

SITE CONDITION REPORT

For full details, see H5 *SCR guide for applicants* v2.0 4 August 2008

COMPLETE SECTIONS 1-3 AND SUBMIT WITH APPLICATION

DURING THE LIFE OF THE PERMIT: MAINTAIN SECTIONS 4-7

AT SURRENDER: ADD NEW DOC REFERENCE IN 1.0; COMPLETE SECTIONS 8-10; & SUBMIT WITH YOUR SURRENDER APPLICATION.

1.0 SITE DETAILS	
Name of the applicant	Crown Chicken Limited
Activity address	Lingar Hill Farm Poultry Unit Watton Road Shropham Attleborough NR17 1EE
National grid reference	Site is centred on TL 97179 92241
Document reference and dates for Site Condition Report at permit application and surrender	1. Site condition report prepared in June 2021 for permit application using a desk top study to identify and examine in broad terms readily available information, without any intrusive investigation. Relates to development of the land with 3No. poultry houses for rearing chickens intensively, associated structures, ancillary buildings and drainage identified on the site layout and drainage plans.
Document references for site plans (including location and boundaries)	2. Ordnance Survey site location plan for area covered by this SCR and boundary for Lingar Hill Farm poultry unit at the 1:12500 scale. Groundsure; 21/06/21; Lingar Hill Farm site plans at the 1:1250 scale, showing the area covered by this SCR and the location of housing for rearing poultry intensively, directly associated activities and sources of releases/emissions and site drainage including uncontaminated surface water runoff and dirty water, and site surfacing, etc.

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	
<p>Environmental setting including:</p> <ul style="list-style-type: none"> • geology • hydrogeology • surface waters 	<p><u>Location</u></p> <p>1. Site situated approx. 1.5km southwest of the centre of the village of Shropham within Norfolk, east side of Watton Road (B1111).</p> <p><u>Existing Site Layout & Topography</u></p> <p>2. Site comprises 1.91ha of land developed with two poultry houses and a third is proposed subject to a successful planning application. Site generally, level but likely to vary slightly across the site. Surrounding land rises up gently on east and south sides (Linger Hill) and falls away gently into surrounding land on the west side towards the village of Great Hockham. There is a natural watercourse and a ditch offsite alongside the site boundary on the west and south side, respectively, providing drainage for the site and the surrounding land. Offsite mature broadleaved trees adjacent the south and west boundary and strong hawthorn hedgerow on the north and east will minimise landscape intrusion.</p> <p>3. Site located in the Natural England National Character Area Profile; 85 The Brecks; available on the government website. The Brecks area is characterised by a largely open, gently undulating landscape with a low-lying, dry plateau. Subtle long slopes lead to alluvial flats containing shallow, meandering wooded river valleys. The rivers Little Ouse, Lark and Wissey and their major tributaries arise to the east in the adjoining elevated South Norfolk and High Suffolk Claylands. They flow westwards, cutting through the Brecks' dry chalk plateau before flowing out of the National Character Area (NCA) into the neighbouring flat expanse of the rich peaty Fens and ultimately into the Wash. Views between the NCA and neighbouring NCAs are often framed by areas of conifer</p>

plantation. Vast commercial conifer plantations form a forest landscape, unique in lowland England. Predominantly agricultural land use focused on arable production, with planned courtyard farmsteads and large, regular 18th and 19th century enclosure fields often clearly defined by Scot's pine and beech shelterbelts or neat hawthorn hedges, indicative of large estate enclosure

4. Land surrounding the site predominantly being used for agriculture - fields mostly under arable cultivation - cereals, sugar beet oilseed rape, and vegetable crops, etc and woodlands. Not much development besides around the villages of Shropham and Great Hockham - some isolated farm buildings and dwelling houses, etc. Intensive indoor and outdoor pig and poultry rearing farms are common with processing plants in the area.

Geology

5. The Geology of Britain Viewer available on the British Geological Survey (BGS) website identified the site is underlain by Coversand Superficial Drift Deposit comprising fine to very fine-grained sand and the sedimentary Seaford Chalk Formation and Newhaven Chalk Formation (Undifferentiated) Bedrock, firm white chalk located at depth. Superficial deposits are the youngest geological deposits formed during the most recent period of geological time. Bedrock geology is a term used for the main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits.
6. Coversand Superficial Drift Deposits were formed up to 2 million years ago in the quaternary period when the local environment was dominated by ice age conditions. They are windblown blanket deposits of lowland areas comprising fine to very fine-grained sand, usually horizontally bedded although they can form dunes with large-scale cross bedding and are highly permeable.
7. Seaford Chalk Formation and Newhaven Chalk Formation (Undifferentiated) is

sedimentary Bedrock formed approx. 72 to 90 million years ago in the Cretaceous Period when local environment was dominated by shallow warm seas. Firm white, porous, chalk with conspicuous semi-continuous nodular and tabular flint seams. Some flint nodules are large to very, large. Fractured flow type with very, high permeability.

8. Obtained and reviewed three borehole records from BGS website relating to boreholes within 1km to better establish the geology beneath the site and provide details on the same superficial deposits and bedrock formations.
9. Borehole TL99SE24 is located 620m north of site at Hockham Lodge. Log for this private borehole from 1951 shows it to be at a ground level of approx. 35m AODN with clay layers and shingle to be present to 88m below ground level (bgl) then chalk. BGS have noted buried channel deposit alongside the clay and gravel layers in the margin of the log.
10. Borehole TL99SE9 is located 890m east of site alongside the highway and nearest Linger Hill and was drilled in 1968 for the Great Ouse River Authority. Borehole records show it to be at a ground level of 39.7m AODN with layers of brown sand with flints, soft, sandy clay with occasional flints and clay with flints and fragments of chalk present to 43mbgl, then chalk.
11. Borehole TL99SE6 is located 815m west of site in Harling Road and was drilled in 1968 for the Great Ouse River Authority. Borehole records shows it to be at a ground level of 30.2m AODN. BGS have noted suggested revised classifications in the log showing drift (including layers of stony clay and with chalk fragments) to be present to 42mbgl, then upper chalk to 93mbgl, then middle chalk.

Soil Vulnerability Classification – Leaching Potential

12. Soilscape Viewer available on the Cranfield Soil and Agrifood Institution website identified soils on east and west side of site likely have different characters. Soils on east side characterised as Soilscape 11 – freely

draining sandy Breckland soils. Soils on western side characterised as Soilscape 23 – loamy and sandy soils with naturally high groundwater and a peaty surface. Shallow groundwater, and marginal ditches to most fields, including at Lingar Hill Farm.

13. Groundwater onsite has medium-high vulnerability to a pollutant discharged at ground level according to the MAGIC Groundwater Vulnerability Map available on the government website. Where an assessment is based on the hydrological, geological, hydrogeological and soil properties. Vulnerability is described as high, medium-high, medium, medium-low, or low.
14. Concluded the groundwater resource is particularly vulnerable to pollution from leaching of nutrients, pesticides and wastes applied to the land at Lingar Hill Farm.

Hydrogeology

15. The underlying Coversand superficial drift deposits are classified as a secondary aquifer according to the MAGIC Aquifer Designation (Superficial Drift) map. Have a wide range of water permeability and storage capability and can provide modest amounts of water, but the nature of the rock or the aquifers structure limits their use. Supporting water supplies at a local rather than strategic scale (such as for private supplies) and remain important in supporting surface water flows in rivers, wetlands, and lakes.
16. The underlying bedrock chalk formation is classified as a principal aquifer according to the MAGIC Aquifer Designation (Bedrock) map. Rock that provides significant quantities of water and can support water supply and/or baseflow to rivers, lakes, and wetlands on a strategic scale (drinking water supply). They typically have high intergranular and/or fracture permeability, meaning they usually provide a high level of water storage. Generally principal aquifers were previously designated major aquifers.
17. There are no groundwater, surface water, or potable water abstractions onsite. Site is not

located in any groundwater Source Protection Zone (SPZ) according to the MAGIC Source Protection Zones map. Environment Agency has defined SPZ around large and public potable groundwater abstraction sites to provide additional protection to safeguard drinking water quality. The zones show the risk of contamination from any activities that might cause pollution in the zone. Where zone 1 is an inner protection zone, zone 2 is an outer protection zone and zone 3 is the total catchment. Closer the activity, the greater the risk. The nearest large or public potable groundwater abstraction inside a SPZ is actually approx. 2.3km to the east near Shropham village.

Hydrology & Catchment

18. No surface water features or networks onsite.
19. Site located in the management catchment of Cam and Ely Ouse according to Data Catchment Explorer available on the Environment Agency website. An offsite watercourse to the east adjacent the site boundary contains water all year round (in normal conditions) and provides drainage for site and surrounding land. Flows southwards into Larling Brook in 1.8km, next south-eastward via Larling Fen into the River Thet in 4.1km from site, close by Larling church.
20. Overall water body classifications for both the Larling Brook and River Thet are moderate with good ecological, and failing chemical, ratings as recently as 2019.
21. Site located within a Nitrate Vulnerable Zone (NVZ) according to the MAGIC land-based designations map. These are areas where surface and groundwater are at risk from agricultural nitrate pollution. Farmers operating in a NVZ must follow mandatory rules to tackle nitrate loss from agriculture.

Flooding

22. Ground level is approx. 30m above ordnance datum Newlyn (AODN) according to a contour line through the site on the OS map.

	<p>23. Site located in Flood Zone 1 – very, low risk, less than 0.1% (1 in 1,000) chance of flooding each year according to Environment Agency Flood Maps for Planning (from rivers and the sea) available on the government website.</p> <p>24. Low risk of surface water (flash) flooding between 0.1% (1 in 1,000) and 1% (1 in 100) according to Environment Agency Ambient Risk Analytics surface water (pluvial) FloodMap available on the government website. Risk appears limited to east side of site, but flood risk advice provided with a caveat - very unlikely to be reliable for a local area and extremely unlikely to be reliable for identifying individual properties at risk.</p> <p>25. Reservoir flooding is highly unlikely however, there is a reservoir at Church Farm 270m east of the boundary. An area is considered at risk if peoples' lives could be threatened by an uncontrolled release of water</p> <p>26. No risk of groundwater flooding by unusually high groundwater levels when the water table rises above the ground surface.</p> <p><u>Environmental designations</u></p> <p>27. Identified two European sites and one site of Special Scientific Interest within 5km and an ancient woodland within 2km using MAGIC land-based designations map - the Norfolk Valley Fens Special Areas of Conservation (SAC) and Breckland Special Protection Area (SPA) and East Harling Common Site of Special Scientific Interest (SSSI), and Shropham Grove (AW). There may be Local Nature Reserves (LNR) within 2km. Not identified any designated sites for nature conservation onsite.</p>
<p>Pollution history including:</p> <ul style="list-style-type: none"> • 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 	<p><u>Pollution incidents that may have affected land</u></p> <p>28. Not found any readily available evidence for any pollution incidents that may have affected the land onsite.</p>

Historical land-uses and associated contaminants

29. Previous land-use established with historical Ordnance Survey maps at the 1:1250 scale obtained from the groundsure.com website. Earliest map for 1883 shows land was undeveloped with approx. four-fifths mixed woodland, part of Keepers Plantation and remainder on north side as unwooded – possibly used for grazing livestock or arable agriculture and unchanged in 1905 and 1946.
30. Site already developed with a poultry farm on the 1979 map with four poultry houses but unable to establish any more precisely when planning permission was granted or when construction started. Houses erected east to west across nearly the entire site, with an access roadway and probably concrete hardstanding on the west side, presumably having levelled the site. Housed laying hens according to the current owners, Messrs C. E. Davidson Ltd. Existing bungalow next-door for a manager probably erected nearly same time. Planning permission was granted in 1987 for the rebuilding of a poultry broiler house according to records on the Breckland Council planning portal website, and another permission granted in 1990 for rebuilding two poultry rearing houses. Not found evidence why they might have wanted rebuilding, and the locations and footprints of all four poultry houses still appeared to be unchanged on the 1995 map. All the houses had been entirely demolished sometime after and there are two replacement poultry houses erected in their place on the 2003 map and are the houses still in use today. Their orientation changed to north to south and occupy a smaller footprint. Originally erected for rearing free-range poultry according to the current owners, and repurposed and refurbished for rearing broiler chickens intensively indoors in recent years. Owners submitted a planning application in 2021 for erecting a third, clear span, steel framed poultry house in between the existing houses and relocation of two existing feed bins.

Visual/olfactory evidence of existing contamination

31. Site walkover on Thursday 27th May mid-afternoon with the Farm Manager. Weather conditions sunny, warm, and dry. Confirmed land already developed with two houses for rearing poultry intensively.
32. No indications for presence of any artificial and made ground, worked, infilled, disturbed, or landscaped ground on-site besides having been presumably excavated and levelled for the original development in the 1970s, and demolition and subsequent redevelopment. Artificial ground can be associated with potentially contaminated material.
33. Soil surface not much visible, owing to being generally developed with poultry houses, concrete hardstanding, and most other areas covered in grass, mostly kept mown and left to grow long nearer the boundary. Some obsolete wooden buildings previously used for storing materials, standby generator, and carcasses, etc might be removed during further development for a third poultry house. Fragments of broken concrete, brick, roofing materials, plastic, and metal fasteners etc were abundant in the strips of uncovered soil alongside the poultry houses. Presumed to be residue of previous demolition, crushing and reuse of buildings materials onsite in the bases of the current poultry houses.
34. No evidence discovered for any alternative previous industrial use, other than for rearing poultry. No evidence for substances associated with rearing poultry intensively having been released into the soil, for example no evidence of vegetation onsite stressed by substances in the soil for example disinfectants, diesel, etc. Proprietary mixtures of formaldehyde, glutaraldehyde and peroxide are DEFRA approved disinfectants for poultry houses and widely used. Soluble in water and very toxic to aquatic organisms but readily biodegradable so persistence in soil or groundwater is considered to be unlikely based on information in manufacturers safety data sheets. Professional contractors

	<p>recently treated invasive weeds growing near the watercourse with an appropriate herbicide as part of an ongoing control and destruction program.</p> <p>35. Some solid waste plastic tubes, metal, and - wood, etc observed around periphery of site described as waste from when the current two houses were being used by the previous operators for rearing free-range poultry.</p> <p>36. Currently no permissions relating to rearing poultry or any other industrial activities according to the Environment Agency public registers available on the government website.</p> <p><u>Evidence of damage to pollution control measures</u></p> <p>37. Observed concrete apron outside both the poultry houses installed without kerbs or sealed joints. Cracking, probably attributed to HGVs manoeuvring and maybe some subsidence, and open joints noted, especially outside house No.1. Continues to pose a risk of contamination in soil and groundwater for example with dirty litter, dirty water, disinfectants, etc. Dirty water drains installed directly outside the main doors into package underground tanks when the houses were refurbished for rearing broiler chickens is managing risk of runoff on to unmade ground.</p>
<p>Evidence of historic contamination, for example, historical site investigation, assessment, remediation, and verification reports (where available)</p>	<p>38. Not found any evidence in the desk top study for any previous historical site investigation, assessment, or remediation and verification.</p> <p>39. Concluded this site has been in continuous use for rearing poultry intensively indoors and outdoors since before 1979 and probably never used for any other industrial activities. Not discovered evidence for any incidents that might have resulted in significant release of any substance into soil or groundwater and causing pollution, from either readily available documents or any visual/olfactory evidence in the site walkover.</p>
<p>Baseline soil and groundwater reference data</p>	<p>40. Concluded intrusive investigation to establish baseline soil and groundwater reference data was not warranted.</p>

Supporting information	<p>Natural England National Character Area Profile: 85 The Brecks available on the government website. Geology of Britain Viewer available on the British Geological Survey website. Soilscape Viewer available on the Cranfield Soil and Agrifood Institution website. MAGIC Land Based Designation Map, Aquifer Designation Map, Groundwater Vulnerability Map, Source Protection Zones map available on the government website. Data Catchment Explorer available on the Environment Agency website. Environment Agency Flood Maps for Planning (from rivers and the sea) available on the government website. Environment Agency Ambient Risk Analytics surface water (pluvial) FloodMap available on the government website. Ordnance Survey 1883-2003 maps obtained from the groundsure.com website Planning permissions available on the Breckland Council website.</p>
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3.0 Permitted activities

Permitted activities	<ol style="list-style-type: none"> 1. Operators must obtain an environmental permit before bringing the proposed third poultry house into operation in accordance with The Environmental Permitting (England and Wales) Regulations 2016; Regulation 2(1); Schedule 1; Part 2; Section 6.9; Part A(1)(a)(i) Rearing poultry or pigs intensively in an installation with more than 40,000 places for poultry. Storing feedstuffs in package silos, liquid petroleum gas (LPG) in tanks for heating, diesel in a back-up generator, disinfectants in boot dips, dirty water in package underground tanks, etc are directly associated activities. 2. Existing poultry houses designed and constructed to modern specifications – concrete floors poured over a continuous damp proof membrane, concrete block walls and insulated walls and low-pitched roofs with dark brown steel cladding. The proposed third house will be larger with steel, clear span portal construction and concrete panel walls. A new concrete apron for access and loading with a kerb around its entirety will be installed outside all the houses and separate uncontaminated and dirty water drainage. Concrete floors, and kerbs on the concrete apron will provide an impervious and permanent barrier to prevent soil and groundwater contamination. Buildings, drainage, and equipment on site will be regularly inspected and checked for visual signs of leakage, corrosion, structural damage, security, correct operation and will be maintained or repaired.
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	<p>3. Existing houses have high velocity ventilation fans with uncapped roof outlets, and so will the proposed third house, so uncontaminated roof water will be channelled via gutters and down-pipes and stone-filled French drains with perforated pipes providing much opportunity for water to infiltrate into the sandy ground at Lingar Hill Farm, and also conveyed in solid underground pipes into the off-site ditch on the south side, next into the watercourse.</p> <p>4. Uncontaminated runoff the concrete apron (excluding during periods of litter removal and washout) will be channelled via kerbs and a catch pit into solid underground pipes into the offsite ditch. Dirty water runoff the apron when the litter is being removed and when the houses are being washed out will also be channelled into the catchpit and into a package underground concrete encased dirty water tank and comes with a diverter valve. The dirty water will be periodically transferred offsite in tankers.</p> <p>5. Site will be operated in accordance with a written environmental risk assessment approved by the Environment Agency.</p>
<p>Non-permitted activities undertaken</p>	<p>6. All activities at Lingar Hill Farm Poultry Unit will be permitted for the rearing of poultry intensively or directly associated activities. There will be no non-permitted activities being undertaken.</p>
<p>Document references for:</p> <ul style="list-style-type: none"> • plan showing activity layout; and • environmental risk assessment. 	<p>Groundsure; 21/06/21; Lingar Hill Farm site layout plan at the 1:1250 scale, showing the area covered by this SCR and location of housing for rearing poultry, directly associated activities and sources of releases/emissions and site drainage including uncontaminated surface water runoff and dirty water, and site surfacing, etc. Lingar Hill Farm Poultry Unit H1 Environmental Risk Assessment created for the permit application.</p>

SITE CONDITION REPORT

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 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.

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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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

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)

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.