

Preliminary Environmental Information Report

Volume 3 Part B Section Specific Assessments

Section 2 New Grimsby West Substation to New Lincolnshire
Connection Substation A

Chapter 7 Geology and Hydrogeology

Appendix 7A Initial Contamination Risk Classification

June 2025



Contents

| | | |
|------------|--|----------|
| 7A. | Initial Contamination Risk Classification | 1 |
| 7A.1 | Introduction | 1 |
| Table 7A.1 | Initial Contamination Screening Assessment Criteria | 1 |
| Table 7A.2 | Initial Contamination Screening Assessment for Section 2 | 2 |
| | References | 7 |

Grimsby to Walpole

Document control

| Document Properties | |
|----------------------|---|
| Organisation | Arup AECOM |
| Approved by | National Grid |
| Title | Preliminary Environmental Information Report Volume 3 Part B Section Specific Assessments Section 2 New Grimsby West Substation to New Lincolnshire Connection Substation A Chapter 7 Geology and Hydrogeology Appendix 7A Initial Contamination Risk Classification |
| Document Register ID | GWNC-ARUP(AEC)-ENV-REP-0002 |
| Data Classification | Public |

| Version History | | | |
|-----------------|---------|--------|-----------------------|
| Date | Version | Status | Description / Changes |
| June 2025 | 1.0 | Final | First Issue |
| | | | |
| | | | |
| | | | |
| | | | |

7A. Initial Contamination Risk Classification

7A. Initial Contamination Risk Classification

7A.1 Introduction

- 7A.1.1 The assessment methodology for the Geology and Hydrogeology Chapter follows the approach as outlined within the Environmental Impact Assessment (EIA) Scoping Report (Ref 1) and within **PEI Report Volume 3 Part A Appendix 4B Environmental Impact Assessment Methodologies and Scope**.
- 7A.1.2 Given the size and length of the Study Area for the Grimsby to Walpole Project (the Project) and in order to provide a comprehensive but proportionate assessment, when considering the potential effects relating to the risk of encountering and mobilising pre-existing ground or groundwater contamination, it was proposed in the EIA Scoping Report (Ref 1) to first undertake a preliminary screening assessment to determine locations where the previous land use necessitated further assessment of the risks from pre-existing contamination. The criteria used in this assessment has been developed using guidance within Land Contamination Risk Management (LCRM) (Ref 2).
- 7A.1.3 The assessment is based on the classification system in **Table 7A.1** below. The results of applying this system to the potential contamination source areas in the New Grimsby West Substation to New Lincolnshire Connection Substation A Section (Section 2) are provided in **Table 7A.2**. The sources with a moderate, high or very high potential risk of notable contamination being present have then been taken forward for assessment as detailed within **PEI Report Volume 2 Part B Section 2 Chapter 7 Geology and Hydrogeology**. Where a low, very low or negligible risk of notable contamination being present is identified, these sites/areas have not been taken further for assessment on the basis that significant results are unlikely.

Table 7A.1 Initial Contamination Screening Assessment Criteria

| Risk Classification | Potential for Generating Contamination |
|---------------------|---|
| Very Low | Contamination that could be of note in the context of an electricity infrastructure construction project is very unlikely – e.g. residential, retail or offices, agriculture. |
| Low | Some potential for contamination, but previous and current uses are of low risk and unlikely to be of note in the context of an electricity infrastructure construction project e.g. low risk commercial uses, such as depots or warehouses. |
| Moderate | Some potential for contamination, with previous and current processes that are considered a risk of generating widespread slightly elevated contamination levels and/or more localised areas of more severe contamination – e.g. railways, railway yards, collieries, scrap yards, inert landfills. |

| | |
|-----------|---|
| High | Previous and current uses that are commonly associated with widespread elevated contamination potential – e.g. major industry, non-hazardous landfills. |
| Very High | Previous and current uses that are associated with the highest risk of elevated contamination – e.g. hazardous landfills, gas works, chemical works. |

Table 7A.2 Initial Contamination Screening Assessment for Section 2

| Feature ¹ | Location | Distance from draft Order Limits (m) | Risk Classification |
|---|---|--------------------------------------|--|
| Solar farms | South west of Bradley, adjacent to/surrounding pylons GL15, GL16, GL17 and GL18 | 0 m (within) | Very low |
| East Lincolnshire Line railway (historical) and recorded cuttings | Orientated north from the current railway line at North Thoresby, approximately 50 m east of pylon GL43 | 0 m (within) | Moderate |
| Mablethorpe Branch – Great Northern Railway (historical) | At Stewton, between pylons GL86 and GL87, orientated south west to north east | 0 m (within) | Moderate |
| Unspecified heap | North of Aylesby Road, approximately 120 m south west of pylon GL5 | 0 m (within) | Low (no current evidence of feature on current aerial imagery) |
| Former use of animal by-products | East of North Thoresby, approximately 210 m north east of pylon GL48 | 0 m (within) | Low |
| Screening and blending of waste | South of Waltham, off Waltham Road, approximately 140 m east of pylon GL27 | 0 m (within) | Low (process has a registered waste exemption, ref. WEX142241) |
| Surface ground workings – pond (historical) | North of Brigsley, off Waltham Road, | 0 m (within) | Low (feature contains water) |

¹ For brevity, historical pollution incidents to land or water are only included in this table that have an impact classification of Category 2 (major) or greater within the Study Area.

| Feature ¹ | Location | Distance from draft Order Limits (m) | Risk Classification |
|---|--|---|--|
| | approximately 100 m east of pylon GL26 | | |
| Surface ground workings – pond (historical) | South west of Covenham St Mary, off Ings Lane, approximately 130 m east of pylon GL64 | 0 m (within) | Low (feature contains water) |
| Former RAF Manby (historical airfield) <i>and</i> current waste site | West of Manby, immediately south of B1200, north east of pylon GL90 | 0 m (within/just beyond the extent of the draft Order Limits) | Moderate |
| Screening and blending of waste | South west of Waltham, off Prospect Lane, between pylons GL24 and GL25 | 0 m (within/on eastern boundary) | Low (process has a registered waste exemption, ref. WEX142244) |
| Solar farm | South of Yarburgh, off Westfield Road, approximately 220 m south west of pylon GL70 | 0 m (just beyond the extent of the draft Order Limits) | Very low |
| Louth Sewage Treatment Works | South of Alvingham, to the south of Alvingham Road and adjacent to the River Lud, approximately 180 m south west of pylon GL77 | 0 m (just beyond the extent of the draft Order Limits) | Moderate |
| Recorded storage area with above ground tanks and Keddington Oil Well | South west of South Cockerington, off Pedlar Lane, approximately 180 m south west of pylon GL84 | 0 m (just beyond the extent of the draft Order Limits) | Moderate |
| Former vehicle repair and maintenance garage | North west of South Cockerington, off Louth Road, approximately 450 m north east of pylon GL81 | 0 m (just beyond the extent of the draft Order Limits) | Moderate |
| Storage of sludge | South of Bradley, off Bradley Road, approximately 240 m | 0 m (just beyond the extent of the draft Order Limits) | Low (process has a registered waste exemption, ref. WEX129835) |

| Feature ¹ | Location | Distance from draft Order Limits (m) | Risk Classification |
|--|--|--|--|
| | north east of pylon GL16 | | |
| Pollution Incident 1310334 (dated 2015) | North east of Keddington, off Louth Road, approximately 510 m south west of pylon GL78 | 0 m (just beyond the extent of the draft Order Limits) | Moderate: Category 2 (significant) – land Category 3 (minor) – water (crude sewage) |
| Withern Mill Trout Farm | East of Tothill, approximately 300 m north east of pylon GL110 | Approximately 50 m east | Very Low |
| Former textile manufacturer | South of Withern, approximately 160 m north west of pylon GL114 | Approximately 50 m west | Moderate |
| Auto centre | East of Laceby, off the A46, approximately 680 m south west of pylon GL10 | Approximately 110 m north | Moderate |
| Former quarrying/operation of sand and gravel pits | North of Keddington, off Alvingham Road, approximately 860 m west of pylon GL80 | Approximately 110 m south | Moderate |
| Former industrial works | West of Waithe, approximately 340 m south west of pylon GL35 | Approximately 160 m south west | Moderate |
| Former Stewton Brick and Tile Works | At Stewton, approximately 1.4 km west of pylon GL87 | Approximately 160 m south west | High |
| Former Waltham Brick and Tile Works | West of Waltham, off Waltham Road, approximately 420 m east of pylon GL23 | Approximately 170 m east | High |
| Brick works (historical) | At South Reston, off Main Road, approximately 500 m | Approximately 200 m south west | High |

| Feature ¹ | Location | Distance from draft Order Limits (m) | Risk Classification |
|--|--|--------------------------------------|---------------------|
| | south west of pylon GL101 | | |
| Butt Lane landfill (noted on historical mapping as a sand pit, followed by a refuse tip) | On the eastern edge of Laceby, off Butt Lane, approximately 750 m south west of pylon GL9 | Approximately 200 m south | Moderate (inert) |
| Auto centre | At Grimoldby, off Tinkle Street, approximately 2 km north east of pylon GL87 | Approximately 240 m south east | Moderate |
| Bradley Plant Nursery (historical) | At Bradley, off Bradley Road, approximately 1.2 km north east of pylon GL13 | Approximately 240 m north east | Very Low |
| Former military land | South of Tothill, adjacent to the Manor, approximately 430 m south west of pylon GL111 | Approximately 250 m south west | Moderate |
| North Thoresby Fisheries | East of North Thoresby, off Fen Lane, approximately 900 m east of pylon GL47 | Approximately 260 m east | Very Low |
| Sewage works | East of Laceby, to the north of Grimsby Road (A46), approximately 140 m south west of pylon GL9 | Approximately 290 m south west | Moderate |
| Lincolnshire Wolds Railway | Running south east from North Thoresby to Ludborough Station, to the west of pylons GL47 to GL55 | Approximately 300 m west | Moderate |
| Mill (historical) | At Little Carlton, off Main Road, approximately 510 m | Approximately 300 m north | Very Low |

| Feature ¹ | Location | Distance from draft Order Limits (m) | Risk Classification |
|------------------------|---|--------------------------------------|--|
| | north east of pylon GL97 | | |
| Withern Mill landfill | West of Withern and east of Tothill, approximately 600 m east of pylon GL108 | Approximately 300 m east | High (household waste) |
| Engineering contractor | West of Manby, off Manby Middlegate (B1200), approximately 930 m north east of pylon GL89 | Approximately 430 m east | Low |
| Auto centre | South of Brigsley, off Main Road, approximately 900 m south of pylon GL27 | Approximately 440 m south | Moderate |
| Building contractor | South of Brigsley, off Main Road, approximately 860 m south of pylon GL26 | Approximately 450 m south | Low |
| Former military land | South of Woodthorpe, north east of pylon GL118 | Approximately 480 m north east | Moderate |
| Tank (historical) | At Grainsby, off Grainsby Lane, approximately 1 km south west of pylon GL38 | Approximately 450 m south west | Moderate (unknown whether this relates to fuel or water) |

References

- Ref 1 National Grid Electricity Transmission (2024). Grimsby to Walpole Environmental Impact Assessment Scoping Report [online]. Available at: <https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN020036-000004-EN020036%20-%20Scoping%20Report%20Volume%201%20Main%20Report.pdf> [Accessed 14 March 2025]
- Ref 2 Environmental Agency (2023) Land contamination risk management (LRCM) [online]. Available at: <https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm> [Accessed 14 March 2025]

National Grid plc
National Grid House,
Warwick Technology Park,
Gallows Hill, Warwick.
CV34 6DA United Kingdom

Registered in England and Wales
No. 4031152
nationalgrid.com