Thurlby Site Condition Report

1.0 SITE DETAILS	
Name of the applicant	L J Fairburn and Son Ltd
Activity address	Thurlby Farm, Thurlby Road, Bilsby, Nr Alford, Lincolnshire, LN13 9JJ
National grid reference	TF 48323 75628

Document reference and dates for Site Condition Report at permit application and surrender	Thurlby Site Condition Report May 2024

Document references for site plans (including location and boundaries)	Thurlby Site Plan

Note:
In Part A of the application form you must give us details of the site's location and provide us with a site plan. We need a detailed site plan (or plans) showing:

- Site location, the area covered by the site condition report, and the location and nature of the activities and/or waste facilities on the site.
- Locations of receptors, sources of emissions/releases, and monitoring points.
- Site drainage.
- Site surfacing.

If this information is not shown on the site plan required by Part A of the application form then you should submit the additional plan or plans with this site condition report.

2.0 Condition of the land at permit issue	
Environmental setting including: • geology • hydrogeology • surface waters	The installation is located near Alford in Lincolnshire at Grid Reference TF 48323 75628. The installation covers approximately 18ha. The village of Thurlby is located 0.8 kilometres to the east of the unit and the village of Bilsby is located 1.2 kilometres to the west of the site. The proposed site and wider surrounding landscape exhibits a relatively flat landform devoid of significant variations in gradient. All land immediately surrounding Thurlby Site is in agricultural use; arable, grassland and with hedge planting and isolated tree planting. The proposed site includes plans for tree planting as shown on Thurlby Site Plan. The most proximate land in residential use comprises a dwelling located marginally over 280 metres to the north of the poultry shed. The Environment Agency flood hazard map depicts the northern half of the proposed site

	within Flood Zone 1. The southern half of the site is in Flood Zones 2 and 3. Nevertheless, the application site has not been subject to localised flooding or drainage problems attributed to surface water discharge. The site is shown as having an elevation of 2.9 m at the central grid reference and is generally flat (slope <1%). Information taken from the Geology of Britain Viewer: **1:50 000 scale bedrock geology description:** Welton Chalk Formation - Chalk. Sedimentary bedrock formed between 100.5 and 89.8 million years ago during the Cretaceous period. White, massive or thickly bedded chalk with common flint nodules ("burrow-form flints") but generally lacking tabular flint bands; sporadic marl seams including the Plenus Marls Member ("Black Band" sensu lato) and the Black Band Member (sensu stricto) above at the base. **1:50 000 scale superficial deposits description:** Majority of site is situated on: Till, Devensian - Diamicton. Sedimentary superficial deposit formed between 116 and 11.8 thousand years ago during the Quaternary period. The South edge of the installation site is situated on: Tidal Flat Deposits - Clay and silt. Sedimentary superficial deposit formed between 11.8 thousand years ago and the present during the Quaternary period. They consist of unconsolidated sediment, mainly mud and/or sand. They may form the top surface of a deltaic deposit. Please refer to attached image from BGS Geology of Britain Viewer.] Please see attached reviewed borehole logs BGS ID: 506228 : BGS Reference: TF47NE4 (TF 4868 7602_ – Boygrift Thurlby Bridge) ; and BGS ID: 506224 : BGS Reference: TF47NE2 (TF 4840 7533 – Boygrift Drain) showing the local soil types and depths near the road to the North of the installation and at the drain to the South. The LandIS Soilscapes Viewer says the soils on the installation and in the surrounding land are slowly permeable seasonally wet slightly

	acid but base-rich loamy and clayey soils with slightly impeded drainage. The site surfacing is mainly stone, except shed flooring and areas likely to be contaminated. These concrete areas drain to sealed below ground tanks. The site includes a comprehensive surface water drainage scheme designed to avoid adverse impacts upon surface water flow. This will be achieved through the discharge of roof and surface water into a substantial drainage attenuation PVC crate soakaway with restricted flow into an adjoining ditch. This surface water body is called Boygrift Drain. Boygrift Drain takes in water from an area around 23.761 km2 in size and is part of the Steeping and Eaus catchment area. Boygrift Drain is 8.786 km long and is artificial and not a natural waterway. The site is within a Zone 3 (Total Catchment) Source Protection Zone. Groundwater vulnerability is classified as medium to high. The installation is not currently situated within a Nitrate Vulnerable Zone or Drinking Water Safeguard Zone. There are four Sites of Special Scientific Interest located within 5k of the installation, all to the SSW of the site. These are: •Willoughby Meadow SSSI •Willoughby Wood SSSI •Skendleby Psalter Banks SSSI •Claxby Chalk Pit SSSI •Hoplands Wood SSSI There is also an LNR, Willoughby Branch Line, within 5km, also to the SSW of the installation. There are a number of other SSSIs and LNRs within 10km of the installation, but no RAMSAR, SPA or SAC designations within that buffer zone. There are no known pollution incidents at the site and within a 1 km radius. Historic maps indicate that the site has had no known prior site uses other than agriculture. No prior site investigations have been conducted. Search results have been collated using the Defra Flood Map for Planning, the Defra

	website "Magic" and the "Geology of Britain Viewer" website, "Free Map Tools - Elevation Finder" as well as LandIS Soilscapes Viewer, "rowmaps.com" and the Lincolnshire Wildlife Trust.
Pollution history including: • pollution incidents that may have affected land • historical land-uses and associated contaminants • any visual/olfactory evidence of existing contamination • evidence of damage to pollution prevention measures	None known None known None known None known There are no known pollution incidents at the site and within a 1 km radius. Historic maps indicate that the site has had no known prior site uses other than agriculture. No prior site investigations have been conducted.
Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)	There have been no previous land site investigations or assessments at the site
Baseline soil and groundwater reference data	None
Supporting information	• Source information identifying environmental setting and pollution incidents • Historical Ordnance Survey plans • Site reconnaissance • Historical investigation / assessment / remediation / verification reports • Baseline soil and groundwater reference data

3.0 Permitted activities	
Permitted activities	Intensive Farming for poultry •The site will house 64,000 Free Range Laying Hens on partly slatted flooring. •The ventilation system in the poultry house is mechanical ventilation. It is not naturally ventilated. •The roof fans act as inlets only with fans that push air into the shed. All extraction fans are on the gables and sides of the building. The gable end fans are used infrequently for temperature control during hot weather. Climate control system ventilation will assist in the creation of a dry internal environment with a litter moisture content below 40%, thereby ensuring low odour/ ammonia emissions and conditions unsuitable for fly breeding. •Please see *Thurlby ventilation and extraction* doc.

	•The poultry house has manure belts, and the manure will be collected from the farm every 3-4 days by tractor and trailer. No manure is stored on site. •Wash water is captured in to sealed underground tanks. •Dry poultry feed storage and feeding This site will have an operational capacity for two free range poultry houses with a total of 64,000 places for laying hens. The Laying birds are housed at approximately 16 weeks old and remain for a 60 week egg producing cycle. The poultry houses are then depopulated, cleaned and disinfected ready for the next cycle. All manure is transported off site to LJ Fairburn & Son farms for use on agricultural land or sold to local farmers. The free range houses are built of steel framework sited on a concrete base, insulated and then cladded with steel sheeting. Pre-mixed feed is brought in from our own UKAS approved feed mill and stored in silos nearby the poultry sheds. Diets are formulated according to the birds age and nutritional requirements. Protein and phosphorus levels are routinely reduced as the birds get older. Nipple drinkers are situated in each poultry shed and water consumption is monitored and recorded daily. Low energy lighting is used throughout. Any mortalities are collected and recorded daily. The carcasses are then sprayed with blue stock marker spray and placed into a lockable bin. These bins are emptied weekly and the carcasses removed from the site by an approved contractor (A Hughes & Son - Skellingthorpe) who incinerate the dead stock at correctly licensed premises. At the end of the laying cycle the birds are removed from the shed and the manure is taken away in covered trailers by L J Fairburn. The shed is then blown down to remove any dry matter before being washed and then disinfected with Lion Code/ APHA approved chemicals. The dirty wash water that is generated in this process is collected in a waste water tank (built in compliance with SSAFO regulations); the contents of which are spread on separately owned land in accordance with the Defra Codes of Good Agricultural Practice.

	These measures are intended to reduce the production and emission of ammonia, odours, dust and to prevent liquids escaping to the environment. This in turn should reduce the environmental impact of the farming activities. There are no planned changes to pollution prevention measures anticipated to occur within six months of submitting this Site Condition Report to comply with BAT requirements.
Non-permitted activities undertaken	Not applicable
Document references for: • plan showing activity layout; and • environmental risk assessment.	Thurlby Site Plan Environmental Risk Assessment

Note:

In Part B of the application form you must tell us about the activities that you will undertake at the site. You must also give us an environmental risk assessment. This risk assessment must be based on our guidance (*Environmental Risk Assessment - EPR H1*) or use an equivalent approach.

It is essential that you identify in your environmental risk assessment all the substances used and produced that could pollute the soil or groundwater if there were an accident, or if measures to protect land fail.

These include substances that would be classified as 'dangerous' under the Control of Major Accident Hazards (COMAH) regulations and also raw materials, fuels, intermediates, products, wastes and effluents.

If your submitted environmental risk assessment does not adequately address the risks to soil and groundwater we may need to request further information from you or even refuse your permit application.

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4.0 Changes to the activity	
Have there been any changes to the activity boundary?	If yes, provide a plan showing the changes to the activity boundary.
Have there been any changes to the permitted activities?	If yes, provide a description of the changes to the permitted activities
Have any 'dangerous substances' not identified in the Application Site Condition Report been used or produced as a result of the permitted activities?	If yes, list of them
Checklist of supporting information	• Plan showing any changes to the boundary (where relevant) • Description of the changes to the permitted activities (where relevant) • List of 'dangerous substances' used/produced by the permitted activities that were not identified in the Application Site Condition Report (where relevant)

5.0 Measures taken to protect land	
Use records that you collected during the life of the permit to summarise whether pollution prevention measures worked. If you can't, you need to collect land and/or groundwater data to assess whether the land has deteriorated.	
Checklist of supporting information	• Inspection records and summary of findings of inspections for all pollution prevention measures • Records of maintenance, repair and replacement of pollution prevention measures

6.0 Pollution incidents that may have had an impact on land, and their remediation	
Summarise any pollution incidents that may have damaged the land. Describe how you investigated and remedied each one. If you can't, you need to collect land and /or groundwater reference data to assess whether the land has deteriorated while you've been there.	
Checklist of supporting information	• Records of pollution incidents that may have impacted on land • Records of their investigation and remediation

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7.0 Soil gas and water quality monitoring (where undertaken)	
Provide details of any soil gas and/or water monitoring you did. Include a summary of the findings. Say whether it shows that the land deteriorated as a result of the permitted activities. If it did, outline how you investigated and remedied this.	
Checklist of supporting information	• **Description of soil gas and/or water monitoring undertaken** • **Monitoring results (including graphs)**

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8.0 Decommissioning and removal of pollution risk

Describe how the site was decommissioned. Demonstrate that all sources of pollution risk have been removed. Describe whether the decommissioning had any impact on the land. Outline how you investigated and remedied this.

Checklist of supporting information	• **Site closure plan** • **List of potential sources of pollution risk** • **Investigation and remediation reports (where relevant)**

9.0 Reference data and remediation (where relevant)

Say whether you had to collect land and/or groundwater data. Or say that you didn't need to because the information from sections 3, 4, 5 and 6 of the Surrender Site Condition Report shows that the land has not deteriorated.

If you did collect land and/or groundwater reference data, summarise what this entailed, and what your data found. Say whether the data shows that the condition of the land has deteriorated, or whether the land at the site is in a "satisfactory state". If it isn't, summarise what you did to remedy this. Confirm that the land is now in a "satisfactory state" at surrender.

Checklist of supporting information	• Land and/or groundwater data collected at application (if collected) • Land and/or groundwater data collected at surrender (where needed) • Assessment of satisfactory state • Remediation and verification reports (where undertaken)

10.0 Statement of site condition

Using the information from sections 3 to 7, give a statement about the condition of the land at the site. This should confirm that:

- the permitted activities have stopped
- decommissioning is complete, and the pollution risk has been removed
- the land is in a satisfactory condition.