

# **Contaminated Land Strategic Inspection Report**

# Former Landfill Leziate Drove Pott Row

Ref 022077

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Environment and Planning
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# **Executive Summary**

The Borough Council of King's Lynn and West Norfolk has published a contaminated land inspection strategy which sets out how it will fulfil its legal responsibilities for inspection under the contaminated land regime. The legal definition of Contaminated Land in Part 2A of the Environmental Protection Act 1990 (Part 2A) relates to unacceptable risks to human health and/or the wider environment. The contaminated land strategy details how sites are prioritised and the arrangements for strategic inspection. Strategic inspections identify where we may need to find out more about the land or where we don't need to take any more action.

A suspected landfill in Pott Row has been identified for inspection. Given the former use of the land and the sensitivity of the surrounding area, an initial assessment of the site has been undertaken to assess the potential for harm to human health, property, the environment, groundwater and surface waters under Part 2A.

From the evidence gathered during the assessment of the site history and a site walkover, the following can be stated:

- The site is a former marshy area which was filled with inert waste in the late 1980's. It is possible that a former pond was filled at the same time. The site is within an agricultural area and consists of a small farm with associated dwelling.
- The pond and marshy area may have contained naturally occurring organic material, landfill material is reported to be inert rubble and carstone.
- An agricultural building has been developed across the pond's former location. The landfill area noted in the waste management license and planning consent is now an area of grassed open space.
- The waste has been in place for over 30 years. Contact by a vulnerable receptor is considered to be limited.

The Potential Hazard and the Risk associated with the site has been assessed. This assessment indicates a potential LOW hazard a risk rating of LOW. The site is not considered to represent a potential risk to human health and the environment under Part 2A of the Environmental Protection Act 1990 based on the information gathered and will not be prioritised for further detailed inspection. If additional information is discovered, or changes are proposed to the site, then the site should be reassessed.

# **Strategic Assessment**

The Borough Council of King's Lynn and West Norfolk has published a contaminated land inspection strategy which sets out how it proposes to fulfil its legal responsibilities for inspection under the contaminated land regime. The legal definition of Contaminated Land in Part 2A of the Environmental Protection Act 1990 (Part 2A) relates to unacceptable risks to human health and/or the wider environment. The contaminated land strategy details how sites are prioritised and the arrangements for strategic inspection.

Strategic inspections identify where we may need to find out more about the land or where we don't need to take any more action. This report is a summary report of the strategic inspection carried out following prioritisation of sites in 2013 and is updated based on current information about the site.

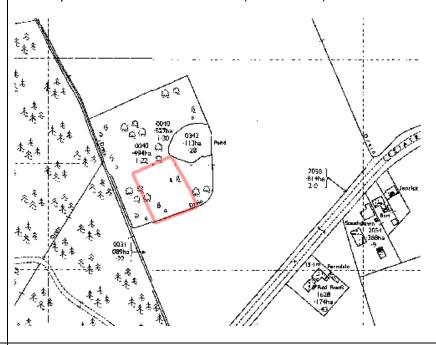
Location	The site's location is on Leziate Drove, Pott Row NGR 570010 321375. The closest postcode is PE32 1DD. The site is shown in Figure 1 in the appendices.
Previous site use	The site is a former marshy area on farmland and was filled between 1989 and 1993.
Present Site Use	The site is now grassed open space as shown in Figure 2.
Prioritisation Score	In the map based screening for priority sites the site was identified due to the recorded historical use as a landfill, in a location where humans and property could be present.  Initial screening showed that fill materials were expected to be inert, so further detailed inspection was not carried out.
Ownership	The site's owners have been consulted and this report will be made available for information.
Previous Investigation	As part of the initial screening assessment, enquiries were made with the Environment Agency and Norfolk County Council to clarify the limited map data available.
Geology	The OS Terrain 50 digital height dataset indicates that the site is at 13m above ordnance datum (maOD). Superficial geology is recorded as Lowestoft Formation – Diamicton at the site. The bedrock is classified as Leziate member Sand. (BGS digital geology).
Hydrogeology	The site is on land classified as a principal, moderately productive aquifer with significant intergranular flow. Sandstones of the formation are reported to be separated by Wadhurst Clay with spring lines and perched aquifers common.  Superficial deposits associated with the Lowestoft Formation are classed as unproductive. It is not within a Source Protection Zone for protection of drinking water. A source protection zone 3 is located within 0.5km to the east.  No private water supplies are recorded within 1km.
Hydrology	The nearest major water features are a pond approximately 300m to the north and Gaywood River approximately 800m to the south.

	Land drains are depicted on OS mapping both on site and on adjacent land.
Environment Agency data	Historical Environment Agency landfill data shows the site as being a landfill which operated from between 15th November 1989 and 11th March 1993. No operator is listed but the waste is indicated as being inert. The extent of the site is not shown and appears a point data only.
Environment Agency Consultation	The Environment Agency was consulted when the screening assessment took place in 2015, and it appeared that they only had limited information. The location of the landfill may be incorrect due to the lack of precision of the grid reference on file.
Planning History	One planning application is recorded on site:  • 2/88/2593/F – Construction of an Agricultural dwelling, permitted
Norfolk County Council Records	Norfolk County Council was consulted. NCC planning files, included application forms, a decision document, Waste Management Licence and location plan for the landfill. The location plan placed the landfill to the southwest of the Environment Agency point data. The landfill is shown as located within an area of trees, as indicated on Fig 1 and this has been used to set the site boundary for the current assessment.
	The planning application form is for consent to level land to store straw, and the use of the land at the time of the application is given as 'marshy hole'. It was expected that the total capacity of the site was 1,000 m³. The cover material was planned to be carstone overlaying brick rubble.
	The planning consent required that the material tipped should be limited to soil, subsoil, builders waste and hardcore (category A Waste).
	NCC files indicate that the site accepted waste from 1989 to 1993 under a Waste Management Licence. The waste material being deposited was classified as inert. The planning permission and Waste Management Licence indicated that landfilling should only be undertaken for two years. A site inspection report in 1994 indicated that the site had been restored and that the area is now in agricultural use. This has been reported as the closure date, however, it is assumed that the site would have closed earlier than that, in line with the planning consent.
Historical Maps (BCKLWN)	Ordnance Survey 1st Ed. 1879 - 1886 – The site is depicted as a wooded area. A pond is directly to the north east. A further small pond is situated 25m to the north east of the site. The surrounding area consists of fields to the north, east and south, and woods, brushwood & rough grassland to the east.
	1843 – 1893: The site is as depicted on the 1st OS map.

1891 – 1912: The site was depicted as shown above.

1945 – 1970: The site is largely depicted as above, with the exception that the pond to the north east is no longer shown. The woodland to the west appears to also include conifer planation, and a drain is shown running along the southern boundary of the site, as shown below.

OS map extract 1945-1970 edition (not to scale)



#### Aerial Photographs

1945 – 1946 MOD Aerial Photograph – The site is generally as depicted schematically in the 1945-1970 map.

1988 Aerial Photograph – Buildings associated with Hollies Farm are now present to the east. The wooded area has grown significantly such that it is difficult to see if the pond is still present.

1999 Aerial Photograph – The site is as depicted above with the exception that additional farm buildings have been constructed. A building appears to have been constructed partially into the woods in the general location where the pond was. The site itself appears cleared of vegetation and used for crop/straw storage. A residential building is located on the farm approximately 80m to the south west of the site.

2006 Aerial Photograph – The farm and buildings appear as above. The site appears as unmanaged open ground.

On subsequent aerial photography up until the most recent (figure 2), the site appears to be returned to an area of grassed and managed open ground.

#### Site Walkover

A brief site walkover was carried out by a borough council Contaminated Land Officer in April 2024 together with the landowner, and the following was noted:

The wider site is farmed to produce grow hay and haylage. There are some paddocks for grazing horses. Buildings on site consist of the farm bungalow, stables, and barns for storage and maintenance of vehicles & equipment associated with the farming activity.

The former pond area is reported to be where water naturally drains. At the time of the visit this area appeared free-draining as the surface was damp and muddy where it had been disturbed by horses hooves, but not waterlogged. The former pond area was surrounded to the north by mature trees as observed the on aerial photo. A large open barn on this area is used for vehicle and equipment storage.

The land in the location of the former landfill is grassed and used as a paddock. A slightly uneven surface was noted but no obvious signs of subsidence. This area was reported to be generally free-draining.

Vegetation on site appeared healthy in all locations with no die-back observed. No olfactory evidence of contamination was noted. The animals on site appeared healthy and the site's owner reported that they were not aware of any problems arising from the infilled land.

#### Potential Hazard

The site is a former marshy area which was filled with inert waste in the late 1980's. It is possible that a former pond was filled at the same time as it is no longer present. The pond and marshy area may have contained naturally occurring organic material, landfill material is reported to be inert rubble and carstone. Fill material is assumed to have been in place for over 30 years.

Therefore, the hazard is assumed to be LOW.

# Summary Conceptual Site Model and Assessment of Risk

#### Human health

The site is on private agricultural land to which residents and workers have access. The nearest residential property is the associated dwelling approx. 100m to the southeast of the landfill. The landfill site was capped and is now an open grassed area. It is assumed that direct contact with fill material would only occur if excavation took place.

Therefore the likelihood of the hazards affecting human health is considered to be LOW, and that the associated risk for human health would be LOW.

#### **Property**

There are farm buildings adjacent to the site and a building in the assumed filled pond area. These buildings are for storage and maintenance of equipment and supplies, most have impermeable bases, and are open and well ventilated. Therefore, the likelihood of the hazards affecting property is LOW, and that the associated risk for property would be LOW.

#### **Environment**

The site is within an agricultural area. The site is not a designated environmental receptor as set out in statutory guidance. The likelihood of hazards affecting the environment is UNLIKELY, and the associated risk for environment would be VERY LOW.

#### **Ground/surface water**

The site is on land which is classified as a principal aquifer but is not within a source protection zone. No significant surface water is noted within 500m. Therefore the likelihood of hazards affecting ground/surface water is considered to be LOW, and the associated risk for water would be LOW.

The landfill material is reported to be inert rubble and carstone, and contact by a vulnerable receptor is considered to be limited. Therefore the overall risk is LOW.

# Conclusions & Recommendations

The Borough Council considers that based on information available at the time of this strategic inspection, no significant source of contamination was indicated and no relevant contaminant linkage has been established. On the basis of this assessment the land is unlikely to be considered to be Contaminated Land as defined in Part 2A EPA 1990 and the site will not be prioritised for detailed inspection.

This assessment is based on the site's current use and is valid providing no changes are made to the soil or vegetation cover material, to surface water conditions or to the site's use.

No further assessment of the site is considered necessary under Part 2A unless additional information is discovered or if changes are made to the site.

If the land use changes or it is redeveloped, this land may require further investigation. The National Planning Policy Framework (NPPF) states that responsibility for securing a safe development rests with the developer and/or landowner. The Borough Council will require that adequate site investigation information, prepared by a competent person is presented to ensure that the site is suitable for any proposed new use.

