



**Waste Recovery Plan Guidance: Construction, restoration, reclamation and land improvement projects**

# **Contents**

[Who should use this guidance 4](#_Toc139448350)

[Authorisation tiers 4](#_Toc139448351)

[Why a waste recovery plan is required 4](#_Toc139448351)

[What to do with your waste recovery plan](#_Toc139448352) 5

[What to include in your waste recovery plan](#_Toc139448353) 5

[Waste to be used](#_Toc139448353) 5

[Purpose of the work](#_Toc139448353) 6

Evidence to support recovery of waste7

Evidence the waste is serving a useful purpose7

Obligations to complete the scheme [7](#_Toc139448352)

Planning permission8

Evidence the activity is viable8

Meeting quality standards10

Further detail your recovery plan may need to include10

If your authorisation is granted11

Changing your waste recovery plan11

Definitions11

Annex 1 – Suitable waste types and permitted uses [1](#_Toc139448351)2

If you would like this document in an accessible format, such as large print, audio recording or braille, please contact SEPA by emailing equalities@sepa.org.uk

## Who should use this guidance

If you are applying for an authorisation to use waste in construction, restoration, reclamation or land improvement projects, use this guidance to help create a waste recovery plan. The purpose of the plan is to:

1. Demonstrate the need for the project
2. Specify the waste types and quantities to be used
3. Show how these wastes will be used

If you are unsure whether the material you propose to use is defined as waste, you should refer to SEPA’s [‘Is It Waste?’ Guidance](https://www.sepa.org.uk/media/154077/is_it_waste.pdf).

## Authorisation tiers

Registrations for restoration, reclamation and land improvement projects have a maximum total tonnage limit of 100,000 tonnes. Any proposed recovery operations of these types above this threshold must be applied for as a permit. This does not mean that all operations below this threshold will automatically be eligible for authorisation at registration level. Other factors such as the complexity of the operation, risk to human health and the environment and likely level of regulatory input required all contribute to what tier of authorisation your proposed activity may be authorised as.

If you are carrying out an activity using less than or equal to 300 tonnes per year of specific low risk wastes (such as coarse crushed brick, tiles and concrete) for small scale construction and maintenance projects, such as private roads, hardstanding areas and field gate access, your activity may be authorised as a registration without requiring a waste recovery plan.

Note, recovery projects carried out on flood plains or areas prone to flooding are unlikely to be authorised as registrations and will generally require permits. Any such projects would require specific planning approval and consideration of impacts to have been carried out.

## Why a waste recovery plan is required

A waste recovery plan must accompany all applications for the use of waste in construction, restoration, reclamation and land improvement projects other than the small activities using 300 tonnes or less a year mentioned above. It will be assessed by SEPA officers to determine whether to grant or refuse the application. It may be referred to directly in an authorisation issued to you so must be accurate in the detail.

Your plan must be able to demonstrate clear waste recovery, as defined in the draft [Environmental Authorisation (Scotland) Amendment Regulations 2024](https://www.gov.scot/binaries/content/documents/govscot/publications/consultation-paper/2023/12/environmental-authorisations-scotland-regulations-2018-proposed-amendments-consultation-draft-regulations/documents/environmental-authorisations-scotland-amendment-regulations-2024-consultation-draft/environmental-authorisations-scotland-amendment-regulations-2024-consultation-draft/govscot%3Adocument/environmental-authorisations-scotland-amendment-regulations-2024-consultation-draft.pdf):

”Recovery” means any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy.”

If you cannot demonstrate that your proposed operation is waste *recovery*, but still want your operation to go ahead, you may apply for a waste *disposal* authorisation instead.

If SEPA does not agree that your activity is genuine waste recovery, your application will be refused.

## **What to do with your waste recovery plan**

You must include your completed waste recovery plan as a supporting document alongside the rest of your application when you apply for your authorisation.

You should identify your waste recovery plan with a version number and a date so that it can be correctly referred to.

For any queries, please contact registry@sepa.org.uk.

## **What to include in your waste recovery plan**

Each operation is likely to be unique and it is up to you as the operator to include all information that you consider will demonstrate that your activity is a genuine recovery activity. Your plan should include the key pieces of information set out below and must include a detailed description of the site and its environmental setting.

The level of detail however within each of these may vary depending on the scale and complexity of your proposed activity.

Your waste recovery plan may include documents you prepared for other purposes, such as planning applications or health and safety documents.

### Waste to be used

Your waste recovery plan must include details of the total tonnage and all types of waste proposed for use, as well as proposed waste acceptance procedures for the activity. This should be in line with the waste acceptance and pre-acceptance criteria set out in SEPA’s Waste Storage and Treatment Guidance.

For registration level recovery activities, where storage of waste is intended prior to use, you will need to ensure that:

* Storage is on the same site where the waste will be used.
* Imported waste is stored for no more than 6 months.
* No more than 50,000 tonnes of waste are stored on the site at any time.
	+ Where waste tyre bales are authorised, the maximum allowed will be 100 tonnes.

You must be able to satisfy SEPA that you will only use the amount of waste needed and that alternative proposals have been considered which include using less waste to achieve the same result. For example, SEPA would not authorise as a recovery activity noise attenuation bunds which are higher or wider than the necessary dimensions for protection from noise pollution. Any additional waste used in the building of such a bund would be classed as disposal.

You should provide plans and cross sections showing the original and planned final ground levels. Drawings must be of a suitable scale.

### Purpose of the work

There must also be sound justification provided for the use of waste and a clear plan for carrying out the operation. You must clearly describe the function of your proposed activity and show that you will carry it out to meet a specific need.

You must be able to demonstrate that you could and would carry out the works using non-waste if using waste was not authorised. If material you would otherwise have used was originally waste, it must meet SEPA’s ‘end of waste’ criteria.

Material that would be classified as waste, if the activity being proposed did not take place, cannot be defined as ‘non-waste’ in your waste recovery plan. Furthermore, if the waste you intend to use is already being stored on the proposed site, or due to be excavated, treated and re-deposited in the same area, it is unlikely that SEPA will accept this as a legitimate recovery operation.

### Evidence to support recovery of waste

You should include evidence in your waste recovery plan to demonstrate why the proposed operation is required, or what benefit it provides. Some examples of what would generally be considered acceptable evidence are given below.

Evidence the waste is serving a useful purpose

When assessing your recovery plan, SEPA will consider whether the proposed wastes are suitable in principle. The table in Annex 1 provides a list of waste types normally accepted in a typical recovery operation.

Where an alternative waste type or use is proposed, you must provide supporting information and evidence about the chemical, physical and engineering properties of the waste in your recovery plan.

You must show that the waste is suitable for its intended purpose and that the activity will not cause harm to human health or the environment. A suitably qualified person must provide the evidence. This will be someone with expert knowledge of the type of work you want to do and the environmental risks involved.

For example, if:

* you are building a bund or embankment, a suitably qualified person is likely to be a geotechnical engineer;
* you are building a road or development platform, it may be a civil engineer;
* your scheme is small and straightforward, it could be an experienced practitioner rather than a graduate or chartered engineer.

Your waste recovery plan must show that a waste will perform an intended function and that it is functionally comparable to a non-waste material you would have used.

Evidence of an obligation to carry out the activity

You may provide evidence that you are obligated to carry out the activity, in which case you should include plans and cross sections demonstrating how your proposal matches that obligation.

Where the obligation does not specify exactly how you must carry out the work, your waste recovery plan must show why and how carrying out your proposal with either waste or non-waste would allow you to meet that obligation. For example, if you have a general obligation to reduce noise levels at a property, you do not need to build a noise bund. You could reduce noise by moving the noise source away from the property or changing your operation. In those cases, you do not need to deposit any material. You would also have to demonstrate why this obligation would be met if you spent money importing non-waste material.

Note, being obliged to carry out an activity is not the same as having planning permission to do so. Planning permission allows you to carry out your activity, whereas an obligation requires it. If you have an existing planning condition or obligation, SEPA will assess all the available information relating to this, such as the extent to which the planning authority was directly involved in the design of the activity and whether they would be likely to agree anything significantly different.

Planning Permission

You must detail in your waste recovery plan how the activity is authorised in planning terms, including a copy of any associated permission documents where relevant. This is particularly important if this forms part of your evidence that you have an obligation to carry out the works. It may be relevant to any assessment of recovery where costs are included.

Planning permission documents can also show that you have permission to use the land and support any claim that an activity could and would go ahead as proposed.

If a project does not yet have planning permission, you must include alternative evidence of this in your waste recovery plan.

Evidence the activity is viable

There may be cases where the details you provide to SEPA regarding other obligations, purpose or the extent of works alone are insufficient for us to approve a recovery plan. In such cases you may provide evidence which shows how, if you were to use a non-waste product, the operation would still deliver a meaningful financial benefit or some other worthwhile benefit. In this instance, you should include in your plan:

* Details of the proposal and how it will provide direct financial or other worthwhile benefit.
* What you expect your income, capital gain or other worthwhile benefit would be.
* What the costs of generating this benefit would be, including via use of non-waste, and any ongoing operating costs.

If the method of funding the proposal is via a favourable rate loan, you must provide an assessment of the financial viability of the scheme using a market rate loan, confirming that this could still be viable with non-waste.

If you are applying as a contractor, you must provide the same evidence, but show how these benefits would apply to the person employing you.

Evidence could be provided which costs the proposed works using non-waste materials and shows the benefits of the works, for example by a prospective increase in land value, expected income or by cost savings e.g. the costs avoided in the installation and operation of equipment.

If you wish to demonstrate that your proposal is a recovery operation, it is your responsibility to evidence a financial case which shows that the works proposed would have a reasonable prospect of proceeding if non-waste materials were used.

This is not the same as the demonstration of financial provision that is required in the licensing process. There is no requirement for any funds to be set aside or for you to provide evidence of funds. The purpose is to demonstrate that there would be a business case for the works to go ahead whether or not waste materials are used.

Your financial case would not need to demonstrate financial gain, but a prediction of substantial financial loss resulting from the use of non-waste materials could be an indicator that the works would not proceed without waste materials and, therefore, an indicator of a waste disposal activity.

The viability assessment does not hinge solely on profit and it does not seek to quantify the monetary benefit of utilising wastes. However, the presence and direction of payment between you and the waste producer is one indicator for SEPA to consider in terms of determining whether your proposed activity should be classed as recovery or disposal.

Any case put forward could take account of any monetary benefit that you would gain from the site. This could include the value of materials extracted from the site or the value of the land once it has been restored. It could also take account of the cost of not carrying out the proposed works which might include the withholding of bonds or the provision of equipment to maintain the site in a safe condition. Where your proposal forms part of a larger scheme, it will be assessed as part of the whole scheme being commercially worthwhile. The presence of any funding secured for the implementation of the works will also be taken into account.

It is accepted that any such viability assessment cannot be completely future proof and SEPA would not expect it to be. Your case should show that the purpose of the proposed activity is reasonable and does not rely on income from the disposal of wastes. If SEPA determines that your activity is a recovery activity, we would not expect the financial case to be updated/revisited over the lifetime of the activity.

While SEPA envisages that any financial case submitted would not contain detailed confidential information, we accept that some of that information may be regarded as commercially confidential by the applicant. You can apply for your submission or any part of it to be excluded from the public register. Any such application would be determined by SEPA in accordance with the legislation.

Meeting quality standards

You must provide evidence to show how the activity will be fit for purpose, including design and construction plans that meet industry standards and a management plan setting out how the activity will be carried out and supervised to minimise harm to human health and the environment.

Further detail your recovery plan may need to include

In some circumstances, the following will be required with your recovery plan:

* Risk assessments, including for the site and, if necessary, surrounding area
* Engineering work information
* Drainage details or plans
* Gas monitoring plans
* Aftercare monitoring plans

If you do not include these and SEPA deems them relevant, your application may be rejected and you will need to reapply. If you are unsure whether or not you need these, you should contact SEPA before submitting your application to discuss your proposal.

## **If your authorisation is granted**

Your waste recovery plan will form part of your authorisation and must be complied with at all times. Failure to comply with your waste recovery plan, as authorised by SEPA, may result in your authorisation being revoked and could lead to enforcement action, including report to the procurator fiscal.

## **Changing your waste recovery plan**

For registration level authorisations, your waste recovery plan forms part of your recovery authorisation granted by SEPA and cannot be changed once granted. If you have been granted a permit level authorisation, you must request permission from SEPA for this to be amended and provide all necessary information as requested for this to be considered.

## **Definitions**

‘Favourable rate loan’ is one where the funding is provided at a lower rate of interest than the market rate.

‘Market rate’ is the standard rate of interest accepted in an industry for a specific type of transaction and is subject to change.

‘Meaningful financial gain’ means the profit and payback period would make it worth your while to incur the full cost of using non-waste, taking into account normal commercial considerations, such as the degree of risk.

‘Otherwise worthwhile’ means there are indirect financial gains, for example improved flood defence systems, avoiding future associated flood costs.

Annex 1

**Table 1: The waste types that may be deemed suitable for recovery activities, according to use**

| **WASTE TYPE** | **WASTE CODE** | **POTENTIAL ACCEPTABLE USES** (SUBJECT TO APPROVED RECOVERY PLANS) |
| --- | --- | --- |
| Wastes from non-metalliferous excavation | 01 01 02 | Structural fill for building, stabilising slopes, drainage and road construction.Construction of noise bunds, screening bunds, flood defence bunds, containment bunds and golf courses.Landscaping associated with construction work, restoration of mineral workings and general fill material.Agricultural improvement schemes.Ecological improvements, wetland schemes and lakes. |
| Waste gravel and crushed rocks other than those containing dangerous substances | 01 04 08 | Structural fill for building, stabilising slopes, drainage and road construction.Construction of noise bunds, screening bunds, flood defence bunds, containment bunds and golf coursesLandscaping associated with construction work, restoration of mineral workings and general fill materialAgricultural improvement schemesEcological improvements, wetland schemes and lakes |
| Waste sand and clays  | 01 04 09 | structural fill for building, stabilising slopes, drainage and road constructionconstruction of noise bunds, screening bunds, flood defence bunds, containment bunds and golf courseslandscaping associated with construction work, restoration of mineral workings and general fill materialagricultural improvement schemesecological improvements, wetland schemes and lakes |
| Mollusc or crustacean shells from which the soft tissue or flesh has been completely removed | 02 02 02 | surface treatment of roads and tracksDrainageWhere clean shells from fish processing are to be used, they must be treated in accordance with The Animal By-Products (Enforcement) (Scotland) Regulations 2013.  |
| Soil from cleaning and washing beet | 02 04 01 | construction of noise bunds, screening bunds, flood defence bunds, containment bunds and golf courseslandscaping associated with construction work, restoration of mineral workings and general fill materialagricultural improvement schemesecological improvements, wetland schemes and lakesMaterial you deposit in place of non-waste topsoil must meet the British Standard for topsoil BS 3882:2015. |
| Bottom ash and slag from power stations (furnace bottom ash)  | 10 01 01 | structural fill for building, stabilising slopes, drainage and road construction.The waste must meet the relevant civil engineering standards for use. |
| Pulverised fuel ash from power stations  | 10 01 02 | structural fill for building, stabilising slopes, drainage and road constructionconstruction of noise bunds, screening bunds, flood defence bunds, containment bunds and golf courseslandscaping associated with construction work, restoration of mineral workings and general fill materialThe waste must meet the relevant civil engineering standards for use. |
| Gypsum (solid or sludge only)  | 10 01 0510 01 07 | agricultural improvement schemes. |
| Incinerator bottom ash  | 10 01 15 | structural fill for building, stabilising slopes, drainage and road construction.The waste must meet the relevant civil engineering standards for use. |
| Wastes from the processing of slag  | 10 02 01 | structural fill for building, stabilising slopes, drainage and road construction. |
| Unprocessed slag  | 10 02 02 | structural fill for building, stabilising slopes, drainage and road construction. |
| Furnace slag (from casting of non-ferrous pieces)  | 10 10 03 | structural fill for building, stabilising slopes, drainage and road construction. |
| Waste ceramics, bricks, tiles and construction products (after thermal processing) | 10 12 08 | structural fill for building, stabilising slopes, drainage and road constructionconstruction of noise bunds, screening bunds, flood defence bunds, containment bunds and golf courseslandscaping associated with construction work, restoration of mineral workings and general fill materialroad or track construction and repair, hard surfacing or car parks |
| Waste concrete and concrete sludge  | 10 13 14 | structural fill for building, stabilising slopes, drainage and road construction. |
| End-of-life tyre bales  | 16 01 03 | structural fill for building, stabilising slopes, drainage and road constructionconstruction of noise bunds, screening bunds, flood defence bunds, containment bunds and golf courseslandscaping associated with construction work, restoration of mineral workings and general fill materialBaled tyres must meet the PAS 108:2007 specification. |
| Concrete  | 17 01 01 | structural fill for building, stabilising slopes, drainage and road constructionconstruction of noise bunds, screening bunds, flood defence bunds, containment bunds and golf courseslandscaping associated with construction work, restoration of mineral workings and general fill materialroad or track construction and repair, hard surfacing or car parks |
| Bricks  | 17 01 02 | structural fill for building, stabilising slopes, drainage and road constructionconstruction of noise bunds, screening bunds, flood defence bunds, containment bunds and golf courseslandscaping associated with construction work, restoration of mineral workings and general fill materialroad or track construction and repair, hard surfacing or car parks |
| Tiles and ceramics | 17 01 03 | structural fill for building, stabilising slopes, drainage and road constructionconstruction of noise bunds, screening bunds, flood defence bunds, containment bunds and golf courseslandscaping associated with construction work, restoration of mineral workings and general fill materialroad or track construction and repair, hard surfacing or car parks |
| Mixtures of concrete, bricks, tiles and ceramics | 17 01 07 | structural fill for building, stabilising slopes, drainage and road constructionconstruction of noise bunds, screening bunds, flood defence bunds, containment bunds and golf courseslandscaping associated with construction work, restoration of mineral workings and general fill materialroad or track construction and repair, hard surfacing or car parks |
| Road base and road planings other than those containing coal tar | 17 03 02 | road or track construction and repair, hard surfacing or car parks.Use of bituminous road planings is limited to construction of hard surfaces infrastructure such as roads, tracks, pathways and parking within 30cm of the final waste levelYou must not deposit bituminous road planings more than 2 metres deep. |
| Soil and stones (topsoil, peat, subsoil and stones) | 17 05 04 | structural fill for building, stabilising slopes, drainage and road constructionconstruction of noise bunds, screening bunds, flood defence bunds, containment bunds and golf courseslandscaping associated with construction work, restoration of mineral workings and general fill materialagricultural improvement schemesecological improvements, wetland schemes and lakesUse is limited to the top 50cm of the recovery activity as a growing mediaMaterial you deposit in place of non-waste topsoil must meet the British Standard for topsoil BS 3882:2015. |
| Dredging spoil | 17 05 06 | construction of noise bunds, screening bunds, flood defence bunds, containment bunds and golf courseslandscaping associated with construction work, restoration of mineral workings and general fill materialYou must remove water from dredgings before you use them.Material you deposit in place of non-waste topsoil must meet the British Standard for topsoil BS 3882:2015. |
| Track ballast, soil and stones other than those containing dangerous substances | 17 05 08 | structural fill for building, stabilising slopes, drainage and road constructionconstruction of noise bunds, screening bunds, flood defence bunds, containment bunds and golf courseslandscaping associated with construction work, restoration of mineral workings and general fill materialroad or track construction and repair, hard surfacing or car parksTrack ballast must be free from significant oil and organic contamination.Material you deposit in place of non-waste topsoil must meet the British Standard for topsoil BS 3882:2015. |
| Bottom ash and slag (incinerator bottom ash) | 19 01 12 | structural fill for building, stabilising slopes, drainage and road construction.The waste must meet the relevant civil engineering standards for use. |
| Washed sewage grit (waste from de-sanding only) | 19 08 02 | agricultural improvement schemesecological improvements, wetland schemes and lakes |
| Stone filter media only (if cleaned to remove sewage contamination) | 19 08 99 | structural fill for building, stabilising slopes, drainage and road constructionconstruction of noise bunds, screening bunds, flood defence bunds, containment bunds and golf courseslandscaping associated with construction work, restoration of mineral workings and general fill materialroad or track construction and repair, hard surfacing or car parks |
| Glass | 19 12 05 | structural fill for building, stabilising slopes, drainage and road construction. |
| Minerals (such as sand and stones) from the treatment of waste aggregates that are otherwise naturally occurring minerals | 19 12 09 | structural fill for building, stabilising slopes, drainage and road constructionconstruction of noise bunds, screening bunds, flood defence bunds, containment bunds and golf courseslandscaping associated with construction work, restoration of mineral workings and general fill materialThis excludes:* fines from treatment of any non-hazardous waste
* gypsum from recovered plasterboard

It does not include residual ‘fines’ from mechanical treatment of mixed waste at transfer stations. Source materials must be:* properly classified as hazardous or non-hazardous
* accurately described (characterised)
 |
| Crushed bricks, tiles, concrete and ceramics, including mixtures of materials | 19 12 12 | structural fill for building, stabilising slopes, drainage and road constructionconstruction of noise bunds, screening bunds, flood defence bunds, containment bunds and golf courseslandscaping associated with construction work, restoration of mineral workings and general fill materialThis excludes:* metal from reinforced concrete
* fines from treating any non-hazardous waste
* gypsum from recovered plasterboard

It does not include residual ‘fines’ from mechanical treatment of mixed waste at transfer stations. Source materials must be:* properly classified as hazardous or non-hazardous
* accurately described (characterised)
 |
| Soil substitutes other than those containing dangerous substances only | 19 12 12 | agricultural improvement schemesecological improvements, wetland schemes and lakesA ‘soil substitute’ is a material that serves as a direct replacement and performs the same function as top soil. It can only be used on a site where there is no existing soil profile.You should not include hazardous waste or dangerous substances. The soil substitute must be free from contaminants such as:* asbestos fragments
* plastics
* glass
* metals
* treated timber
* foils and films

Material you deposit in place of non-waste topsoil must meet the British Standard for topsoil BS 3882:2015. |
| Treated bottom ash including incinerator bottom ash and slag other than that containing dangerous substances only | 19 12 12 | structural fill for building, stabilising slopes, drainage and road construction. |
| Solid wastes from soil remediation other than those containing dangerous substances | 19 13 02 | construction of noise bunds, screening bunds, flood defence bunds, containment bunds and golf courseslandscaping associated with construction work, restoration of mineral workings and general fill material |
| Soil and stones (topsoil, peat, subsoil and stones) | 20 02 02 | structural fill for building, stabilising slopes, drainage and road constructionconstruction of noise bunds, screening bunds, flood defence bunds, containment bunds and golf coursesagricultural improvement schemeslandscaping associated with construction work, restoration of mineral workings and general fill materialecological improvements, wetland schemes and lakesUse is limited to the top 50cm of the recovery activity as a growing mediaMaterial you deposit in place of non-waste topsoil must meet the British Standard for topsoil BS 3882:2015. |