A47 Wansford to Sutton Dualling

Scheme Number: TR010039

Volume 6
6.3 Environmental Statement Appendices
Appendix 9.4 – Construction workers risk assessment

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

July 2021

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

A47 Wansford to Sutton Development Consent Order 202[x]

ENVIRONMENTAL STATEMENT APPENDICES
Appendix 9.4 – Construction workers risk assessment

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Tables

Appendix 9.4- Construction workers risk assessment

9.4 Introduction

9.4.1.1 Human health risks to construction workers during the construction of the Proposed Scheme have been assessed in this appendix. Risks to construction workers have not been discussed in the main chapter section due to construction workers being temporary receptors, and the risk to construction workers, as required by The Construction (Design and Management) Regulations 2015, would only be undertaken with an acceptable level of risk. Therefore, construction workers do not need to be considered in the assessment of environmental impact for the Proposed Scheme.

9.4.1.2 The risk to construction workers must be assessed as construction workers are a potential human health receptor during the construction of the Proposed Scheme.

9.4.1.3 The assessment methodology and criteria are discussed in the main Environmental Statement (ES) Chapter 9 (Geology & Soils) (**TR010039/APP/6.1**).

9.4.2 Contamination Assessment

Potentially active contaminant linkages

9.4.2.1 The potential active contaminant linkages relating to construction workers for the Proposed Scheme are summarised in Table 9.5-1 below.

Table 9.5-1: Potentially active contaminant linkages

Source	Pathway	Receptor
Source 1: Agricultural land use	Direct contact with soils/dusts Ingestion or inhalation of soils/dusts Inhalation of gas/vapours	Construction workers
Source 2: Petrol filling station	Direct contact with soils/dusts Ingestion or inhalation of soils/dusts Inhalation of gas/vapours	Construction workers
Source 3: Electricity substation and mast	Direct contact with soils/dusts Ingestion or inhalation of soils/dusts Inhalation of gas/vapours	Construction workers
Source 4: Made ground associated with	Direct contact with soils/dusts	Construction workers

Source	Pathway	Receptor
the Anglian Water pumping station	Ingestion or inhalation of soils/dusts Inhalation of gas/vapours	
Source 5: Made ground associated with the A47	Direct contact with soils/dusts Ingestion or inhalation of soils/dusts Inhalation of gas/vapours	Construction workers
Source 6: Disused railway line	Direct contact with soils/dusts Ingestion or inhalation of soils/dusts Inhalation of gas/vapours	Construction workers

Human health – potential contaminant linkages

9.4.2.2 Construction workers (during the building of the road and infrastructure), are considered to be potential receptors via dermal contact, inhalation or digestion of soil, dust, ground gases or vapours.

9.4.2.3 The generic risk assessment which was undertaken on the available soil data did not identify any unacceptable risks to human health from the soils on the Proposed Scheme.

9.4.2.4 The ground gas and soil vapour risk assessments did not identify any unacceptable risks to human health from ground gas.

9.4.3 Potential land contamination impacts

9.4.3.1 The following construction phase activities have the potential to result in an adverse impact to human health.

- generation of dust
- increased potential for exposure of contaminants to human health receptors due to exposure of contaminated materials during construction
- importation of unsuitable materials which have the potential to introduce new sources of contamination.

Mitigation measures

9.4.3.2 The implementation of an Environmental Management Plan (EMP) **(TR010039/APP/7.5)** will set out controls to ensure that all identified environmental risks are appropriately managed and minimised. Mitigation

measures within the EMP will include best practice environmental management procedures and appropriate waste management, such as:

- protection of watercourses from entry of polluting matter, and
- suppression of odour and dust using best practice measures.

9.4.3.3 Made ground is present underlying the Proposed Scheme. Management of the associated potential risks would be undertaken in accordance with good practice including:

- monitoring of potential ground-gas and vapours in confined spaces during construction
- design of in-ground structures to appropriate concrete design class
- suitable personal protective equipment (PPE) and hygiene practices for construction and maintenance workers.

9.4.4 Assessment of likely significant residual effects

9.4.4.1 The residual effects on the identified receptors have been determined as presented in Table 9.5-2. The significance of effect has been determined using Table 3.8.1 of the Design Manual for Roads and Bridges, (DMRB), Volume 11 Section 2 Part 6 LA 104.

Table 9.5-2: Determination of residual effects of significance

Receptor and description of impact	Sensitivity	Magnitude of impact	Reasoning	Significance
Construction				
Construction workers *Direct contact with, inhalation or ingestion of contaminated soils and dusts, ground gases/vapours or contaminated groundwater.*	Medium	Minor adverse	Construction workers would be present during the construction phase and potentially as maintenance workers during the operational phase. Potential for close contact with made ground materials. No risks have been identified to Human Health from soils or ground gas on the Proposed Scheme.	Slight adverse

9.4.5 Monitoring

9.4.5.1 No significant residual effects have been identified relating to contamination or geology and therefore physical monitoring through inground installations etc. is not considered necessary. No remediation due to contamination is required.

Soils and other material assets would be handled according to the waste and materials asset requirements set out in the EMP. Monitoring of accordance with these requirements would be conducted via audit of the requirements. Further detail is documented within the EMP (**TR010039**/**APP**/**7.5**).