

Land remediation and waste management guidelines

Table of contents

1	Executive summary	3
2	Introduction and scope	4
	2.1 Scope	5
3	On-site use of excavated materials without treatment	6
	3.1 Use of soil and aggregate on the site of excavation – where SEPA will not regulate under waste legislation	6
	3.2 Suitability for use	6
	3.3 Example uses	7
	3.4 Disposal of waste – where SEPA will regulate under waste legislation	9
4	On-site treatment and subsequent use	10
	4.1 Waste regulatory framework	10
	4.2 Mobile plant licensing and Controlled Activities Regulations.....	10
	4.3 Site specific working plan	10
	4.4 Conditions of use	11
	4.5 Sampling of treated materials prior to use	11
5	Common soil remediation techniques	12
	5.1 Excavation and removal.....	12
	5.2 Cover systems	12
	5.3 Solidification and stabilisation	13
	5.4 In-situ techniques	13
	5.5 Ex-situ treatment.....	13
	5.6 Mixing/dilution	13
6	Groundwater remediation	14
	6.1 Pump and treat.....	14
7	Off-site treatment of excavated material	15
	7.1 Off-site treatment of soil	15
	7.2 Off-site treatment – technical considerations.....	15
	7.3 Use on the source site of materials returning from off-site treatment.....	15
	Appendix 1: Flow diagram for on-site use	17

1 Executive summary

These guidelines set out SEPA's approach to regulating the remediation of contaminated sites under the waste regulatory regime.

This document is intended to help site developers, consultants, contractors, local authorities and SEPA staff to understand when the waste regulatory regime will be applied by SEPA to site remediation and redevelopment activities. It also describes the considerations that SEPA will take into account when applying regulatory controls on waste.

SEPA provides site-specific advice to local authorities with regard to pollution of the water environment from contaminated sites being remediated under Planning and Development Control, Part IIA of the Environmental Protection Act 1990 (Contaminated Land Regime) and associated statutory guidance.

Contaminated soils which require treatment during site redevelopment are likely to fall within the scope of the definition of waste in the revised Directive on Waste 2008/98/EC (as amended). These guidelines seek to ensure that the objectives set out in Article 13 of the revised Waste Framework Directive are met and that the Directive's effectiveness is not undermined.

Treatment processes and the use of treated materials on site require regulation under the legislation governing the management of waste. These guidelines set out SEPA's approach to regulating such treatment processes and the subsequent use of treated materials under the waste management licensing regime.

This document does not address the assessment of pollutant linkages or the determination of site-specific remediation criteria with regard to human health, soils or groundwater.

We may review and update the advice contained in this document based on our experience of practical applications, technological developments and legislative amendments.

Key points

- This guidance sets out how SEPA will regulate the treatment and/or use of contaminated materials only at the site of excavation. It does not apply to the use of such materials away from the site of excavation. Such activities will be regulated under waste legislation. More information on applying for waste management licences and exemptions can be found on our website (www.sepa.org.uk/waste/waste_regulation.aspx).
- Subject to the six criteria set out in Section 3.1, SEPA will not regulate under waste legislation soil not requiring treatment and able to be used at the site of excavation as part of the development or land remediation project. But if these criteria cannot be met, we will regulate the activities.
- Excavated contaminated soil requiring treatment before it can be used will be regulated under waste legislation. Treatment of waste soil and groundwater must be carried out within the terms of a waste management licence (either a mobile plant licence or site licence). Licensed activities must be accompanied by a site specific working plan agreed in advance with SEPA.
- Use of treated waste soils at the site of excavation can be carried out under the terms of a mobile plant licence and must conform to the conditions of use set out in Section 4.4.
- Waste soil treated off-site can under the circumstances described in Section 7.3 be used at the source site (i.e. site of excavation) under the terms of a mobile plant licence.
- In each of the circumstances described in this guidance, SEPA's key concern is to ensure that there is no pollution of the environment or harm to human health.

2 Introduction and scope

Land remediation restores previously marginal land to productive use and conserves undeveloped areas. It is thus an important aspect of sustainable development, especially with regard to resource management and reducing dependency on landfill. SEPA supports the redevelopment and remediation of brownfield land as a key element of sustainable development.

This guidance sets out how SEPA intends to regulate material generated as part of the development of sites in Scotland within the context of waste legislation. Enforcement action will be carried out in accordance with SEPA's enforcement policy.

SEPA guidance, Is it Waste? Understanding the definition of waste, and supplementary guidance¹ give more detail with regard to when a substance becomes a waste and when a waste ceases to be a waste.

A revised Waste Framework Directive (2008/98/EC)² has recently been enacted by the European Commission and must be implemented by December 2010. SEPA is awaiting Scottish Government proposals for its transposition into Scots law. However, contaminated soils which require treatment during site redevelopment are likely to fall within the scope of the definition of waste in the revised Directive. These guidelines seek to ensure that the objectives set out in Article 13 of the revised Waste Framework Directive are met and that the Directive's effectiveness is not undermined.

The development of contaminated sites is not without risk. Historical activities may have left a legacy of contamination which needs to be remediated to mitigate the risk to human health and the environment. Therefore, a prerequisite for redevelopment is a site investigation to:

- characterise the risks to human health and the environment from the presence of pollutants;
- develop site-specific remediation criteria which eliminate or mitigate these risks.

In general, site remediation is carried out under three main circumstances:

- i as a result of requirements from Planning and Development Control;³
- ii if a site is identified as requiring remediation in terms of Part IIA of the Environmental Protection Act 1990 (EPA)⁴ (known as the Contaminated Land Regime);
- iii voluntary remediation and permitted development, i.e. where there is no planning application or where the site is not formally identified as "contaminated land" under Part IIA.

Local authorities are the lead regulator under both the planning and contaminated land regimes (with the exception of 'special sites' for which SEPA is the enforcing authority) and SEPA is the lead regulator for waste management. The various roles and responsibilities of SEPA and local authorities with respect to the remediation of land contamination in Scotland are set out in Table 1.

¹ Available from www.sepa.org.uk/waste/waste_regulation/is_it_waste.aspx

² http://ec.europa.eu/environment/waste/framework_directive.htm

³ Planning Advice Note PAN 33 *Development of Contaminated Land* (www.scotland.gov.uk/Publications/2000/10/pan33)

⁴ www.opsi.gov.uk/acts/acts1995/ukpga_19950025_en_6

Table 1: Roles and responsibilities

	Remediation route		
	Planning	Part IIA (non special site)	Part IIA (special site)
Agency			
Local authority	Lead regulator	Lead regulator	Advisory
SEPA (contaminated land)	Advisory with respect to water environment	Advisory with respect to water environment	Lead regulator
SEPA (waste)	Lead regulator	Lead regulator	Lead regulator
Task			
Agreeing remediation criteria	Local authority	Local authority	SEPA
Licensing treatment of waste	SEPA	SEPA	SEPA
Licensing use of waste	SEPA	SEPA	SEPA

2.1 Scope

This document is intended to be used for sites undergoing remediation through the planning regime or the Contaminated Land Regime. It does not apply to voluntary and permitted development remediation (as described in iii above) or the remediation of radioactive contaminated land. For advice with regard to these circumstances, please contact your local SEPA contaminated land officer.

The document also does not apply to the treatment of Japanese knotweed. Separate guidance on Japanese knotweed is available from the SEPA website.⁵

This document does not address the assessment of pollutant linkages or the determination of site-specific remediation criteria with regard to human health, soils or groundwater.

This guidance applies only in Scotland and is subject to periodical review.

SEPA reserves the right to depart from the position outlined in this guidance to:

- avoid the risk of harm to human health and the environment;
- ensure the effectiveness of the Waste Framework Directive is not undermined.

⁵ On-site management of Japanese Knotweed and associated contaminated soils (www.sepa.org.uk/waste/waste_regulation/guidance_and_position_statemen.aspx)

3 On-site use of excavated materials without treatment

3.1 Use of soil and aggregate on the site of excavation – where SEPA will not regulate under waste legislation

This section details how SEPA will apply waste legislation with respect to excavated materials that are to be used on the same site without treatment as part of the planned remediation works.

Our overriding concern is to ensure that there is no pollution of the environment or harm to human health. If pollution or harm does occur SEPA will take appropriate enforcement action.

The reduction of contamination at source is the preferred option and should always be considered first. However, it is possible that materials containing contaminants can be used on site for construction and engineering purposes without treatment. This will depend on:

- the risks and pollutant linkages identified during the site investigation;
- the measures to mitigate those risks described in the remediation plan.

SEPA will not regulate under waste management controls the use of excavated materials on the development or remediation site (either through the planning or contaminated land regimes) where a remediation plan is in place incorporating all the following six criteria:

1. The use is a necessary part of the planned works.
2. The material is suitable for that use.
3. The material does not require any processing or treatment before it is reused.
4. No more than the quantity necessary is used.
5. The use of the material is not a mere possibility but a certainty.
6. The use of the soil will not result in pollution of the environment or harm to human health.

The remediation plan must be agreed with the local authority (or SEPA if the site is a special site). SEPA will work with the relevant planning or Part IIA authority to ensure compliance with the remediation plan.

Any use of materials that do not meet the six criteria will be regulated by SEPA under waste management controls. In most cases, material use that does not meet all the criteria will be required to be:

- treated prior to reuse;
- removed from site as waste; or
- considered as disposal of waste by landfill.

3.2 Suitability for use

Local authorities are the lead regulator for remediation through the planning and contaminated land regimes (with the exception of special sites). Through the remediation plan, they will assess the site-specific suitability of a material for a particular use.

In general, SEPA will not 'double check' this assessment but will provide advice on the risks to the water environment in its role as a consultee. However, SEPA is responsible for making this assessment for special sites.

- Refer to SEPA Position Statement, *Assigning Groundwater Assessment Criteria for Pollutant Inputs*⁶ when assessing pollution of the water environment for contaminated land.
- Note that the reuse of material on-site is not considered a "new activity" but as resulting from "land contamination".

⁶ Available from: www.sepa.org.uk/waste/waste_regulation/guidance_and_position_statemen.aspx

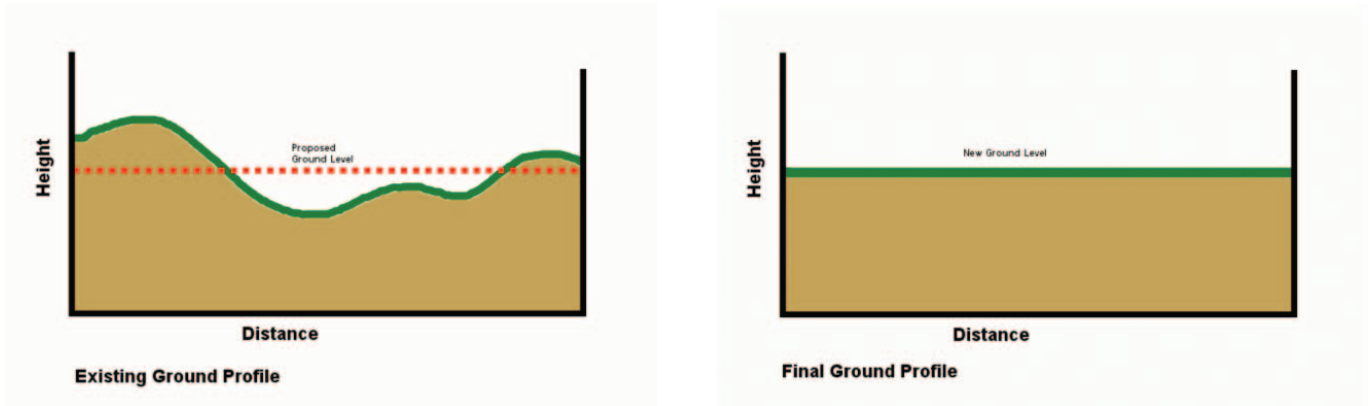
3.3 Example uses

The use of material meeting the six criteria set out in Section 3.1 will not be regulated under waste legislation. To clarify the first test (i.e. that the use is a necessary part of the planned works), four examples are provided below for illustration. Should a use be agreed through the planning process, SEPA will generally consider it to be 'necessary' to the development.

Example 1 – Site regrading

The site needs to be levelled to form a stable construction platform (Figure 1). In addition, a hardstanding area breaks an identified pollutant linkage with respect to human health.

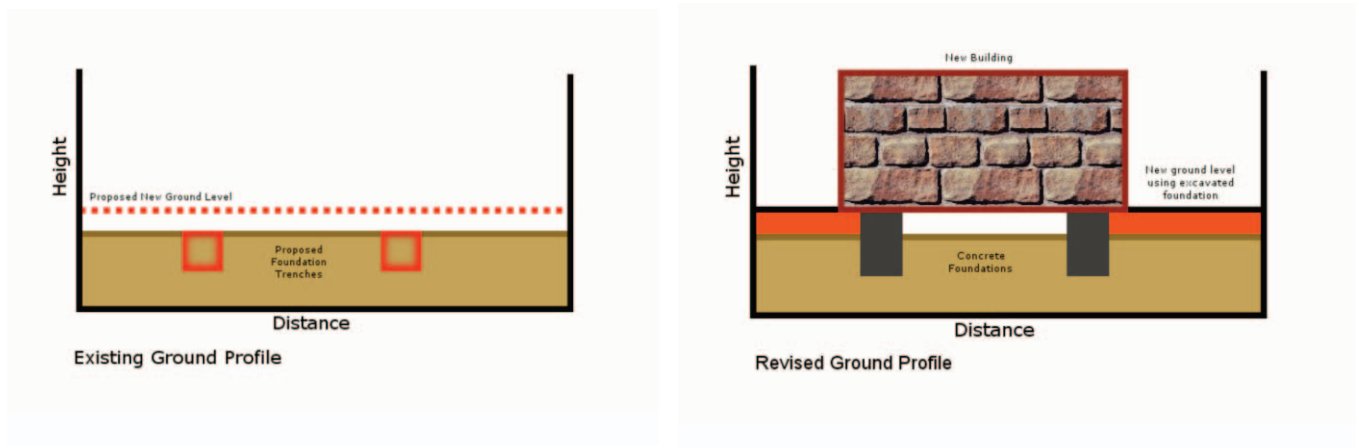
Figure 1: Use for site regrading



Example 2 – Foundation excavations

Foundation excavations are being used to construct a stable construction platform (Figure 2). The building and adjacent hardstanding break the identified pollutant linkage. The excavated material is being used as part of the planned works and the risk assessment has demonstrated that there is no risk of pollution or harm to human health when used for this purpose.

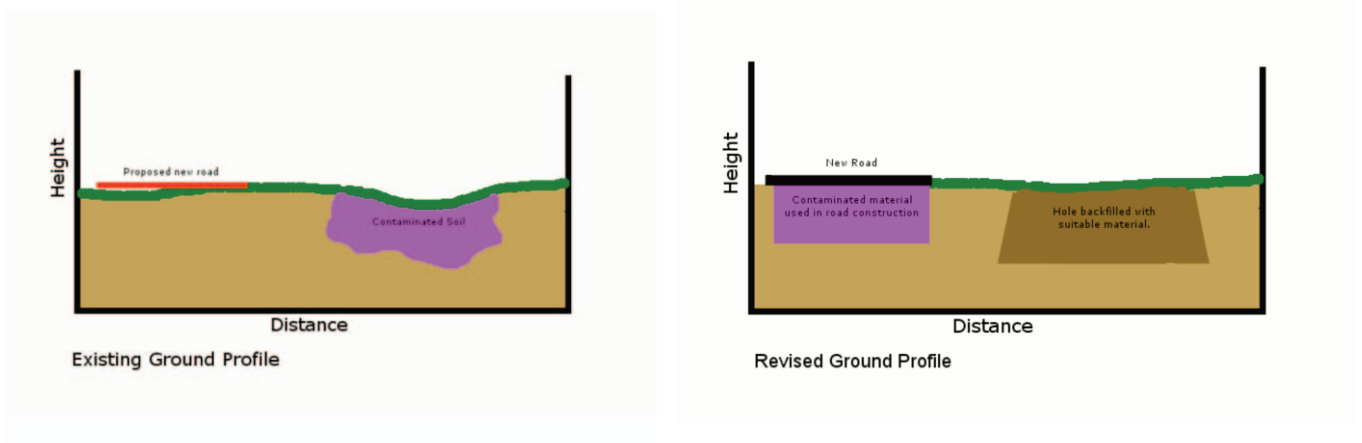
Figure 2: Use in foundation excavations



Example 3 – Moving materials within the site boundary

A pollutant linkage has been identified with regard to part of the site being developed as a play park. The source material is being moved to an area of the site where it presents no pollutant linkage to a receptor, i.e. the road breaks all identified pollutant linkages associated with the use of that material and does not create any new pollutant linkages (Figure 3).

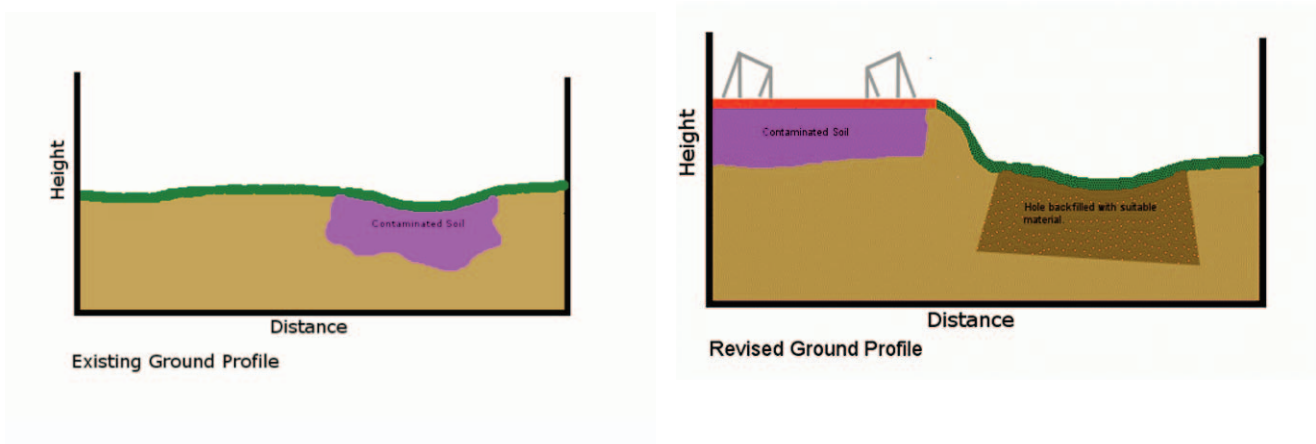
Figure 3: Moving materials within the site boundary



Example 4 – Site deficit

This site has with an overall deficit of materials required for the development and material will need to be imported. Like Example 3, material is excavated from a high risk area of the site and is used in the construction of a raised artificial football pitch (Figure 4). Material is subsequently imported (under an exemption from waste management licensing) to meet the deficit of the site. The raised artificial football pitch is part of the agreed planning permission for the site and the material can be used to construct it provided it meets the six criteria listed in Section 3.1 (i.e. it is suitable, no more than the required quantity is used, etc).

Figure 4: Use to make up a site deficit



3.4 Disposal of waste – where SEPA will regulate under waste legislation

Material produced on-site during construction works that cannot meet the criteria specified in Section 3.1 will be regulated as waste. For example:

- SEPA will consider as waste disposal:
 - uses of material that are not part of the planned construction or remediation project or where unsuitable/excessive material is used;
 - 'sham' uses that are not necessary to the development and are solely to avoid exporting soil off-site for treatment or disposal.

In these cases, the material will be required to be treated prior to reuse, removed from site as waste, or considered as disposal of waste by landfill. Under the Landfill Directive (1999/31/EC)⁷, a Pollution Prevention Control (PPC) permit⁸ (a landfill permit) will be required for disposal in landfill.

Uses must therefore conform to those agreed through the planning process. SEPA will work with local authority planning departments to ensure soil is not disposed of on-site.

- Where contaminated soil is excavated and it is proposed to deposit it in an engineered cell on the site of excavation, SEPA will regard this as waste disposal by landfill. A PPC landfill permit will be required.
- SEPA does not consider asbestos to be a suitable material for backfilling or other construction purposes. Bulk asbestos must not be backfilled or otherwise reused in site works. Such backfilling is considered as disposal of waste by landfill and a PPC landfill permit will be required.

⁷ <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31999L0031:EN:NOT>

⁸ www.sepa.org.uk/air/process_industry_regulation/pollution_prevention_control.aspx

4 On-site treatment and subsequent use

Under waste legislation the treatment of contaminated soils is considered a waste treatment operation. This section explains how SEPA applies the waste regulatory framework to the treatment and subsequent use of such materials.

4.1 Waste regulatory framework

Section 35(1) of the Environmental Protection Act 1990 (as amended) refers to two types of waste management licence:

- Site licence which authorises the treating, keeping or disposal of any specified description of controlled waste in or on specified land.
- Mobile plant licence – the treatment or disposal of any specified description of controlled waste by means of specified mobile plant.

Under Regulation 12 of the Waste Management Licensing Regulations 1994 (as amended), it is possible to apply for a mobile plant licence (MPL) for, among other things:

- the treatment of waste soil;
- the treatment of contaminated material, substances or products for the purposes of remedial action with respect to land or the water environment.

Both in-situ and ex-situ treatment of soils and groundwater are covered by Regulation 12.

A mobile plant licence specifies the equipment used to treat waste material. Licence conditions refer to a site specific working plan (SSWP) which covers treatment and which can specify certain proposed uses. A single mobile plant licence can simultaneously cover several pieces of mobile plant and types of treatment across a number of sites.

SEPA considers a mobile plant licence can also license the use of treated contaminated soil where:

- the use is undertaken on the site from which the material was excavated;
- the mobile plant licence and site specific working plan cover the site of use;
- the use complies with the 'conditions of use' (see Section 4.4).

4.2 Mobile plant licensing and Controlled Activities Regulations

Where treatment of a site includes treatment of groundwater by "pump and treat", Schedule 10, Part 2 of the Water Environment (Controlled Activities) (Scotland) Regulations 2005 (CAR) allows for a waste management licence to be regarded as an "authorisation" for the purpose of CAR. This means that abstractions and discharges of surface water and groundwater such as pump and treat systems can be licensed under a mobile plant licence as long as the activities comply with CAR. Regulation of pump and treat is explained further in Section 6.

4.3 Site specific working plan

Before mobile plant is used on a site, a site specific working plan (SSWP) relating to the site of its proposed operation must be agreed with SEPA. This licence condition is present in every mobile plant licence.

The information that must be provided in a site specific working plan is detailed in the appendices of the mobile plant licence. For further information, contact the appropriate SEPA area team.

The site specific working plan must contain a demonstration of compliance with the conditions of use set out in Section 4.4.

Where it is proposed that treated waste is to be used on the site of excavation, the site specific working plan must contain details of the treatment standards to be attained.

⁹ www.uk-legislation.hmso.gov.uk/si/si1994/Uksi_19941056_en_1.htm#tcon

¹⁰ www.sepa.org.uk/waste/waste_regulation/application_forms/waste_management_licence.aspx

¹¹ www.sepa.org.uk/water/regulations.aspx

4.4 Conditions of use

The conditions of reuse for treated materials on the site of excavation are similar to those set out for untreated material in Section 3.1. The only distinction here is that the materials are being treated prior to reuse, which requires a mobile plant licence. All the following five conditions must be met:

1. The use is a necessary part of the planned works.
2. The material is suitable for that use.
3. No more than the quantity necessary is used.
4. The use of the material is not a mere possibility but a certainty.
5. The use of the soil will not result in pollution of the environment or harm to human health.

Before the operation begins, the licence holder must provide details of the proposed use and the treatment targets in the site specific working plan. Extracts from a remediation plan agreed with the local authority (or SEPA) must form part of this evidence. In general, SEPA will not scrutinise the derivation of treatment targets agreed with a local authority. However, SEPA will regulate to ensure that the targets are met and, where they are not, that suitable alternative arrangements are made.

Following treatment, SEPA will require written confirmation from the licence holder that:

- the soil has been treated successfully;
- the treatment targets have been met.

Any change of use due to unsuccessful treatment should be discussed with SEPA and the local authority (where appropriate) before the material is used. Relevant updates to the site specific working plan should be provided as required.

Once the use of treated soils is complete, records showing the final soil quality and location must be submitted to SEPA.

4.5 Sampling of treated materials prior to use

Contaminated soil is often highly variable in composition and there can be large variations in contamination levels. This can make complete characterisation very difficult. These effects can be compounded by inadequate sampling of the material.

When developing a sampling plan, SEPA recommends following BS EN 14899: 2005 *Characterisation of Waste – Sampling of Waste Materials – Framework for the preparation and application of a Sampling Plan*.¹² The chosen sampling frequency must be included in the site specific working plan.

¹²<http://shop.bsigroup.com/en/ProductDetail/?pid=00000000030112012>

5 Common soil remediation techniques

There are many methods employed in the remediation of land. Broadly, these can be divided into:

- engineered methods, e.g. excavation and removal, or cover systems;
- process-based methods, e.g. bioremediation or soil washing.

Each method has a different specificity, effectiveness, cost and potential of risk to the environment and human health.

This section describes common approaches to site remediation and how each is regulated by SEPA in terms of waste legislation.

5.1 Excavation and removal

Excavated material taken for use to a site other than the site of excavation (i.e. the remediation site) will continue to be regulated as waste until it is fully recovered. Off-site storage, treatment, disposal or use prior to such recovery will require a waste management licence, exemption or a PPC permit. More information on applying for such authorisations can be found on SEPA's website.¹³

All waste soils removed off-site for further use or disposal are subject to the Duty of Care.¹⁴ The Duty of Care applies to anyone who produces, imports, transports, stores, treats or disposes of controlled waste from business or industry. The waste producer must check that the waste is passed to someone authorised to accept it as a waste. The producer could be held responsible if such checks are not made and the waste is subsequently disposed of illegally.

If the waste is to be disposed of to landfill, it is important to check the landfill is allowed to accept the particular type of waste. Waste producers must ensure that any landfill site receiving their waste holds a Pollution Prevention and Control permit. The permit will specify whether the site can accept hazardous, non-hazardous or inert waste. A landfill site will only accept a certain type of waste if:

- the landfill owner's licence or permit allows it;
- certain waste acceptance criteria (WAC)¹⁵ are met;
- the landfill operator is prepared to accept the waste.

5.2 Cover systems

Cover systems do not remove the source contamination and thus will be required to remain intact as long as contaminants are present, which may be many years. The Royal Commission on Environmental Pollution (RCE) described such methods as being:

‘... less satisfactory environmentally than methods which remove contaminants from the soil and, where possible, break them down into harmless substances.’¹⁶

SEPA supports this view and encourages contaminant reduction through treatment whenever possible.

Where cover systems are to be used and the use is carried out as part of a remediation plan that demonstrates compliance with the criteria set out in Sections 3.1 or 4.4, SEPA will not regulate such systems under waste legislation.

As a minimum, best practice guidance developed by BRE¹⁷ and CIRIA¹⁸ on the design, construction and maintenance of cover systems should be followed.

It is necessary to demonstrate that the proposed use is a necessary part of the development (see Sections 3.2 and 3.3).

¹³ www.sepa.org.uk/waste/waste_regulation.aspx

¹⁴ www.sepa.org.uk/waste/waste_regulation/waste_carriers_and_brokers/duty_of_care.aspx

¹⁵ www.sepa.org.uk/waste/waste_regulation/landfill.aspx

¹⁶ *Sustainable Use of Soil*, RCE, 1996 (www.rcep.org.uk/reports/19-soil/documents/1996-19soil.pdf)

¹⁷ www.bre.co.uk

¹⁸ www.ciria.org

5.3 Solidification and stabilisation

Solidification and stabilisation are discrete processes that are often used together in order to reduce the mobility of contaminants in soils. Solidification and stabilisation processes often involve a combination of materials and these techniques can be applied:

- in-situ, e.g. using a rotating auger or jet injection method;
- ex-situ, e.g. using batch processing or in-drum techniques;

Such treatments must only be carried out under the terms of either a mobile plant licence (and agreed site specific working plan) or a site licence. In addition, the treated waste must comply, as a minimum, with the conditions of use set out in Section 4.4.

5.4 In-situ techniques

In-situ techniques that reduce the concentration of contaminants in the soil vary significantly.

In-situ treatment must be carried out under the terms of either a mobile plant licence (and agreed site specific working plan) or a site licence. In addition, reuse of the treated waste must comply, as a minimum, with the conditions of use set out in Section 4.4.

5.5 Ex-situ treatment

Ex-situ remediation techniques vary depending on the contaminants present in the soil. Although the processes vary significantly, the approach of excavation, treatment to remove contamination and re-deposition is generally the same.

All such ex-situ treatment operations and the subsequent re-deposition of waste must be covered by either a mobile plant licence (and agreed site specific working plan) or a site licence. In addition, reuse of the treated waste must comply, as a minimum, with the conditions of use set out in Section 4.4.

5.6 Mixing/dilution

Diluting contaminants by mixing material with clean soils or waters to meet remediation objectives is not a suitable remediation technique.

6 Groundwater remediation

This section describes how SEPA regulates “pump and treat” groundwater remediation under waste legislation in the context of development and remediation projects.

6.1 Pump and treat

The most common method of treating groundwater is to extract the water, treat it at the surface, and discharge the treated water. This process is known as “pump and treat” technology. There are a variety of methods to return treated water to an aquifer, one of which is use of reinjection wells.

SEPA regulates pump and treat activities under waste legislation. Schedule 10, Part 2 of the Controlled Activities Regulations (CAR) allows for a waste management licence to be regarded as an “authorisation” for the purpose of CAR.

The requirements of the CAR must be fulfilled as part of the waste licensing process. Therefore, discharge to the water environment as part of pump and treat operations can be licensed under a mobile plant licence as long as it complies with the requirements of CAR.

In practice, this means that a full CAR risk assessment on the abstraction and discharge must be carried out and submitted as part of the site specific working plan. Like the rest of the plan, the risk assessment must be agreed with SEPA before any abstraction or discharge starts. The risk assessment required is significant and, in some cases, may involve public participation. It may therefore take longer than a risk assessment for soil treatment that does not affect the water environment. Early contact with SEPA is strongly advised.

7 Off-site treatment of excavated material

7.1 Off-site treatment of soil

The off-site treatment of contaminated soil is usually carried out under a fixed site licence or PPC permit.

Under certain circumstances, however, off-site treatment can be carried out under the terms of a mobile plant licence where the activity is of a temporary nature. SEPA will consider authorising activities at an off-site treatment plant under mobile plant licensing for up to one year provided a site specific working plan has been agreed in advance and accepted by the local SEPA team. This might be where:

- space constraints mean the development or remediation site cannot accommodate the treatment plant;
- a number of sites near one another require use of the same treatment plant.

Off-site treatment operations proposed to last longer than one year are required to operate under a fixed site licence or PPC permit.

7.2 Off-site treatment – technical considerations

In some cases, a remote treatment site operating under a mobile plant licence (see Section 7.1) will itself need to be remediated when treatment operations end.

In such cases, a baseline survey of the conditions at the treatment site must be carried out before operations begin. Licence conditions will require this pre-assessment and the return of the site to at least baseline conditions.

Impermeable reception, processing and storage areas, together with measures to prevent run-off of contaminated material onto open ground, will be required as a minimum.

The site's operators must inspect incoming loads of material (visual and olfactory) and, where appropriate, carry out field testing backed up by confirmatory sampling and laboratory testing. Such inspections should confirm and demonstrate that the material treated on the site meets the specification set out in the site specific working plan. Procedures for the rejection of loads must be defined.

7.3 Use on the source site of materials returning from off-site treatment

Once material has been treated off-site, use of the treated material will in many cases still be subject to waste management controls when it is exported from the treatment site.

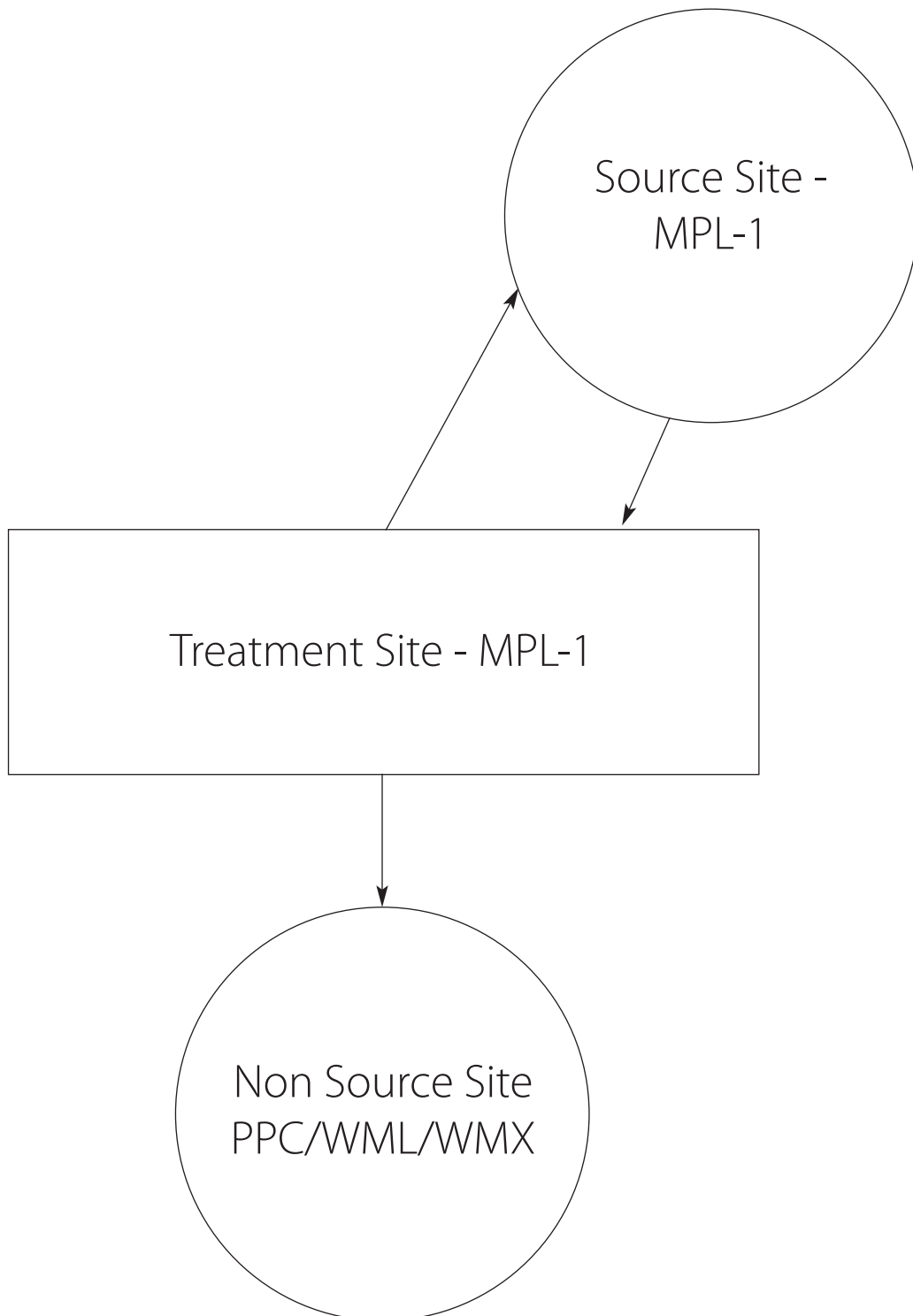
However, SEPA will allow the use of treated materials at the source site (i.e. site of excavation) under the mobile plant licence for the treatment site without requiring an additional waste management licence or exemption provided the following conditions are met:

- Both the source site and the treatment site are defined in the site specific working plan for the treatment site.
- The details of the use are provided and comply with the conditions of use given in Section 4.4.
- Soils from different sites are not mixed. Treatment areas, stockpiles, biopiles, etc at the treatment site covered by the mobile plant licence to ensure segregation of materials received.
- A full mass balance approach has been taken that shows quantities imported and exported, matched to transfer notes/consignment notes.

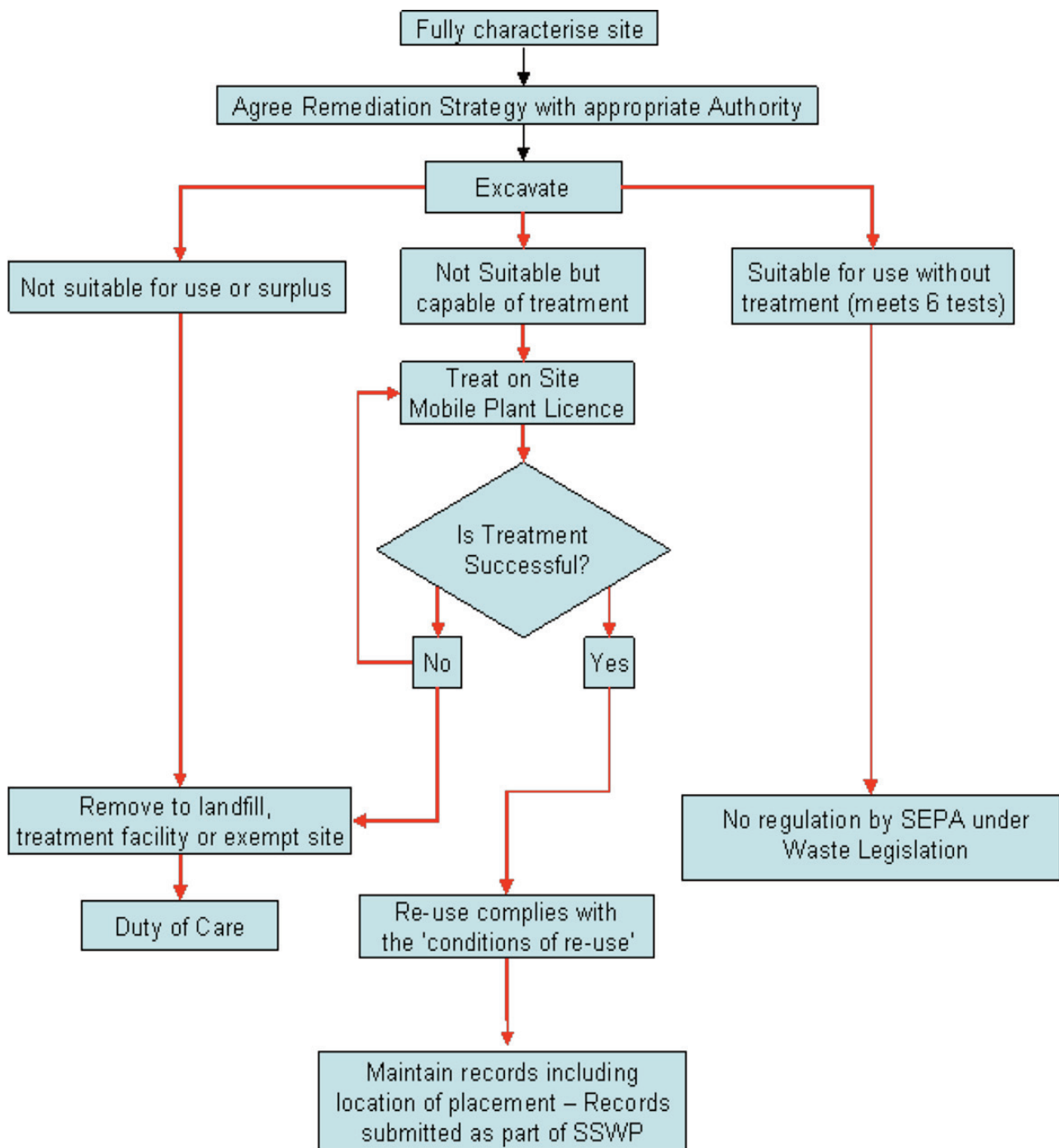
If these conditions are not complied with, reuse of the returned materials at the source site will require specific and separate (from the treatment site) authorisation from SEPA under waste legislation. Material used anywhere other than the site of excavation will require a waste management licence (WML) or exemption (WMX). The principle is illustrated in Figure 5.

This position does not apply to soil treated at permanent soil treatment facilities regulated under fixed site licences or PPC permits. Material from such sites must be used under the terms of a waste management licence or exemption.

Figure 5: Temporary off-site treatment arrangement



Appendix 1: Flow diagram for on-site use



SEPA Corporate Office
Erskine Court
Castle Business Park
Stirling, FK9 4TR
Tel: 01786 457700
Fax: 01786 446885

Aberdeen Offices
Greyhope House
Torry
Aberdeen, AB11 9RD
Tel: 01224 248338
Fax: 01224 248591

Leading Light Building
142 Sinclair Road
Torry
Aberdeen, AB11 9PR
Tel: 01224 248338
Fax: 01224 248591

Arbroath Office
62 High Street
Arbroath, DD11 1AW
Tel: 01241 874370
Fax: 01241 430695

Ayr Office
31 Miller Road
Ayr, KA7 2AX
Tel: 01292 294000
Fax: 01292 611130

Dingwall Offices
Graesser House
Fodderty Way
Dingwall Business Park
Dingwall, IV15 9XB
Tel: 01349 862021
Fax: 01349 863987

Technical Building
Strathpeffer Road
Dingwall
IV15 9QY
Tel: 01349 862021
Fax: 01349 863987

Dumfries Office
Rivers House
Irongray Road
Dumfries, DG2 0JE
Tel: 01387 720502
Fax: 01387 721154

East Kilbride Office
5 Redwood Crescent
Peel Park
East Kilbride, G74 5PP
Tel: 01355 574200
Fax: 01355 574688

Orbital House
3 Redwood Crescent
Peel Park
East Kilbride, G74 5PR
Tel: 01355 574200
Fax: 01355 574688

Edinburgh Office
Clearwater House
Heriot Watt Research Park
Avenue North, Riccarton
Edinburgh, EH14 4AP
Tel: 0131 449 7296
Fax: 0131 449 7277

Elgin Office
28 Perimeter Road
Pinefield
Elgin, IV30 6AF
Tel: 01343 547663
Fax: 01343 540884

Fort William Office
Carr's Corner
Industrial Estate
Lochybridge
Fort William, PH33 6TL
Tel: 01397 704426
Fax: 01397 705404

Fraserburgh Office
Shaw House
Mid Street
Fraserburgh, AB43 9JN
Tel: 01346 510502
Fax: 01346 515444

Galashiels Office
Burnbrae
Mossilee Road
Galashiels, TD1 1NF
Tel: 01896 754797
Fax: 01896 754412

Glasgow Office
Law House
Todd Campus
West of Scotland
Science Park
Glasgow, G20 0XA
Tel: 0141 945 6350
Fax: 0141 948 0006

Glenrothes Office
Pentland Court
The Saltire Centre
Glenrothes, KY6 2DA
Tel: 01592 776910
Fax: 01592 775923

Lochgilphead Office
2 Smithy Lane
Lochgilphead, PA31 8TA
Tel: 01546 602876
Fax: 01546 602337

Newton Stewart Office
Penkiln Bridge Court
Minnigaff
Newton Stewart, DG8 6AA
Tel: 01671 402618
Fax: 01671 404121

Orkney Office
Norlantic House
Scotts Road
Hatston
Kirkwall
Orkney, KW15 1RE
Tel: 01856 871080
Fax: 01856 871090

Perth Offices
7 Whitefriars Crescent
Perth, PH2 0PA
Tel: 01738 627989
Fax: 01738 630997

Strathearn House
Broxden Business Park
Lamberkine Drive
Perth, PH1 1RX
Tel: 01738 627989
Fax: 01738 630997

Shetland Office
The Esplanade
Lerwick
Shetland, ZE1 0LL
Tel: 01595 696926
Fax: 01595 696946

Stirling Office
Bremner House
The Castle Business Park
Stirling, FK9 4TF
Tel: 01786 452595
Fax: 01786 461425

Thurso Office
Thurso Business Park
Thurso
Caithness, KW14 7XW
Tel: 01847 894422
Fax: 01847 893365

Western Isles Office
2 James Square
James Street
Stornoway
Isle of Lewis, HS1 2QN
Tel: 01851 706477
Fax: 01851 703510