

Preliminary Environmental Information Report

Volume 3 Part B Section Specific Assessments

Section 6 Refined Weston Marsh Substation Siting Zone to New
Walpole B Substation

Chapter 7 Geology and Hydrogeology

Appendix 7A Initial Contamination Risk Classification

June 2025



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Grimsby to Walpole

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7A. Initial Contamination Risk Classification

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7A.1 Introduction

- 7A.1.1 The assessment methodology for the Geology and Hydrogeology Chapter follows the approach 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 Refined Weston Marsh Substation Siting Zone to New Walpole B Substation Section (Section 6) 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 6 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.

Risk Classification	Potential for Generating Contamination
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 criteria for Section 6

Feature ¹	Location	Distance from draft Order Limits (m)	Risk Classification
Midland and Great Northern Joint Railway (historical), adjacent storage and scrap yard	North of Weston Hills, off Broadgate, approximately 50 m north of pylon SW9	0 m (within)	Moderate
Unspecified pit (historical, assumed to be backfilled)	East of Whaplode St Catherine, off Raven's Gate, directly adjacent to pylon SW32	0 m (within)	Moderate
Peterborough Wisbech and Sutton Bridge Branch Railway (historical) and unspecified ground workings	South east of Four Gotes, directly west of the River Nene, approximately 150 m east of pylon SW73	0 m (within)	Moderate
Unspecified tank (historical)	South east of Ingleborough and Mill Road, approximately 60 m south east of pylon SW78	0 m (within)	Moderate
Unnamed historical railway, tramways and railway sidings (historical)	South east of Ingleborough, east of Mill Road, approximately 50 m east of pylon SW79	0 m (within)	Moderate
Holly Tree House – Manor Farm landfill (historical)	West of Sutton St James, off Broad Gate and Bird's Drove, approximately 1.5 km north east of pylon SW44	0 m (within an area of road widening)	High (household waste)
Birds Drove Corner landfill (historical)	West of Sutton St James, off Broad Gate and Bird's Drove, approximately 1.5 km north east of pylon SW44	0 m (within an area of road widening)	High (household waste)
Warehouses and storage yard	South west of Moulton, on Broad Lane, approximately 550 m north of pylon SW13	0 m (just beyond the draft Order Limits)	Low
Warehouses and storage yard	West of Sutton St James, off Joy's Bank, approximately 120 m east of pylon SW37	0 m (just beyond the draft Order Limits)	Low

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
Allotments (historical)	South west of Tydd St Giles, off Cross Gate and Broad Drove West, approximately 280 m south of pylon SW54	0 m (just beyond the draft Order Limits)	Very Low
Corn Mill (historical)	On the south west of Ingleborough, north west of Mill Road, approximately 200 m east of pylon SW77	0 m (just beyond the draft Order Limits)	Low
Water works, water tower and tanks (historical)	West of Weston, off High Road, approximately 110 m east of pylon SW3	0 m (just beyond the draft Order Limits)	Moderate
Civil engineering contractor	South of Weston, off Delgate Bank, approximately 250 m north east of pylon SW10	0 m (just beyond the draft Order Limits)	Low
Container and storage contractor	South west of Sutton St James, off Broad Gate, approximately 430 m north east of pylon SW45	0 m (just beyond the draft Order Limits)	Low
Disturbed ground (visible on aerial imagery)	South of Tydd St Giles, off Black Dike, approximately 150 m south east of pylon SW60	0 m (just beyond the draft Order Limits)	Low
Solar Farm	South east of Ingleborough, south east of Mill Road, approximately 160 m north east of pylon SW80	0 m (just beyond the draft Order Limits)	Very low
Storage of sludge	South west of Tydd St Giles, off Bird's Drove, approximately 170 m north of pylon SW49	0 m (just beyond the draft Order Limits)	Low (process has registered waste exemption ref. WEX132658)
Storage of sludge	South of Tydd St Giles, off High Road, approximately 110 m north west of pylon SW63	0 m (just beyond the draft Order Limits)	Low (process has registered waste exemption ref. WEX164031)
Pollution Incident 377743 (dated 2006)	Adjacent to the South Holland Main Drain off New Fen Dike, south west of Sutton St James, on the southern boundary of the draft Order Limits,	0 m (just beyond the draft Order Limits)	Moderate: Category 2 (significant) - land

Feature ¹	Location	Distance from draft Order Limits (m)	Risk Classification
	approximately 330 m south west of pylon SW41		Category 4 (no impact) - water (asbestos fly-tipping)
Mill (historical) and Petroleum license	South of Tydd St Giles, east of Church Lane, north of the draft Order Limits, approximately 520 m north of pylon SW63	0 m (just beyond the extent of the draft Order Limits)	Moderate (recorded by the Local Authority to have had a petroleum license, although the location of tanks, operational dates and any decommissioning are unknown).
Refuse/slag heap (historical)	South of Tydd St Giles, east of Church Lane, north of the North Level Main Drain, approximately 350 m north of pylon SW63	0 m (just beyond the extent of the draft Order Limits)	Low (recorded by the Local Authority as having no current evidence of slag or refuse and currently comprises agricultural land).
Warehouses and storage yard	North west of Weston, off Cross Gate, approximately 300 m north west of pylon SW2	Approximately 50 m south	Low
Warehouses	West of Sutton St James, off Neal's Gate, approximately 480 m north east of pylon SW34	Approximately 50 m north east	Low
Auto centre	North of Whaplode Fen, off Mill Gate and Little Lane, approximately 500 m north east of pylon SW19	Approximately 50 m south	Moderate
Jekyll's Farm landfill (historical)	East of Holbeach St Johns, off Jiggle's Gate and Old Fen Dike, approximately 700 m east of pylon SW37	Approximately 50 m east	High (household waste)
Leeds Gate Bridge landfill (historical)	South east of Holbeach St Johns, along New Fen Dike, approximately 400 m south west of pylon SW42	Approximately 50 m south	High (unknown waste materials)
Closed petroleum license at Crown Farm	North of Ingleborough, off Mill Road, approximately 260 m north east of pylon SW77	Approximately 50 m north east	Moderate

Feature ¹	Location	Distance from draft Order Limits (m)	Risk Classification
Closed petroleum license at Honington House Farm	North of West Walton, off Mill Road, approximately 290 m south of pylon SW77	Approximately 100 m south	Moderate
Closed petroleum license at Priory Farm	North west of Walton Highway, off Salts Road, approximately 500 m south of pylon SW81	Approximately 100 m south	Moderate
Petroleum license record for underground storage	South of Four Gotes, east of Sutton Road, approximately 270 m south west of pylon SW70	Approximately 150 m south	Moderate (recorded by the Local Authority as now storing diesel)
West Walton Fire Station	North east of Ingleborough, off Mill Road, approximately 1 km north east of pylon SW77	Approximately 160 m north	Low
Pollution Incident 1829837 (dated 2020)	Off Broad Lane, south west of Moulton, north of the draft Order Limits and approximately 580 m north east of pylon SW12	Approximately 200 m west	Moderate: Category 2 (significant) - water Category 4 (no impact) - land 4 (no impact) - air (contaminated water – vegetable washings)
Miscellaneous external storage at commercial premises (visible on aerial imagery)	At Whaplode Fen, off Mill Gate, approximately 530 m south of pylon SW24	Approximately 220 m south	Low
Plant Nursery	South west of Weston, off Swindler's Drove, approximately 400 m west of pylon SW4	Approximately 330 m west	Low
Agricultural machinery/plant hire	South west of Sutton St James, off New Fen Dike, approximately 560 m south west of pylon SW43	Approximately 360 m south	Low
Pollution Incident 891372 (dated 2011)	Adjacent to the South Holland Main Drain, south of Old Fen Dyke, south west of Sutton St James, north east of the draft Order Limits, approximately 400 m north east of pylon SW41	Approximately 360 m north east	Very Low: Category 1 (major) - water

Feature ¹	Location	Distance from draft Order Limits (m)	Risk Classification
			<p>Category 4 (no impact) - land</p> <p>(no recorded pollutant, associated with dry weather)</p> <p>This is recorded to have been an incident arising from natural causes (associated with dry weather) with no specific associated contaminant type. The incident occurred in 2011 and is positioned at a surface watercourse (South Holland Main Drain). It is therefore considered that this is a historical surface water incident that is not likely to be having any current effect on the Geology and Hydrogeology baseline conditions in Section 6.</p>
Pollution Incident 2154746 (dated 2023)	South of New Fen Dike, south west of Sutton St James, south of the draft Order Limits, approximately 670 m south west of pylon SW43	Approximately 430 m south west	<p>Moderate:</p> <p>Category 2 (significant) - water</p> <p>Category 4 (no impact) - land</p> <p>Category 4 (no impact) - air</p> <p>(unauthorised discharge or disposal of contaminated water)</p>

Feature ¹	Location	Distance from draft Order Limits (m)	Risk Classification
Petroleum license record for underground storage	Within Newton-in-the-Isle, south of High Road, approximately 1.1 km south of pylon SW65	Approximately 460 m south	Low (recorded by the Local Authority as 'removed', which is assumed to refer to removal of the storage tanks)
Petroleum license for underground storage	Within Tydd St Giles, approximately 930 m south of pylon SW65	Approximately 480 m south west	Moderate (recorded by the Local Authority as now storing waste oil)
Walpole St Andrew Sewage (historical sewage treatment works)	North west of Ingleborough, directly east of the River Nene and approximately 1.5 km north of pylon SW74	Approximately 500 m north	High

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]

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