



CROSSRAIL INFORMATION PAPER

D4 – TREATMENT OF CONTAMINATED LAND

This paper explains how contaminated land issues will be handled during Crossrail construction.

It will be of particular relevance to those in the vicinity of the proposed Crossrail works.

This is not intended to replace or alter the text of the paper itself and it is important that you read the paper in order to have a full understanding of the subject. If you have any queries about this paper, please contact either your regular Petition Negotiator at CLRL or the Crossrail helpdesk, who will be able to direct your query to the relevant person at CLRL. The helpdesk can be reached at:

Crossrail
FREEPOST
NAT6945
London
SW1H 0BR

Email: helpdesk@crossrail.co.uk
Telephone: 0845 602 3813



D4 – TREATMENT OF CONTAMINATED LAND

1. Introduction

1.1 A contaminated land assessment was carried out as part of the Crossrail Environmental Impact Assessment. The results were reported in the Crossrail Environmental Statement¹ submitted with the hybrid Bill.

2. Impact Assessment

2.1 A total of 635 sites were identified along the Crossrail route as having potential for existing contamination, ie prior to the construction of Crossrail. Of these sites, 144 are located on, or in close proximity to, areas where the project intends to disturb the ground (the digging of shafts, trenches, portals etc) and are considered to have potential for significant impacts upon either human health (mainly construction workers and site visitors during the construction period), groundwater, or surface water resources. High-risk sites are located at:

- The tunnel portal at Royal Oak, Paddington;
- Isle of Dogs station;
- Pudding Mill Lane portal;
- North Woolwich portal; and
- Arsenal Way shaft, Woolwich

2.2 Overall, the construction of Crossrail is expected to generate a total of approximately eight million cubic metres of excavated material, demolition and construction waste. It is estimated that approximately 530,000 cubic metres of this amount may be contaminated (approximately 7 per cent of the total). Site investigations and quantitative risk assessments, to be undertaken as design progresses, will be used to provide further information on the precise level and nature of contamination that will be encountered and will identify appropriate mitigation measures to reduce the risk of harm arising from that contamination to acceptable levels. As a result, the final volume of contaminated waste that will have to be disposed of is likely to be substantially less than 530,000 cubic metres.

3. Management During Construction

3.1 The risks associated with contaminated land will be mitigated through good practice during construction, soil disposal or remediation as necessary. The Crossrail Construction Code will require the nominated undertaker to carry out

¹ The term 'Environmental Statement' refers to the Environmental Statement deposited with the Crossrail Bill in February 2005, the four Environmental Statements accompanying the Additional Provisions, the four Supplementary Environmental Statements submitted during the passage of the Bill, and their Non-Technical Summaries and errata, which together comprise the Crossrail Environmental Statement. The term 'the Main ES' refers specifically to the Environmental Statement produced (with its Non-Technical Summary) in February 2005. See <http://billdocuments.crossrail.co.uk/>.

site assessments, investigations and/or risk assessments in accordance with relevant legislation and guidance wherever construction work is planned. These assessments will examine the potential for contamination in both soil and groundwater.

- 3.2 Disposal of contaminated material will be subject to the strategy developed for surplus materials management which promotes waste minimization, re-use and recycling, before disposal at landfill (see Information Paper D3, Excavated Material and Waste Management Strategy). For contaminated material, alternatives to landfill will include the use of remedial technologies (both in situ and ex situ) designed to reduce the quantity of soil requiring disposal, and/or treatment of soils to a standard such that they can be reused at a site or be disposed of as non-hazardous waste. The degree to which alternative disposal methods for contaminated material will be promoted will be dependent on cost, practicability and programme constraints.
- 3.3 In developing individual mitigation proposals, the nominated undertaker will have regard to Planning Policy Statement 23, the Environment Agency's Pollution Prevention Guidance Notes (PPG's) in respect of water pollution (PPG01, PPG02, PPG05, PPG06, PPG21 and PPG23), and the Model Procedures for the Management of Land Contamination (CLR11).
- 3.4 On-site remedial works will be carried out under environmental permitting legislation. Contaminated material which needs to be disposed of to landfill will be subject to the application of the Landfill Regulations 2002 which prevent co-disposal of contaminated and non-contaminated waste.
- 3.5 On completion of any remedial works, a record will be retained of the works undertaken to comply with the remedial strategy.