

The Keadby Next Generation Power Station Project

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The Keadby Next Generation Power Station Development Consent Order [year]

Environmental Statement (ES)

Volume II – Appendix 13B Land Contamination Methodology Tables

The Planning Act 2008

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

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Glossary of Abbreviations and Definitions of Frequently Used Terms

| Abbreviation/ | Description |
|---------------|-------------------------|
| ES | Environmental Statement |

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13B. Introduction

13B.1. Overview

- 13B.1.1. This Technical Appendix supplements **ES Volume I Chapter 13: Geology, Hydrogeology and Land Contamination (Application Document Ref. 6.2)** and describes the additional details for the approach to assessment for land quality for the Proposed Development.
- 13B.1.2. A qualitative assessment of the risks posed by land contamination within the study area has been undertaken by first assigning a 'baseline risk score' to each identified historical or current area of potential land contamination identified in the baseline review. The baseline risk score is based partly on the relationship between the identified area of potential land contamination and its proximity to the Site (**Table 13B.1**) together with the proposed cut/ fill of the Proposed Development design at its closest point (**Table 13B.3**). The baseline risk score also considers the nature of the current and/ or historical land use, as certain land uses typically result in a greater potential for contamination of the ground to have occurred (**Table 13B.2**). The lower the baseline risk score then the lower the perceived level of risk.

Table 13B.1: Proximity Zone Definition

| Zone No. | Definition |
|----------|---|
| Zone 1 | All land on or within the footprint of the line and including a 10m margin either side, and including side shoots such as road realignments, spoil borrow or storage areas etc. |
| Zone 2 | All land within 50m of the edge of Zone 1 land. |
| Zone 3 | All land from between 50 and 250m from the edge of Zone 1 land. |

Table 13B.2: Potentially Contaminative Land Uses

| Class | Generic Description | Typical Land Uses |
|---------|--|--|
| Class 1 | Low risk of potential contamination, or less hazardous chemicals in use. | Farms (ancillary buildings and areas for storing chemicals, fuel etc.) |
| | | Warehouses |

| Class | Generic Description | Typical Land Uses |
|---------|--|----------------------------------|
| | | Goods yards |
| | | Hospitals |
| | | Builders yards |
| | | Retail and business parks |
| Class 2 | Medium risk of potential contamination, more hazardous chemicals in possible use | Engineering workshops |
| | | Railways/ disused railway lines |
| | | Brick works |
| | | Dry cleaners (retail) |
| | | Sewage works |
| | | Former clay pits and quarries |
| | | Cement/ asphalt works |
| | | Car breakers |
| | | Garage workshops |
| | | Waste transfer facilities |
| | | Paper works |
| | | Power stations |
| | | Glass works |
| | | Timber treatment works |
| | | Foot and mouth burials |
| | | Metal manufacturing and plating |
| | | Depots |
| | | Scrap yards |
| Class 3 | High risk of potential contamination, hazardous chemicals likely to be present | Gas and coke works |
| | | Landfills and historic landfills |
| | | Petrol filling stations |
| | | Oil depots |
| | | Iron and steel works |

| Class | Generic Description | Typical Land Uses |
|-------|---------------------|----------------------|
| | | Historical foundries |
| | | Chemical works |

Table 13B.3: Baseline Risk Scoring Method

| Potentially Contaminative Land Use Class | Proximity to Route | Relationship to Cut/ Fill/ Construction Work | Baseline Risk Score |
|--|--------------------|--|---------------------|
| Class 1 Low Risk | Zone 1 | Earthworks fill | 2 |
| | | Earthworks cut/ at grade | 3 |
| | | Bored excavation | 0 |
| | Zone 2 | Earthworks fill | 1 |
| | | Earthworks cut/ at grade | 2 |
| | | Bored excavation | 0 |
| | Zone 3 | Earthworks fill | 0 |
| | | Earthworks cut/ at grade | 1 |
| | | Bored excavation | 0 |
| Class 2 Medium Risk | Zone 1 | Earthworks fill | 3 |
| | | Earthworks cut/ at grade | 4 |
| | | Bored excavation | 2 |
| | Zone 2 | Earthworks fill | 2 |
| | | Earthworks cut/ at grade | 3 |
| | | Bored excavation | 2 |
| | Zone 3 | Earthworks fill | 1 |

| Potentially Contaminative Land Use Class | Proximity to Route | Relationship to Cut/ Fill/ Construction Work | Baseline Risk Score |
|--|--------------------|--|---------------------|
| | | Earthworks cut/ at grade | 2 |
| | | Bored excavation | 1 |
| Class 3 High Risk | Zone 1 | Earthworks fill | 4 |
| | | Earthworks cut/ at grade | 5 |
| | | Bored excavation | 3 |
| | Zone 2 | Earthworks fill | 3 |
| | | Earthworks cut/ at grade | 4 |
| | | Bored excavation | 3 |
| | Zone 3 | Earthworks fill | 2 |
| | | Earthworks cut/ at grade | 3 |
| | | Bored excavation | 2 |
| Baseline risk scores from 1 (no/low risk) to 5 (high risk) have been assigned based on professional judgement. The highest risk score (5) is assigned to areas where earthworks cut/at grade is proposed within a potentially high-risk contaminative land use class (Class 3) within the Site boundary (Zone 1) as this is considered to pose the greatest risk to exposure to contaminant sources. | | | |