



**INLAND
WATERWAYS**
ASSOCIATION

GUIDANCE NOTE

*Waste
Management*

CONTENTS

Introduction	3
Waste Regulation Authorities	4
Waste Hierarchy	5
Site Waste Management Plan (SWMP)	6
Identifying Waste	7
Duty of Care	9
Treatment of Waste	10
Disposal of Waste	11
Transfer Notes & Consignment Notes	12
Dredging Exemption Management of Vegetation	13
Soil Management & Contamination Control	14
Top Tips for Waste Management on Your Site	17

First published as v.1 in 2022. This is a web-friendly document and will be reviewed and updated when the source legislation changes. Any printed version may not be the latest version and a check should be made on IWA website. IWA has interpreted the current legislation, as dated in the document, in good faith but the reader should check for themselves that it is the latest version and that they are acting within the legal framework.

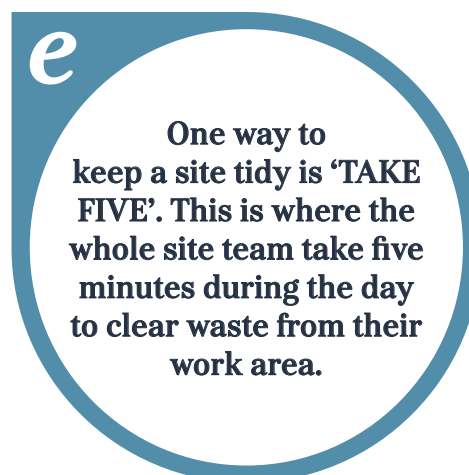
INTRODUCTION

Restoration projects vary in size and complexity but all of them will produce waste and you will deal with it. For a small site it might be sufficient for one of the volunteers to take away a full bin bag and dispose of it with their domestic waste at home. On larger sites a skip may be required. Some types of waste can cause contamination and need to be handled carefully. Make sure that the waste you produce is not left lying around to make the site untidy or to pollute neighbouring property.

The construction sector produces around 100 million tonnes of waste per annum (roughly a third of all waste within the UK). Governments around the globe, not just the UK, are now pushing for a greener economy and are putting increasing pressure on the construction industry to reduce, reuse and recycle more and more construction waste. Another issue causing serious concern for local authorities is the risk from contamination and incorrect storage and handling of waste.

The legal definition of waste is anything that you discard or intend to discard and that needs to be transferred to a permitted facility. Discarding doesn't simply mean throwing away or getting rid of something. Discarding also covers activities such as recycling and recovery operations, which put waste material back into good use. If you receive waste with the intention of processing it for reuse, it is still waste and waste rules apply. Materials that are waste can become non-waste in certain circumstances. This is known as achieving 'end of waste'.

Controlled waste is household, industrial and commercial waste and is detailed in Schedule 1 of the Controlled Waste (England and Wales) Regulations (2012).



Larger restoration groups may register as waste carriers because they operate several sites and have a central collection point. Your restoration may involve the large scale removal of excess spoil from excavation work. Brick waste can be used as backfill but some may need to be removed. The waste regulations apply to all waste.



WASTE REGULATION AUTHORITIES

The primary waste regulation authority in England is the Environment Agency (EA), in Wales, Natural Resource Wales (NRW) and in Scotland, Scottish Environment Protection Agency (SEPA).

These three governmental departments are responsible for managing applications and enforcement of waste management licenses, permits and exemptions, waste carrier licenses and duty of care.



WASTE HIERARCHY

The waste hierarchy sets out a number of steps for dealing with waste in order of priority and benefit for the environment. The Waste Framework Directive (WFD) (2008/98/EC) states all reasonable measures must be taken to prevent waste and requires the following steps:



Prevention/Reduction

e.g. not over excavating, ordering materials to size, allowing the use of recycled materials.



Re-use

e.g. reusing for landscaping material, hardcore or timber.



Recycle

e.g. crushing waste concrete for hardcore, offering materials to charities.



Recovery

e.g. sending material for composting or energy recovery, such as woodchip for biomass.



Disposal

e.g. send to landfill.

- 1 Plan your activities well in advance and try to design out waste or the need for off-site disposal.
- 2 Plan to segregate waste types to improve the reuse or recycling opportunities and thereby reduce costs.



SITE WASTE MANAGEMENT PLANS (SWMP)

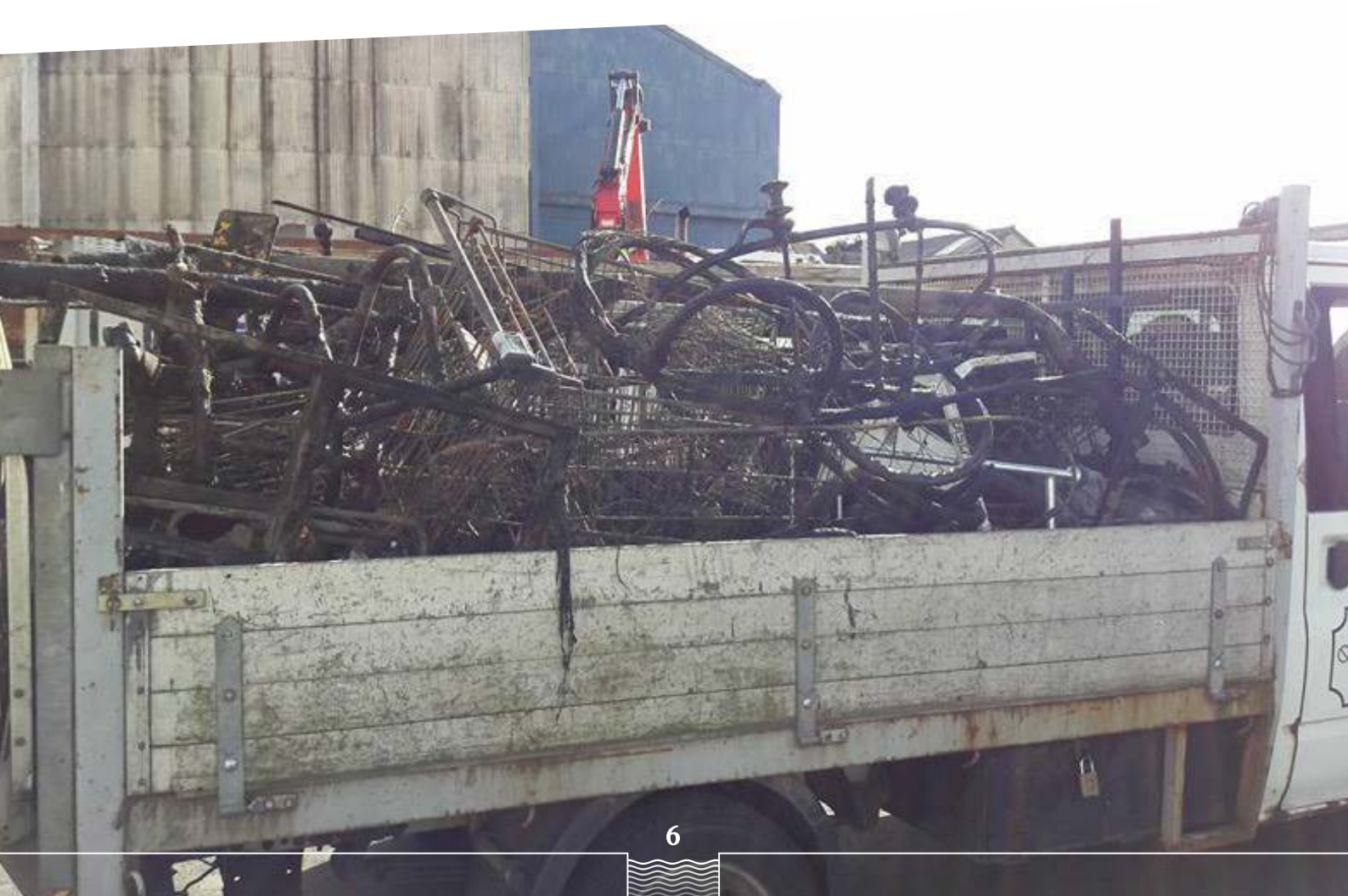
A Site Waste Management Plan (SWMP) was a legal requirement under the Waste Management Plan Regulations. These regulations were repealed on 1st December 2013. Despite no longer being mandatory, two thirds of businesses still use a SWMP to identify cost savings and material usage and to demonstrate their environmental credentials in projects.

Benefits of Site Waste Management Plans:

- ① Identify wastes early.
- ② Answer queries from waste authorities.
- ③ Avoid prosecution.
- ④ Demonstrate how waste is managed.
- ⑤ Quantify information for future projects .



For restorations, wishing to implement a SWMP a template can be found on the Government website, a link is included in Useful Resources on p.18.



IDENTIFYING WASTE

The first waste you are likely to encounter is vegetation from a site clearance.

WOOD AND VEGETATION

Virgin timber (cut from live or fallen trees and bushes) is not waste. Virgin timber residues, cut branches and wood chip, are not subject to the waste controls overleaf if the residues are certain to be used for the same purposes to which you would use virgin timber, such as:

- ① Woodchip left in situ, or used in gardens or on pathways.
- ② Fuel in an appliance such as a biomass boiler or wood burning stove (but not burning in the open for disposal).
- ③ Used to create or maintain a habitat.

Clippings or trimmings that consist mainly of foliage - the leaves of a tree or leaves on the stems or branches on which they are growing; is waste - 'green-waste'. Wood, which is not virgin timber (that is, wood that has been used for any purpose) and associated residues, either treated or not treated, is waste. Where virgin wood is mixed with waste wood such as fence posts, pallets, construction boarding or other waste, the mixed load is waste.

EXCAVATION MATERIAL

Excavation will be the next activity that is likely to generate waste and the chemical composition of the material will affect how it is classified. You will need to consider the history of the site and what it has been used for in the past. Expert investigation and testing may be required and it is recommended that you seek advice from somebody registered as a Specialist in Land Contamination (SiLC). Information on site characterisation can be found in the water and wall library on the Contaminated Land: Application in Real Environments (CL:AIRE) website. A link is provided in Useful Resources on p.18.

It can be difficult to quantify the material as it may be underwater and you must consider the bulking up. When quantifying the volume of excavated material consider how it will bulk up on excavation. Excavated material occupied between 20 - 30% greater volume once excavated. 1 cubic metre of ground will occupy between 1.2 and 1.3 cubic metres once excavated.

Dredgings are defined as any material removed from a water body (even if they are not underwater at the time) and they are different to other waste. Specialist rules apply and are exempt from landfill tax. A link to the D1 exemption for dredged material is provided in useful resources.

Canal restoration projects may encounter 'difficult waste', which is waste that must be handled in a particular way e.g. invasive species found within soils, water and excavations or contaminated soils containing various rubble, hazardous materials or polluting substances above the safe thresholds.

Waste categories:

- ① **Non-Hazardous**
Materials containing no materials hazardous to human health or the environment.
- ② **Hazardous**
Materials containing substances hazardous to human health or the environment.
- ③ **Mirror Hazardous**
Requires assessment and is classified hazardous should concentrations exceed a threshold.

GUIDANCE NOTE

Materials imported onto site can be identified as hazardous by reviewing the safety information sheets found online or when materials arrive. The by-product of imported materials must be separated into the correct category types after use and categorised in accordance to the European Waste Catalogue (EWC), a six digit coding system describing and categorising types of waste. Chapter 17 of the EWC is relevant to construction and demolition.

Typical construction wastes and the EWC found in Canal Restoration

Non-hazardous

Bricks - 17 01 02
Concrete - 17 01 01
Wood - 17 02 01

Mirror hazardous

Contaminated Soils - 17 05 03*
Dredging Spoil - 17 05 05
(soil and stones containing hazardous substances)

Hazardous

Hydraulic Oil 13 01 13*
(other hydraulic oils)



DUTY OF CARE

The duty of care legislation provides for the safe management of waste to protect human health and the environment. The Department for Environment Food and Rural Affairs (DEFRA) has produced a code of practice, which gives guidance on how to meet the waste duty of care requirements, issued under section 34(7) of the Environmental Protection Act 1990. A link to the code of practice is given in Useful Resources on p.18. The duty of care was introduced to ensure a chain of custody.

A waste holder is defined as anyone who imports, produces, carries, keeps, treats, disposes of, or are a dealer or broker that has control of, controlled waste. The duty of care applies to all waste holders.

A waste holder's duty of care does not extend to the following, which are not classified as controlled waste:

- ① Listed in Article 2 of the Waste Framework Directive, such as wastewaters (water contaminated by human use), decommissioned explosives, radioactive waste.
- ② Waste containing animal products, collected and transported in line with the Animal By-products Regulation.
- ③ Sewerage, sludge or septic tank sludge.

Common waste operations and processes:

- ① **Recovery;** an operation that results in the waste serving a useful purpose by replacing non-waste materials, such as incineration for energy recovery. Preparing for reuse and recycling are both recovery operations.
- ② **Preparing for reuse;** an operation or process of checking, cleaning or repairing products, previously discarded, so that they can be reused, such as repairing bicycles or furniture that had been discarded or cleaning bricks.

- ③ **Recycling;** an operation where waste is reprocessed into products, materials or substances for its original or other purpose, such as tyres for playground surfaces.
- ④ **Disposal;** an operation that is not recovery, for example landfill.
- ⑤ **Treatment;** a recovery or disposal operation, including preparation prior to recovery or disposal.

As a waste holder you must take all reasonable steps to:

- ① Prevent unauthorised or harmful deposit, treatment or disposal of waste.
- ② Prevent a breach by any other person of the requirements to have an environmental permit, or a breach of a permit condition.
- ③ Prevent the escape of waste from your control.
- ④ Ensure that any person you transfer waste to has the correct authorisation.
- ⑤ Provide an accurate description of the waste when it is transferred to another person.

Ensure that transferring waste to another waste holder is managed correctly throughout its complete journey to disposal or recovery:

- ① Check the next waste holder is authorised to take the waste.
- ② Ask the next waste holder where they are taking the waste and check the destination is authorised to accept that waste.
- ③ Carry out further checks if you suspect the waste is not being handled in line with the duty of care.

Paperwork evidencing to the above needs to be kept between 2 -3 years.

TREATMENT OF WASTE

The Environmental Permitting Regulations state that non-hazardous waste must be treated before going to landfill. This involves applying the waste hierarchy to reduce the quantity that ends up in landfill.

On a restoration site, this will take the form of separating non-hazardous waste on site into separate areas, where the original waste can be processed into a more sustainable stream. This reduces the volume and handling of waste and enhances the recovery of waste. Hazardous wastes must be stored and disposed of separately.

When dealing with waste, responsibilities are divided into three categories:

- 1 **Producers or holders:** produces, holds/stores or has waste removed from their premises.
- 2 **Carrier:** the collectors or brokers dealing with transportation of waste.
- 3 **Consignee:** receivers of waste for processing i.e recycling or disposal.

In most scenarios, the restoration society generating the waste will be classified as producers or holders.

This means the restoration society/landowner must ensure the following protocols are followed:

- 1 Classify the waste to check if it contains any of the named hazardous materials listed in the 'list of waste (LoW)' or 'European waste catalogue (EWC)'. Samples should be taken from the waste and sent for testing.
- 2 Sorting the waste should be completed by individuals/organisation with the appropriate licences to handle the hazardous materials identified.
- 3 Use an authorised business to collect, recycle or dispose of hazardous waste. It is the duty of the producers/holders to confirm the business employed to remove waste is registered to do so and have the correct permits.
- 4 Fill in the parts of the consignment note form that apply to the organisation and pass on copies to the carrier.
- 5 Keep records (known as a 'register') for 3 years at the premises that produced or stored the waste.

It is unlikely restoration societies or landowners will be registered as 'carriers' or 'consignee' and will most likely hire in outside businesses in this role.

DISPOSAL OF WASTE

For disposal at landfill waste is classified as:

- ① **Inert:** this will not undergo any significant physical, chemical or biological transformations, for example material that is not too wet nor chemically contaminated nor has a very high organic content.
- ② **Non-Hazardous:** this will rot down and decompose but doesn't contain hazardous substances.
- ③ **Hazardous:** substances that contain 1 or more of the 15 substances hazardous to human health or the environment.

Before any waste is sent to landfill, the waste producers must ensure they are aware of the properties of the waste. Each type of waste must meet strict acceptance criteria before being allocated to landfill.



TRANSFER NOTES & CONSIGNMENT NOTES

Duty of care requires waste to be passed over to a holder who is a registered waste carrier and has a waste management permit or licence. When non-hazardous waste is transferred to an authorised person this must be alongside a waste transfer note, with a copy held for at least three years by the waste producer. Hazardous waste will require a consignment note to be held for three years and be completed by the person originating the transfer.

Controlled Waste Transfer Note should contain:

- SIC Code
- Waste Description & six digit EWC Code
- Quantity
- How the waste is contained
- Carrier of waste
- Date, time and location of transfer
- Disposal location
- Your signature and authorised receivers signature

Hazardous Waste Consignment note should contain:

- Name & address of consignee
- 2007 SIC Code
- Details of process producing waste
- Waste Description & six digit EWC Code
- Quantity
- Details of the waste properties e.g. hazard code
- Type of container
- Date & time of transfer
- Your signature and authorised signature of person carrying waste



The SIC code is the UK Standard of Industrial Classification for economic activities. It is a four digit code and is used by governments to classify industry wastes and can be found on the government website.

DREDGING EXEMPTION

D1 waste exemption: depositing waste from dredging inland waterways is the main exemption when dealing with waste produced from dredging inland waterways. This exemption is however limited to non-hazardous waste materials. Waste exemptions essentially allow the organisation conducting the work to not need to process the waste material at landfill or other waste centres.

This exemption will need to be registered with the Environment Agency before undertaking the work. It is possible to apply for exemptions in bulk if you have several sites requiring dredging.

Other exemptions do exist, but are unlikely to apply to inland waterways, restorations and maintenance.



Dredging's are not subject to waste legislation if there is an immediate use for the silt on site e.g. topping up the towpath or backfilling bank protection (if the dredging's are suitable).

VEGETATION MANAGEMENT

Where vegetation cannot simply be left where it falls when cut, it can be:

- ① Stacked into habitat piles.
- ② Chipped and left on site, which requires a T6 exemption from the Environment Agency.
- ③ Burnt on site, which requires a D7 exemption from the Environment Agency.
- ④ Removed as firewood.
- ⑤ Sent for composting (most local authorities have green waste composting facilities).

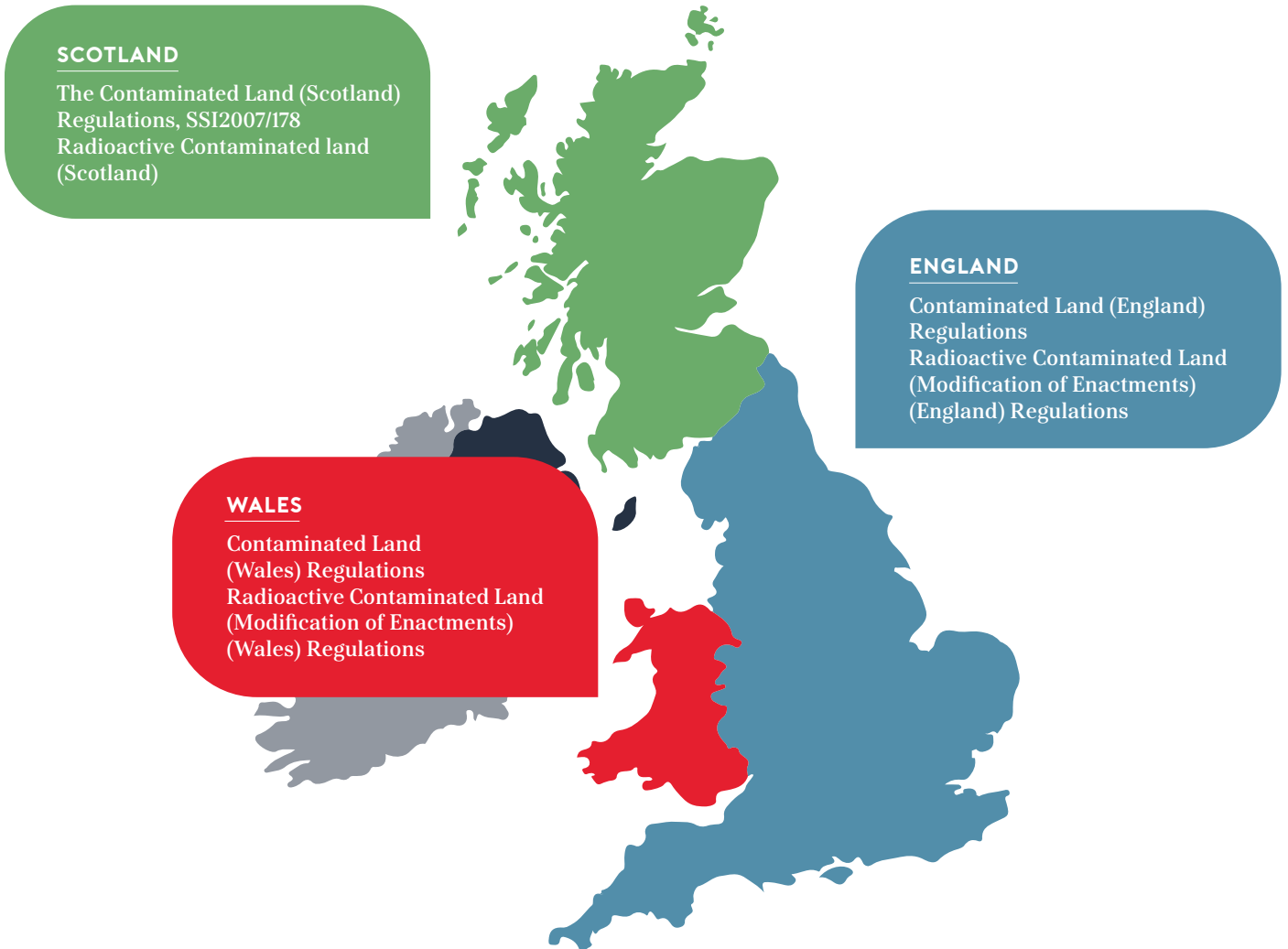
SOIL MANAGEMENT & CONTAMINATION CONTROL

Canal restoration is likely to involve excavation on both greenfield and brownfield sites.

Greenfield sites are of a rural nature and will require effective management of soils and sub-soil. This would be where a canal channel has been abandoned and has filled with natural material. Brownfield sites are where the land has been used for commercial or industrial activities, such as a canal channel infilled in after abandonment.

Brownfield sites should be assumed to be polluted and tests undertaken to determine the nature of the pollutants and the level of concentration.

Contaminated land is defined as any land that appears to be in such a condition, by reason of substances in, on or under the land, where significant harm or significant pollution of controlled waters is being caused or there is a significant possibility of such harm or pollution being caused.



The two main Codes of Practice relating to soil and contaminated land management are:

- ① The Code of Practice for the Sustainable Use of Soils on Construction Sites (used to protect soils and ensure adequate soil function during and after construction).
- ② Definition of Waste: Development Industry Code of Practice (DoWCoP) (used to make a process to determine whether excavated materials constitute waste and to identify the point when treated waste is no longer considered waste).

In addition to the regulatory bodies above, Local Authorities have statutory duties to ensure remediation of a contaminated land site is carried out by an appropriate person.

Soil fulfils a number of functions for society which are central to sustainability and is a vulnerable and finite resource. Construction activities can have a significant impact on soil.

The Code of Practice is not legally binding, but by following it you can:

- ① Protect and enhance soil resources on site and provide wider benefits to the environment.
- ② Provide cost savings.
- ③ Help achieve sustainability targets.
- ④ Meet your legal obligations in respect of waste control.

The ten sections of the Code of Practice provide practical advice on different aspects of using soils sustainably during the various stages of site development. Start by carrying out a soil resource survey and incorporate the results into the site working plan.

Prepare a Soil Resource Plan which includes:

- ① Areas and types of topsoil and subsoil to be stripped.
- ② Haul and access routes.
- ③ Methods to be used.
- ④ Location, type and management of soil stockpiles.

Tracked equipment should be used for stripping, stockpiling and placing soil to reduce compaction. Stockpiles should be clearly defined for different soil materials and storage times should be kept to a minimum. When placing soil, ensure the entire profile is in a condition to promote aeration, drainage and root growth. When importing soil make sure it is from a reputable supplier and suitable for its intended use.

The process for managing contaminated land is carried out in three stages:

- ① **Assessment of the risks from land contamination;** based on information gathered from a preliminary investigation. BS 10175, Investigation of Potentially Contaminated Sites – Code of Practice provides recommendations and guidance on carrying out an investigation to ensure relevant data is provided for the risk assessment.
- ② **Appraisal of remediation options;** using the risk assessment the remediation will aim to reduce the risks. The remediation should follow the hierarchy for waste management. There are three main types of remediation;
 - ▶ Containment.
 - ▶ Separation.
 - ▶ Destruction.

- 3 **Implementation of remediation options;** will require consideration of the required permits and licences. The DoWCoP sets out good practice for dealing with uncontaminated and contaminated land and requires the implementation of a materials management plan (MMP) and a qualified person to declare that it has been complied with.

Where materials cannot be incorporated into the site, disposal must follow all duty of care requirements. Stockpiling of contaminated material should be avoided, but if stockpiles are required, they should be placed on an impermeable layer to avoid cross contamination and measures should be taken to avoid dust and wind-blown contaminants and leachate entering watercourses.

The MMP should include the following:

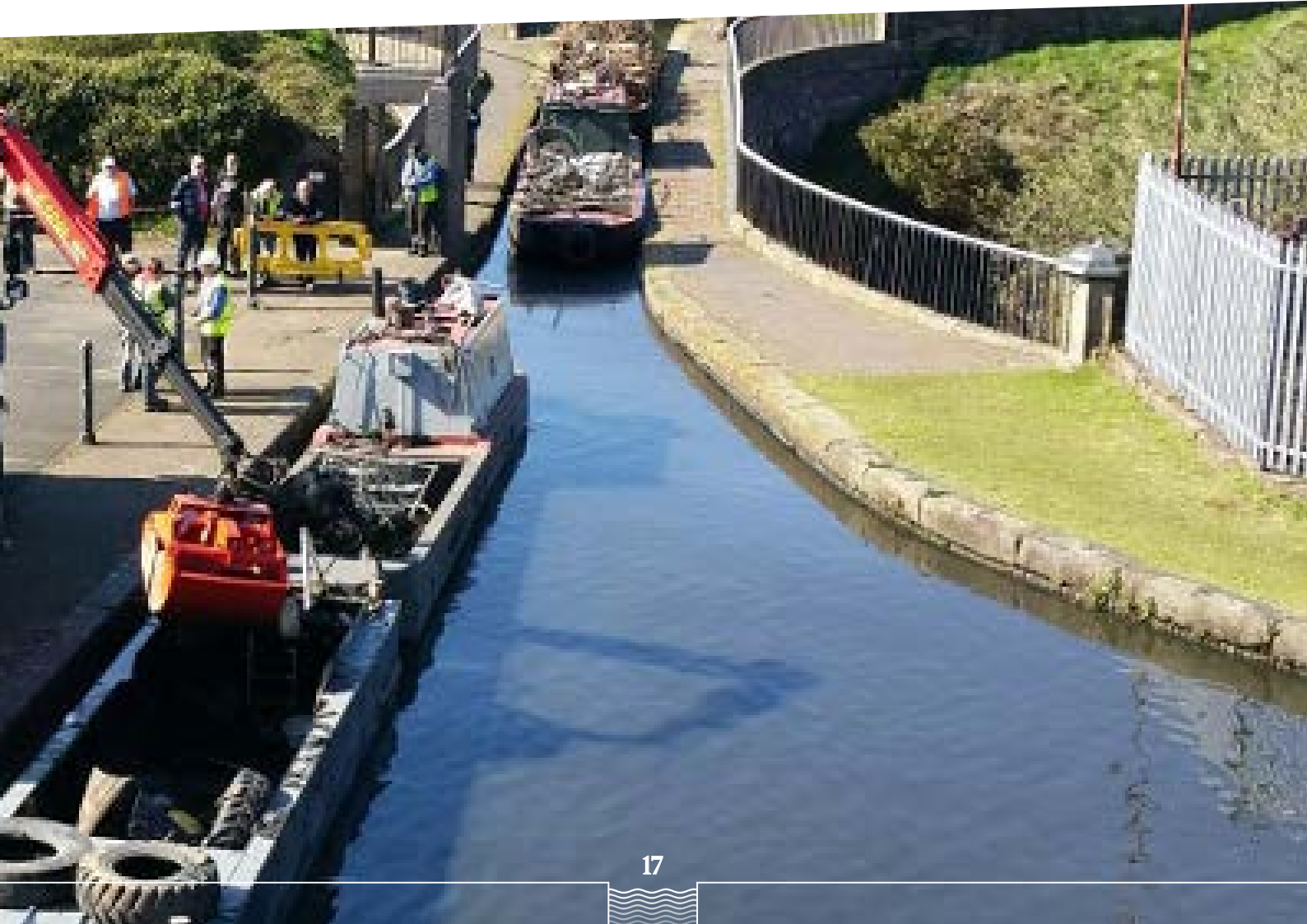
- 1 A description of the materials in terms of potential use and relative quantities.
- 2 Details of where and how these materials will be stored.
- 3 Details of the final destination and use of these materials.
- 4 Details of how these materials are to be tracked and moved.



TOP TIPS FOR WASTE MANAGEMENT ON YOUR SITE

All waste produced can also present a hazard to workers on site if it is not properly managed throughout the project.

- ① Waste needs to be stored so as not to cause contamination. Ideally waste materials should be stored separately so the recyclable materials are not mixed with non-recyclable material.
- ② Bag up empty cement and lime bags carefully so that dust is not generated. Collect litter and unused material at the end of each day and dispose.
- ③ Make clearing waste a priority. Check that everyone is aware of what is required and that it is being done.
- ④ Clear up unused concrete / mortar. Place it on a board or polythene sheet so that it can set and then be used as fill or disposed with other solid waste.
- ⑤ Materials from cleaning of recycled materials or during preparation work for repainting should be collected and not allowed to pollute land or watercourses.
- ⑥ Make sure that all flammable waste materials (such as packaging and timber offcuts) are cleared away regularly to reduce fire risks.
- ⑦ Waste materials need storing safely before their removal from the site so make sure that you allow sufficient space for waste skips and bins.



**USEFUL RESOURCES: WASTE
MANAGEMENT**

[Government guidance, Environmental management- Waste](#)

[DEFRA Waste duty of care code of practice](#)

[The Controlled Waste \(England and Wales\) Regulations](#)

[Government Site Waste Management Plan template](#)

[Specialist in Land Contamination \(SiLC\)](#)

[Contaminated Land: Application in real environments \(CL:AIRE\) water and land library](#)

[Government guidance on classification of different types of waste](#)

[Guidance on the classification and assessment of waste; technical guidance WM3](#)

[European Waste Code \(EWC\) check tool](#)

[Disposal of business or commercial waste](#)

[Government requirements for producers and holders](#)

[Environment Agency register of carriers](#)

[Government advice on consignment notes](#)

[Environment Agency D1 exemption for dredging](#)

[Environment Agency T6 exemption for chipping vegetation](#)

[Environment Agency D7 exemption for burning on site](#)

[HSE guidance on materials storage and waste management](#)

USEFUL RESOURCES: SOIL MANAGEMENT

[DEFRA Construction code of practice for the sustainable use of soils on construction sites](#)

[CL:AIRE Definition of waste; Code of practice](#)

[CL:AIRE Guidance bulletin GB3](#)

Sign up to read the full Practical Restoration Handbook and supporting resources here:
waterways.org.uk/practicalrestorationhandbook





Historic England

*This project was partly funded by Historic England's
National Capacity Building Programme.*





The Inland Waterways Association is a non-profit distributing company limited by guarantee. Company registration number 612245. Charity registration number 212342. Registered office: Island House, Moor Road, Chesham HP5 1WA.