

HS2

Excavated material and waste management

The purpose of this factsheet is to set out the expected approach for managing the excavated material and waste that would arise from the construction of the Proposed Scheme.

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1 Introduction

- 1.1.1 High Speed Two (HS2) is the Government's proposal for a new, high speed north-south railway. The proposal is being taken forward in phases. Phase One will connect London with Birmingham and the West Midlands. Phase 2a will extend the route to Crewe. The Western Leg of Phase 2b comprises an extension of the network to Manchester and a connection to the West Coast Main Line at Golborne, and is referred to as the Western Leg hybrid Bill. The Eastern Leg of Phase 2b currently comprises an extension of the network from the West Midlands through the East Midlands to Leeds.
- 1.1.2 HS2 Ltd is the non-departmental public body responsible for developing and promoting these proposals. The company works to a Development Agreement made with the Secretary of State for Transport.
- 1.1.3 The construction and operation of Phase One of HS2 is authorised by the High Speed Rail (London – West Midlands) Act (2017). In July 2017, the Government introduced a hybrid Bill to Parliament to seek powers for the construction and operation of Phase 2a.
- 1.1.1 In February 2020, the Government announced its intention to draw up an Integrated Rail Plan. This will recommend a way forward on scoping, phasing and sequencing the delivery of HS2 Phase 2b, Northern Powerhouse Rail, Midlands Rail Hub and other proposed rail investments across the north. At the same time, the Government asked HS2 Ltd to prepare the Western Leg hybrid Bill, provided it does not prejudge any recommendations or decisions that will be taken in this plan, which will be published by the end of the year.
- 1.1.2 It is intended to deposit a Western Leg hybrid Bill seeking powers to construct and operate this phase in Parliament in early 2022 or sooner if possible (the Proposed Scheme). The work to produce the Bill will include an Environmental Impact Assessment (EIA), the results of which will then be reported in an Environmental Statement (ES). The ES would be submitted alongside the Bill when it is introduced to Parliament. As was the case with Phase One and Phase 2a, when the Bill is introduced to Parliament the Secretary of State will also publish draft Environmental Minimum Requirements (EMRs). The EMRs will set out the environmental and sustainability commitments that will be observed in the construction of the Proposed Scheme.
- 1.1.3 A series of information papers were produced for the Phase One and Phase 2a hybrid Bills, explaining the commitments made in those Bills and EMRs. It is the Secretary of State's intention to follow a similar process for the Western Leg Bill. These information papers will be used to provide information about

the Proposed Scheme itself, the powers contained in the Bill and how decisions on the Proposed Scheme have been reached. It is currently proposed that these information papers for the Western Leg of Phase 2b will be published at the time the Bill is introduced in Parliament.

- 1.1.4 The Secretary of State for Transport will be ‘the Promoter’ of the Western Leg Bill. The Promoter will also eventually appoint a body responsible for delivering the Proposed Scheme under the powers to be granted by the Bill. This body will be known as the ‘nominated undertaker’. There may well be more than one nominated undertaker. However, any and all nominated undertakers will be bound by the obligations contained in the Bill, the policies established in the Western Leg EMRs and any commitments provided in the Western Leg information papers.
- 1.1.5 These Western Leg factsheets have been produced to provide information on the emerging proposals for measures to manage the design process for the Proposed Scheme and to control impacts which may arise from the construction and operation of the Proposed Scheme. These measures may then be applied to the Western Leg as commitments made through the eventual Bill, EMRs or information papers.

2 Overview

- 2.1.1 The purpose of this factsheet is to set out the expected approach for managing the excavated material and waste that would arise from the construction of the Proposed Scheme.
- 2.1.2 Only if excavated material is not required or is unsuitable for the construction of the Proposed Scheme would it be considered waste.

3 Material generation and reuse

- 3.1.1 The construction of the Proposed Scheme is likely to lead to the generation of several million tonnes of excavated material. An aim of HS2 is for as much of this material as possible to be reused as part of the Proposed Scheme for the construction of embankments and environmental mitigation earthworks.
- 3.1.2 It is likely that the Proposed Scheme would also lead to the generation of demolition material and construction waste. It is anticipated that at least 90% of this material may be diverted from landfill through reuse, recycling and recovery.

- 3.1.3 Forecast volumes for excavated material, demolition material and construction waste will be calculated and continually refined as part of the development of the ES.
- 3.1.4 A smaller quantity of domestic type waste may be produced during construction from worker accommodation sites.

4 Environmental effects of Waste Management

- 4.1.1 The design, construction and operation of the Proposed Scheme would lead to the generation of solid waste. In the United Kingdom, waste producers are legally required to apply the waste hierarchy to decisions concerning the management of waste¹.
- 4.1.2 The waste hierarchy as described in the Government Review of Waste Policy in England 2011² (see Figure 1) sets out the preferred approach to the management of waste from waste prevention, to reuse, recycling, energy recovery and landfill. It supports the need to achieve efficient use of material resources, minimise the amount of waste produced (or otherwise increase its value as a resource) and reduce, as far as possible, the amount of waste that is disposed to landfill. In keeping with the HS2 Environmental Policy³, the nominated undertaker would apply the waste hierarchy in relation to the reduction and sustainable management of solid waste generated from the design, construction and operation of the Proposed Scheme to:
- improve resource efficiency and environmental performance; and
 - reduce costs.

¹ The Waste (England and Wales) Regulations 2011 (SI 2011 No. 988) (as amended), article 12 (1). London, HMSO, in accordance with Directive 2008/98/EC on waste (Waste Framework Directive). The Waste (Scotland) Regulations 2012 in accordance with Directive 2008/98/EC on waste (Waste Framework Directive).

² Defra (2011), Government Review of Waste Policy in England 2011. London, HMSO.

³ The HS2 Environmental Policy is available here: <https://www.gov.uk/government/publications/hs2-environmental-policy>

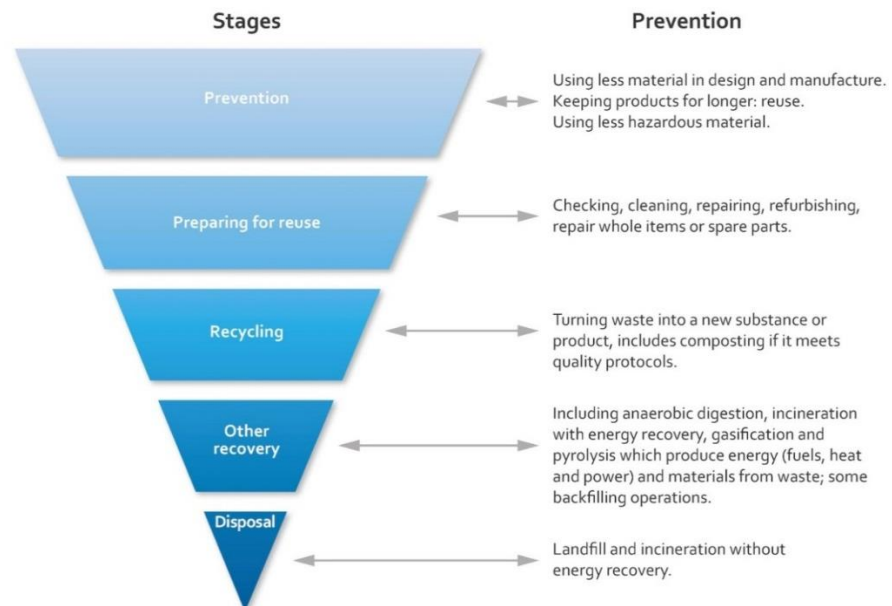


Figure 1: Waste hierarchy

4.1.3 All waste generated from the design, construction and operation of the Proposed Scheme would be managed in accordance with the waste hierarchy. This places waste prevention as the preferred option at the top, followed by reuse, recycling and other recovery, with landfill disposal at the bottom as the last resort.

4.1.4 Disposal is seen as a last resort due to a range of potential adverse effects associated with the use of landfill. These include natural resource depletion, methane production and nuisance effects (e.g. dust and odour). There is also a need to conserve existing landfill capacity for wastes for which there is currently no alternative treatment option that can be used to recover material resources and/or energy.

4.1.5 Excavated material would only be classified as waste if it is surplus to the design requirements or unsuitable for use in the construction of the Proposed Scheme.

5 Prevention through the design approach and mitigation

5.1.1 An integrated design approach would be developed to use excavated material to satisfy the fill material requirements wherever reasonably practicable. This includes reuse of all topsoil and agricultural subsoil as close to the point of excavation as practicable.

5.1.2 The reuse of excavated material within the Proposed Scheme would be managed in accordance with the Definition of Waste: Code of Practice

published by CL:AIRE. This involves the preparation of a Materials Management Plan that would set out how the suitable excavated material is to be used as a resource within the construction of the Proposed Scheme.

- 5.1.3 For the excavated material which could not be beneficially reused for the earthworks of the Proposed Scheme, the nominated undertaker would seek timely opportunities for such material to be used in other local construction projects or the restoration of mineral sites, provided that the transportation of that material does not result in significant environmental effects.

6 Transportation of excavated materials

- 6.1.1 Excavated material would be moved along the construction corridor of the Proposed Scheme where this is reasonably practicable. For longer distances or when it is not reasonably practicable to use the construction corridor, excavated material would be transported by public highway along designated construction routes. Where reasonably practicable, rail would be considered for the transportation of large quantities of excavated material over long distances.
- 6.1.2 The traffic and transport impacts and effects from the movement of excavated material, demolition material and construction waste would be contained in the ES and the Transport Assessment.

7 More information

- 7.1.1 Further factsheets and details on the Proposed Scheme can be found at: www.hs2.org.uk/phase2b

