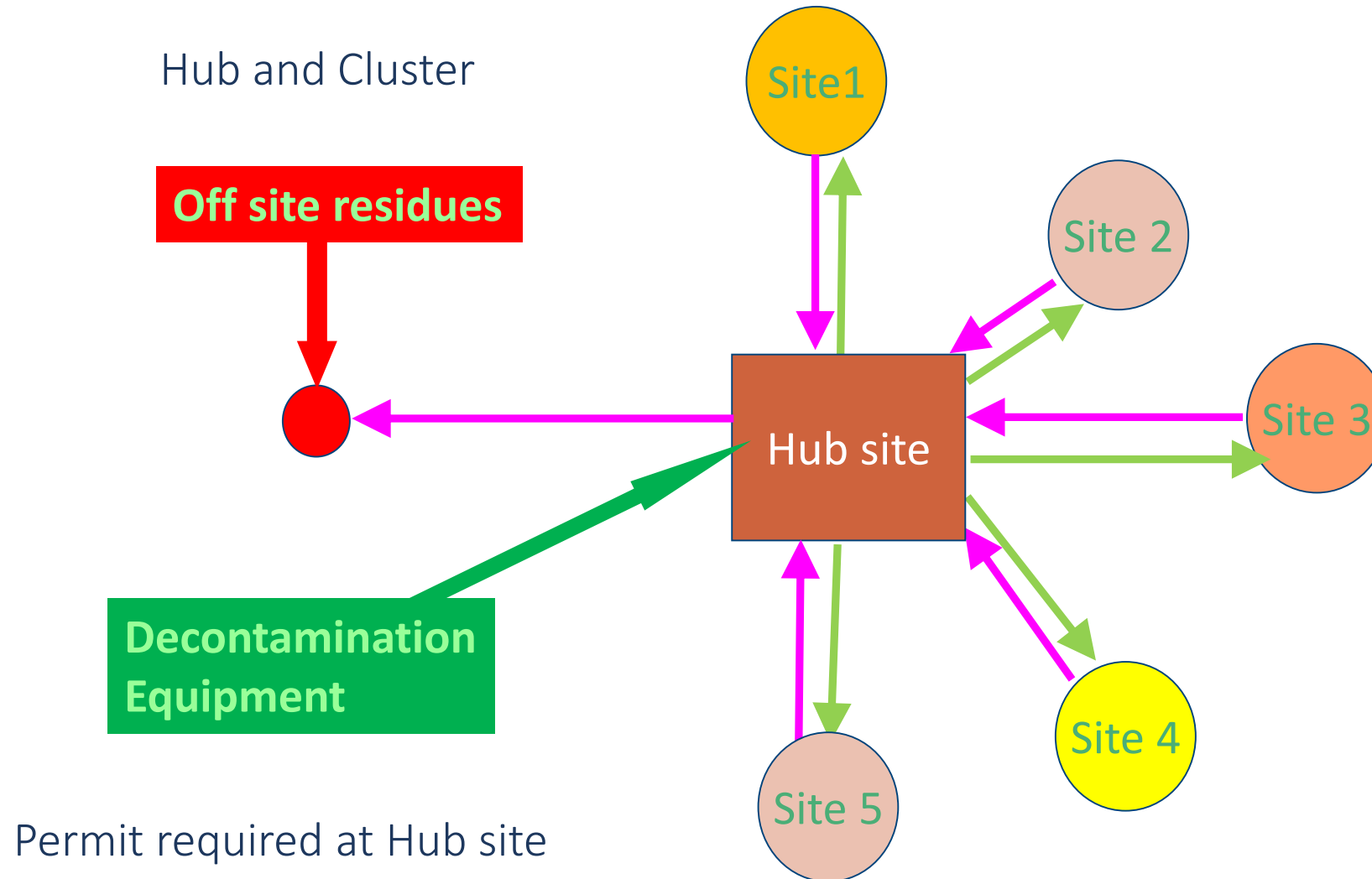
Greenfield to Brownfield (no Permit)



Brownfield to Brownfield (Permit on one of the sites)



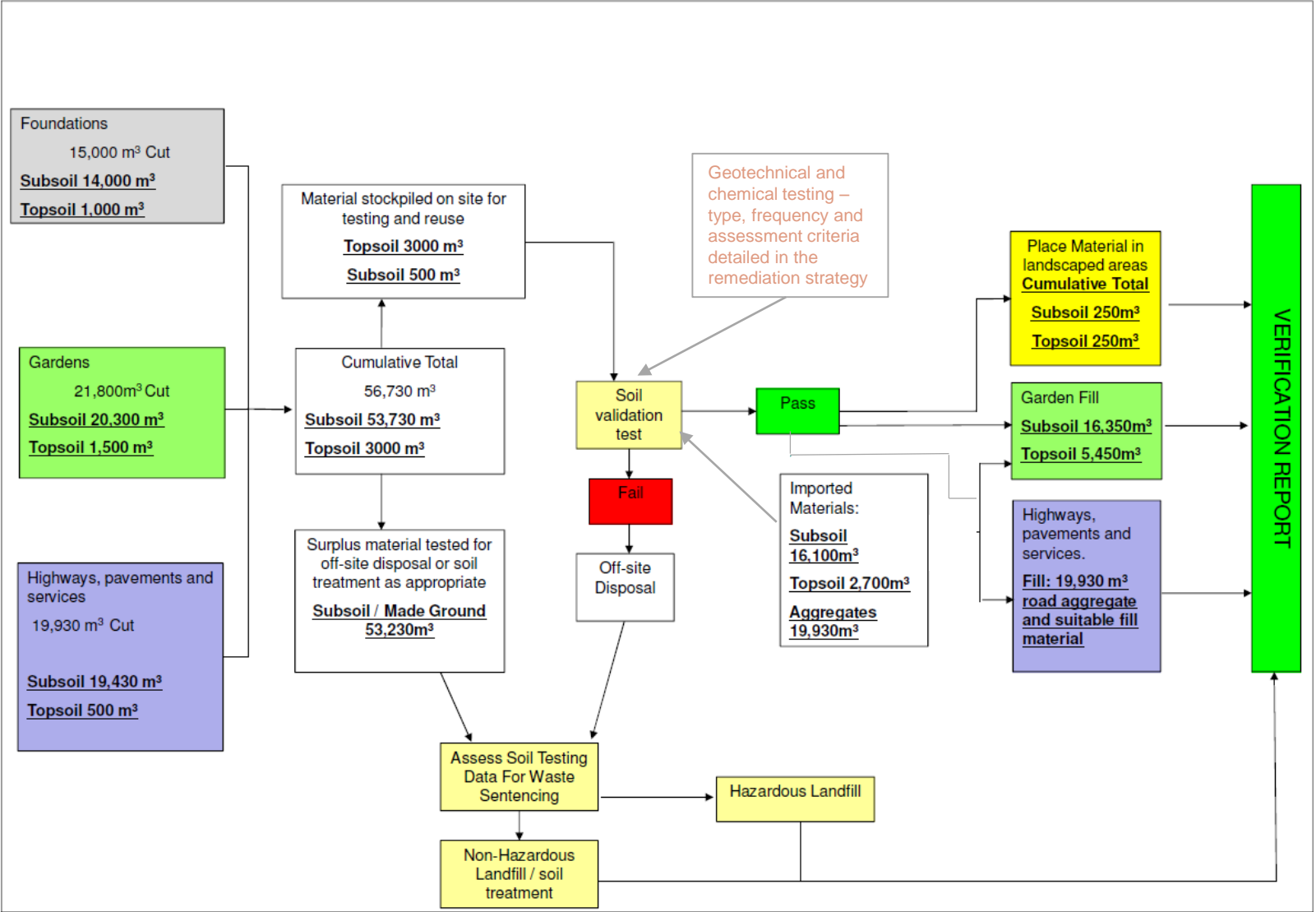
HUB & CLUSTER & FSTF SCENARIOS



KEY INFO FOR THE MMP

- Desk study
- SI and risk assessment
- Design statement or remediation strategy
- Earthworks spec and modelling / estimates of materials quantities
- Drawings before and after development and ideally demonstrating materials movements and tracking
- Regulator correspondence (approval if possible)
- Contractual issues e.g. who pays for excesses or deficits in materials

EXAMPLE MMP SCHEMATIC



WHEN ARE THEY NOT NEEDED

- During site investigation
- Disposal off site (if not a direct transfer to another site)
- If another mechanism is already in place:
 - Waste exemption
 - Standard rules waste recovery permit (<60,000m³)
 - Bespoke waste recovery permit (>60,000m³)
- Minor works (no rule on this but suggest a waste exemption is easier and cheaper if <1,000t soils or <5,000t aggregates)

SCENARIO

- Developer requires a 10,000t soil materials movement from one part of a site to another part of a site to create a development platform
- The site is within one planning boundary, greenfield and no evidence of contamination
- Is a MMP needed?
- **YES**, it is up to the developer to prove that the material is not a waste

SCENARIO

- Developer proceeds without a MMP in place
- What could happen?
- Audit, investigation, prosecution by the EA and HMRC
 - The EA fine may be small but in this scenario the HMRC bill could be $10,000\text{t} \times £91.35 = £913,500$ in England or $10,000\text{t} \times £137.00 = £1,370,000$ in Wales
 - i.e. how much landfill tax would have been charged if materials had gone to landfill
- Not following simple procedures can make or break a project or bring down a company

ROUTE TO COMPLIANCE

- Desk study
- Regulator liaison
- Ground investigation
- Remediation strategy
- Regulator liaison
- Materials management plan
- Qualified person declaration
- Verification
- Regulator sign-off



ROLES & RESPONSIBILITIES

- Client (via its designer/contractor) responsible for volumes – producer of the material
- Importance of understanding volumetrics – cut/fill balance
- If direct transfer – information required for both origin and receiver sites (desk study and limited testing minimum)
- QP merely checking presence of all documentation, not the quality of it

WHEN CAN MADE GROUND BE TRANSFERRED BETWEEN SITES

- Only under a hub and cluster or FSTF scenario
- The donor or receiver site must have an environmental permit for the process that is occurring to make the materials suitable for use
- Materials must not increase the contaminant loading at the receiver site
- Care needed when preparing an earthworks specification i.e. acceptance criteria need to be protective of existing site conditions at receiver sites

POTENTIAL BENEFITS OF USING A STF

- Material that may be destined for hazardous waste landfill can be disposed of at a cheaper rate
- Material may be treated at the STF to allow it to be taken at non-hazardous waste landfill – environmental benefit
- The materials are exempt from landfill tax

WHEN IS THERE A BETTER ALTERNATIVE

- Minor movements can be done under an Environment Agency U1 exemption
- But this is limited to:
 - 5,000 tonnes aggregates, concrete, brick type material
 - 1,000 tonnes soils

MERSEY GATEWAY, WIDNES-RUNCORN



MERSEY GATEWAY, WIDNES-RUNCORN



CABOT CARBON, ELLESMERE PORT



CABOT CARBON, ELLESMERE PORT



FREQUENT STICKING POINTS

- Obtaining regulator correspondence within the clients timescale
- Receiving accurate (well estimated) material volumes from the client
- Finding out where materials are originating and their destination
- Verifying what has occurred during construction (good record keeping)
- Geotechnical performance of materials often overlooked
- Requirement for environmental permit (if needed)
- Importance of watching brief

POTENTIAL PITFALLS

- Inadequate site investigation – unforeseen problems
- Badly surveyed / estimated materials types and quantities
- Poor record keeping / data management / missing information
- Staff changes / lost knowledge
- Insufficient data to provide verification – no regulator sign-off
- Incorrect interpretation of the CoP
- No contingency arrangements - surplus or shortfall of materials
- Programme delays / rising costs
- Contractual disputes / legal action
- Regulator prosecution

WHATS NEW

- HMRC ruling since 1st April 2018 (landfill tax)
- Requirement for the QP to name a responsible person for the completion of a verification report
- Requirement for the QP to give a predicted date for the issue of the verification report
- Declaration receipt also sent to the person named as being responsible for the verification report
- Disciplinary procedure in place for misuse of the CoP
- Annual CPD and test requirement for QPs

AVAILABLE GUIDANCE

- <http://ec.europa.eu/environment/waste/framework/guidance.htm>
- <https://www.claire.co.uk/projects-and-initiatives/dow-cop>
- <https://www.gov.uk/guidance/waste-exemptions-using-waste>
- <https://www.gov.uk/guidance/waste-recovery-plans-and-permits>
- <https://www.hydrock.com/news/changes-landfill-tax-now-impact-construction-sector/>