

# Engreen Environmental Consultants Ltd.

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**Report Title:** Site Condition Report

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**Client:** G.H. BY PRODUCTS  
(DERBY) LIMITED

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**Issue Date:** June 2019

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**Report Reference:** P171-R03-F1

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**Submitted to:**

Environment Agency

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# 1 Introduction

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## 1.1 Background

The following Site Condition Report (SCR) has been developed for the G.H. By Products (Derby) Limited Site, "Park Farm", located in Willingham-by-Stow. The National Grid Reference for the centre of the site is NGR SK 85925 84325. The report is based on the Environment Agency's 'H5 Site condition report – guidance and templates' guidance.

The site is located on Park Farm in Willingham-by-Stow, Lincolnshire. The farm is currently used to rear cattle for food production and the slurry tank already located on site, is used for the temporary storage of wastes prior to land spreading on fields surrounding the farm.

The waste storage infrastructure on site is to be expanded to include a new lagoon to supplement the existing farm tank to allow the bulking of wastes prior to land spreading. A Bespoke Environmental Permit is required, as storage of wastes within the lagoon and farm tank fall outside of existing Standard Rules sets.

Further details of the environmental permit application can be found within the report reference P171-R01-F1, Site Information.

## 1.2 SCR Scope

This SCR has been developed as part of a permit application for the G.H. By Products (Derby) Limited site. This report covers the entire site as identified within the Site Boundary, as shown by the 'Site Boundary Plan' within the report referenced P171-R05-F1 Site Drawings.

## 1.3 Sources of Information

The following sections detail the sources of desk study information searched in order to describe the environmental setting and, in particular, to determine the potential for substances to be present in, on or under the land associated with present and past uses of the site and its surrounding areas.

### 1.3.1 Sources of Environmental Data

The Envirocheck report referenced 203752106\_1\_1, 14<sup>th</sup> May 2019, has been used to provide the following data:

- Ordnance Survey Historical Mapping ;
- British Geological Survey data sets;
- Environment Agency data sets.

The Proposed Slurry Store Investigation Report produced by Delta-Simons Project Number 18-0530.01, has been used to provide the following site information:

- Baseline soil reference data.

This report was produced following their appraisal of ground conditions below part of the proposed site area:

Further sources of environmental data were provided using internet based searches to establish:

- Groundwater Source Protection Zones;
- Nature and conservation receptors.

## 1.4 Report Format

This report has been set out as follows:

- Site Details;
- Site Description;
- Environmental Setting;
- Land Pollution History;
- Summary.

## 2 Site Details

### 2.1 Site Details

1.0 SITE DETAILS	
Name of the applicant	G.H. By Products (Derby) Limited
Activity address	Park Farm, Gainsborough Road, Willingham-by-Stow, DN21 5JX
National grid reference	SK 85925 84325
Document reference and dates for Site Condition Report at permit application and surrender.	P171-R03-F1 Site Condition Report
Document references for site plans (including location and boundaries)	P171-R05-F1 Site Drawings

### 2.2 Condition of the Land at Permit Issue

2.0 Condition of the land at permit issue	
Environmental setting including: <ul style="list-style-type: none"> <li>• geology</li> <li>• hydrogeology</li> <li>• surface waters</li> </ul>	The environmental setting of the site is detailed in Section 4 of this report.
Pollution history including: <ul style="list-style-type: none"> <li>• pollution incidents that may have affected land</li> <li>• historical land-uses and associated contaminants</li> <li>• any visual/olfactory evidence of existing contamination</li> <li>• evidence of damage to pollution prevention measures</li> </ul>	The pollution history assessment for the site area has been detailed in Section 5 of this report.
Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)	The pollution history assessment for the site area has been detailed in Section 5 of this report.
Baseline soil and groundwater reference data	See - Delta-Simons Report Project Number 18-0530.01. Summary of findings within the report below.
Supporting information	The source information used to produce the Site Condition Report has been listed in Section 1.3 above. There are no Relevant Hazardous Substances (RHS) stored on site

### 2.3 Permitted Activities

3.0 Permitted activities	
Permitted activities	Environmental Permitting (England and Wales) Regulations SI 2016/1154

Non-permitted activities undertaken	None within the Site Boundary.
Document references for: <ul style="list-style-type: none"><li>• plan showing activity layout; and</li><li>• environmental risk assessment.</li></ul>	The site layout is detailed on the 'Site Layout Plan' within the report referenced P171-R05-F1. Environmental risk has been assessed within the reports P171-R02-F1.

## 3 Site Description

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### 3.1 Site Description

#### 3.1.1 Topography

The proposed area to be included within the Site boundary is flat.

#### 3.1.2 Drainage Description

There are no point source releases to water or sewer from site.

#### 3.1.3 Operational Areas and Bunds

The proposed operational area of the lagoon was previously a field used for grazing cattle. Construction of the lagoon has commenced. The farm tank is existing and not bunded.

#### 3.1.4 Vegetation

There is currently no vegetation on site. Site Management have confirmed that the vegetation cleared to allow construction of the lagoon appeared in good health. This is confirmed by the Site Description within the Delta-Simons Report as no issues with vegetation have been noted. This description was produced following a site walkover prior to construction works commencing.

#### 3.1.5 Neighbouring Land Uses

The immediate neighbours to the site comprise:

- North – Agricultural property / land;
- East – Agricultural land;
- South – Agricultural land;
- West – Agricultural land.

#### 3.1.6 Surface Water Features

There are no surface water features within the Site boundary.

### 3.2 Potential Contamination Sources from Proposed Use

The potential contamination sources from the proposed use are:

- Fuel leaks and spillages from parked, moving vehicles.
- Contaminants from stored waste materials;

It should be noted that the environmental risk associated with the storage of waste materials has been assessed as being insignificant (see reports P171-R01-F1 and P171-R02-F1).

## 4 Environmental Setting

### 4.1 Geology and Hydrology

The Table 4.1 below outlines the geological sequence beneath the site.

<b>Stratigraphy</b>	<b>Thickness</b>	<b>Aquifer Status</b>	<b>Assumed Hydraulic Gradient</b>	<b>Abstractions Within 1km</b>
Superficial Geology = None Recorded	-	-	-	-
Scunthorpe Mudstone Formation - Mudstone And Limestone, Interbedded.	Unknown	Secondary B Aquifer	West and South West	None

The Delta-Simons Report states that the soils sampled beneath the site, have extremely low permeability rates.

It is assumed that any hydraulic gradient, if present, is anticipated to be to the South, towards the closest identified surface water receptor.

The Envirocheck report indicates that there are no permitted groundwater abstractions within 1 kilometre of the site.

The Envirocheck report outlines that the site is in an area ‘*that might not*’ be affected by coal mining activity.

The site is not located within a Source Protection Zone.

### 4.2 Hydrology

The following watercourses are within 1 km of the proposed site boundary. Further detail is provided within reports P171-R02-F1 and P171-R05-F1. Only the closest receptor in each direction is listed (Note, distances given are measured using Ordnance Survey data provided by Promap, unless stated)).

- Land drain c. 375 metres to the North.
- Land drain c. 160 metres to the South East.
- Land drain c.80 metres to the South (identified within the Delta-Simons Report and recorded as dry)
- Existing Farm Lagoon c.50 metres to the South West.
- Land drain c.110 metres to the West.

The Envirocheck report indicates that there are no surface water abstractions within 1 km of the site.

### 4.3 Ecological Receptors

Searches using the Multi Agency Geographic Information for the Countryside (MAGIC) and Nature on the Map were undertaken to identify whether the site is within 2 km of the following sensitive receptors:

- Local Nature Reserves;
- National Nature Reserves;
- Sites of Special Scientific Interest (SSSI);
- Sites with international designations (Ramsar, Special Areas of Conservation, Special Protection Areas);



- Biodiversity Action Plan Priority Habitats;
- Geological SSSI;
- Ancient Woodland.

There are a number of receptors which have been identified and are listed within P171-R02-F1. The closest ecological receptor is an area of Deciduous Woodland Biodiversity Action Plan Priority Habitat approximately 375 metres to the North of the Site boundary.

## **4.4 Natural Impacts**

### **4.4.1 Radon Potential**

The property is in a lower probability radon area, as less than 1% of homes are estimated to be at or above the action level.

### **4.4.2 Flood Risk**

The site is not located within a known flood risk area.

## **4.5 Landfill**

The Envirocheck report has not identified any historical landfill sites within or in close proximity to the proposed facility boundary.

## 5 Land Pollution History

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### 5.1 Historical Development of the Site and Adjacent Land

The following map series have been analysed in order to establish the significant historical developments of the site and adjacent land:

Scale 1:2,500 – 1886 to 1999;

Scale 1:10,000 and 10,560 – 1885 to 2019.

The earliest map reviewed of 1885 Scale 1:10,560, shows the site as 'Glebe Farm' and surrounding areas as undeveloped farmland. A farm track runs from West to East, to the South of the proposed farm tank permit boundary. The same track runs adjacent to and parallel with the Northern site boundary of the lagoon section of the site.

Glebe Farm has been renamed as 'Park Farm' on the map published in 1956, Scale 1:10,000.

No further developments are shown within the site boundary or on adjacent land, until developments shown on the map published 1974-1975 Scale 1:2,500. This map shows the development of the existing farm lagoon at Park Farm c.50 metres East of the proposed lagoon and a Pond c. 50 metres to the South of the farm tank. Further development at the farm is shown by a building to the East of the Farm tank on the map published in 2000, Scale 1:10,000.

The final historical map set available for review, published 2019 scale 1:10,000, shows the farm tank to be included within the permit and development of existing cattle sheds adjacent to the North and West of the tank / North East of the lagoon respectively.

### 5.2 Potential Contamination Sources from Historical Land Use

The historical land uses of the site and / or surrounding land which may have given rise to land contamination are:

- Agricultural uses.

The Envirocheck Report outlines that there have been no recorded pollution incidents on site which may have led to ground contamination.

Potential contaminants associated with historical land use may comprise:

- Organic materials;
- Fertilisers;
- Pesticide and herbicides.

Some of the waste streams to be accepted at site may contain the materials listed above.

### 5.3 Site Management Discussions

Site Management have confirmed that there have been no recorded pollution incidents, nor any use of the land which may have led to significant ground contamination issues that they are aware of.