



Phase 2b Western Leg Information Paper

E18: Land quality (contamination)

This paper outlines HS2 Ltd's approach to the assessment and treatment of land contamination affected by the Proposed Scheme.

It will be of particular interest to those potentially affected by the Government's proposals for high speed rail.

This paper was prepared in relation to the promotion of the High Speed Rail (Crewe - Manchester) Bill. Content will be maintained and updated as considered appropriate during the passage of the Bill.

If you have any queries about this paper or about how it might apply to you, please contact the HS2 Helpdesk in the first instance.

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1 Introduction

- 1.1 High Speed Two (HS2) is the Government's scheme for a new, high speed north-south railway, which is being taken forward in a number of phases. Phase One will connect London with Birmingham and the West Midlands. Phase 2a will extend the route from the West Midlands to Crewe. The Phase 2b Western Leg will connect Crewe to Manchester. As set out in the Integrated Rail Plan, published in November 2021, HS2 East is proposed to deliver a new high speed line from the West Midlands to East Midlands Parkway.
- 1.2 HS2 Ltd is the non-departmental public body responsible for developing and promoting these proposals. The company works under the terms of a Development Agreement entered into with the Secretary of State for Transport.
- 1.3 The construction and operation of Phase One of HS2 is authorised by the High Speed Rail (London – West Midlands) Act 2017 and Phase 2a by the High Speed Rail (West Midlands – Crewe) Act 2021.
- 1.4 In January 2022, the Government introduced a hybrid Bill to Parliament (hereafter referred to as 'the Bill'), to seek powers for the construction and operation of the Phase 2b Western Leg (the Proposed Scheme), which is called the High Speed Rail (Crewe – Manchester) Bill. The Proposed Scheme comprises the Phase 2b Western Leg from Crewe to Manchester and several off-route works. It also facilitates the delivery of Northern Powerhouse Rail by providing the Crewe Northern Connection and junctions and other infrastructure to be used in future schemes.
- 1.5 The work to produce the Bill includes an Equalities Impact Assessment and an Environmental Impact Assessment (EIA), the results of which are reported in an Environmental Statement (ES) submitted alongside the Bill. The Secretary of State has also published draft Environmental Minimum Requirements (EMRs), which set out the environmental and sustainability commitments that will be observed in the construction of the Proposed

Scheme. For more information on the EMRs please see Information Paper E1: Control of environmental impacts.

1.6 The Secretary of State for Transport is the Promoter of the Bill through Parliament. The Promoter will also appoint a body responsible for delivering the Proposed Scheme under the powers granted by the Bill. This body is known as the 'nominated undertaker'. There may 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 EMRs and any commitments provided in the information papers.

1.7 These information papers have been produced to explain the commitments made in the Bill and the EMRs and how they will be applied to the design and construction of the Proposed Scheme. They also provide information about the Proposed Scheme itself, the powers contained in the Bill and how particular decisions about the Proposed Scheme have been reached.

2 Overview

2.1 This information paper outlines HS2 Ltd's approach to the assessment and treatment of land contamination affected by and potentially affecting the Proposed Scheme.

3 Contaminated land

3.1 Constructing the Proposed Scheme will require the use of land with a range of existing ground conditions. In some cases this will involve construction on contaminated land. Contaminated land is defined in Part 2A of the Environmental Protection Act 1990 as land that contains substances in or under it, which have the potential to pollute local watercourses or groundwater, or otherwise cause significant harm. This could include land with a previous industrial use or old landfill sites.

3.2 An assessment of the potential presence of land contamination in or around the route of the Proposed Scheme was carried out as part of the

EIA. The results of these assessments are reported in the Land Quality section of the ES. The Land Quality section has three distinct parts comprising land contamination, geo-conservation sites and mineral resources.

3.3 A total of 1907 sites were assessed along the route of the Proposed Scheme. The sites were selected based on records of their previous use, such as landfills, which may have caused contamination. Of these sites, 247 were taken forward for further assessment as they are located either on or near areas where construction will take place, and, either singly or in combination, are considered to potentially contain substances harmful to:

- human health (i.e. affecting site neighbours or site visitors during the construction period, as well as eventual users of the railway);
- Controlled waters (i.e. groundwater and surface water resources);
- ecosystems; or
- building fabric.

3.4 The higher risk sites identified from the further assessment are:

- Current and historical landfills including Booth Bank Farm Landfill adjacent to the M56; and
- Former railway land including Ardwick Depot.

3.5 None of the sites assessed have been identified formally by the respective local authorities as being "contaminated land" within the meaning of Part 2A of the Environmental Protection Act 1990. However, the nominated undertaker will consult with local authorities on proposals for the remediation of contamination where this has been identified prior to or during construction.

4 Management during design

- 4.1 As part of the progression of the design of the Proposed Scheme, the assessed sites (as described in Section 2 above) where construction will take place will be subject to site investigations. After these have taken place, detailed assessments, including quantitative risk assessments, will be completed to assess the precise nature of contamination present that could impact (or be impacted by) the construction of the Proposed Scheme.
- 4.2 The nominated undertaker will assess individual sites in accordance with relevant legislation and guidance and will develop a remediation strategy, which details the most practical solutions to remediate the site from a range of options, taking account of all factors of the Proposed Scheme. The design of the Proposed Scheme and its construction works will incorporate the remediation strategy in order to reduce the risks associated with contamination.
- 4.3 In addition, to the above, the draft Code of Construction Practice (CoCP) sets out a series of objectives and measures in relation to contamination to be applied by the nominated undertaker and its contractors throughout the construction period:
- to provide effective management and control through construction to mitigate potential impacts upon people and the natural environment;
 - to provide the mechanisms to engage with the local community and their representatives throughout the construction period; and
 - to ensure that reasonably practicable measures are applied to the construction to ensure it is undertaken economically and meets the requirements of the Bill and its associated commitments.

5 Management during construction

- 5.1 Prior to or during construction of the Proposed Scheme, treatment of contamination will be undertaken in accordance with the remediation strategy described in Section 3 above. This includes treatment of

unexpected contamination encountered in other parts of the construction works in accordance with the CoCP.

5.2 The nominated undertaker will be responsible for carrying out individual mitigation proposals in line with the EMRs, the CoCP and the Environment Agency guidance: Land Contamination Risk Management (LCRM). Works to remediate contamination will be undertaken using relevant environmental permits (depending on the activity involved, permits can be issued by the Local Authority, the Environment Agency or the Scottish Environment Protection Agency). On completion of any remedial works, a verification report will be prepared and retained by whoever has ongoing responsibility for the remediated land.

5.3 In giving approvals under the protective provisions in Part 4 of Schedule 32 to the Bill, the Environment Agency or the Scottish Environment Protection Agency may require the nominated undertaker to carry out measures at its own expense for the protection of watercourses and water resources from the potential effects of any contamination during the construction of the works.

6 Materials and resource management

6.1 The approach for managing excavated material that will arise from the construction of the Proposed Scheme is set out in Information Paper E17: Excavated material and waste management.

6.2 Where it is necessary to remove materials to landfill they will be subject to the Landfill (England and Wales) Regulations 2002 or the Landfill (Scotland) Regulations 2003.

7 More information

7.1 More detail on the Bill and related documents can be found at www.gov.uk/hs2-phase2b-crewe-manchester.

References

Water Resources Act 1991

https://www.legislation.gov.uk/ukpga/1991/57/pdfs/ukpga_19910057_en.pdf

Environmental Protection Act 1990

https://www.legislation.gov.uk/ukpga/1990/43/pdfs/ukpga_19900043_en.pdf

High Speed Rail (London – West Midlands) Act 2017

<https://www.legislation.gov.uk/ukpga/2017/7/data.pdf>

High Speed Rail (West Midlands – Crewe) Act 2021

<https://www.legislation.gov.uk/ukpga/2021/2/data.pdf>

Environment Agency guidance: Land Contamination Risk Management (LCRM) 2021

<https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm>