

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 | |
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| Name of the applicant | Merrells Growers Limited |
| Activity address | West End Farm Poultry Unit Mill Lane Shadingfield Beccles Suffolk NR34 8DL |
| National grid reference | The site is centred on TM 42930 84936 |

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| Document reference and dates for Site Condition Report at permit application and surrender | 1. Site condition report prepared in August 2020 using a desk top study to identify and examine in broad terms readily available information, without any intrusive investigation, relating to development of the land with 3No. poultry houses for rearing chickens intensively, associated structures, drainage and ancillary buildings, identified on the site layout and drainage plans. A site visit was undertaken on Thursday 16 th July 2020. |
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| Document references for site plans (including location and boundaries) | 2. West End Farm Poultry Unit, Mill Lane, Shadingfield, Beccles, Suffolk, NR34 8DL, Layout & Drainage Plans. |
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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 | |
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| <p>Environmental setting including:</p> <ul style="list-style-type: none"> • geology • hydrogeology • surface waters | <p><u>Location</u></p> <p>1. The site is located in a rural setting to the north-west of the settlement of Shadingfield, in Suffolk, at West End Farm, and situated to the north and east of Mill Lane.</p> <p><u>Existing Site Layout & Topography</u></p> <p>2. The existing site comprises approx. 1.94ha of undeveloped agricultural land with a ditch located on the northern boundary and a pond located in the north-western corner shown on the site layout plan. The site is generally flat at an elevation of approx. 33maOD, with the land falling towards the south. Agricultural land surrounds the entire site.- mostly fields under arable cultivation - cereals, sugar beet oilseed rape, and rearing of animals. Intensive poultry production is common in the area with poultry farms and processing plants nearby.</p> <p>3. The site is located in the Natural England National Character Area Profile: 83 South Norfolk and High Suffolk Claylands. Characterised by a large plateau area of chalky glacial till that is generally flat or only gently undulating but can be locally concave. The edges of the plateau have been dissected by watercourses that form notable slopes, especially along the tributaries of the meandering River Waveney to the north. Fragmented ancient woodland, game copses, shelterbelts and carr woodland as well as hedgerow trees provide a treed landscape, despite much boundary loss. Views are frequently open, only sometimes confined by hedges and trees.</p> <p><u>Geology</u></p> <p>4. The British Geological Survey's (BGS) digital geological map identifies the site is underlain by Lowestoft Formation (Diamicton) Superficial Deposits and that the Norwich</p> |

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| | <p>Crag Group (Sand) Bedrock is located at depth, overlying Upper Chalk.</p> <ol style="list-style-type: none"> 5. Quaternary Lowestoft Formation Superficial Drift Deposits are described by BGS as sedimentary deposits glacial in origin - undivided, chalky, pebbly, sandy clay. They are detrital formed by the action of ice and melt water and can form a wide range of deposits and geomorphologies associated with glacial and interglacial periods, and with low to moderate permeability. 6. Quaternary Norwich Crag Formation Bedrock is described by BGS as sedimentary rocks, shallow marine in origin, fine to coarse-grained sands and silts, locally shelly or iron cemented, some clay. They are also detrital, ranging from coarse to fine-grained (locally with some carbonate content) forming interbedded sequences, and with high permeability. 7. Three BGS borehole records TM48SW22, TM48SW2 and TM48SW17 are located within 2000m of the site boundary, and provide details on the ground conditions, and are the same superficial deposits and bedrock formations. To establish the ground conditions surrounding the site, the logs of the borehole records have been reviewed below. 8. Borehole TM48SW22 is located 660m east of the site in Sotterley Road, at an approximate ground level of 32mAOD. Shows blue clay to be present to 13.72m below ground level (bgl), then sand and ballast to 50.29mbgl, then crag to 94.49mbgl, then chalk. 9. Borehole TM48SW2 is located 1,840m west of the site in Redisham Road, at an approximate ground level of 36mAOD. Shows clay with nodules of chalk and pockets of sand to be present to 21.34mbgl, overlying crag to 67.97mbgl, then chalk. 10. Borehole TM48SW17 is located 1,980m south-west of the site in Redisham Road, at an approximate ground level of 36mAOD. Shows clay to be present to 19.20mbgl, overlying crag to 91.44m, then chalk. |
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11. The Groundsure Geo Insight report does not indicate the presence of any Artificial/Made Ground on-site.

Soil Vulnerability Classification – Leaching Potential

12. The Cranfield Soil and Agrifood Institution's Soilscape Viewer identifies the soils on site to be characterised as No.18 - slowly permeable seasonally wet slightly acid but base rich loamy and clayey soils with impeded drainage. Main risks are associated with overland flow from compacted or poached fields. Organic slurry, dirty water, fertiliser, pathogens, and fine sediment can all move in suspension or solution with overland flow or drain water.

Hydrogeology

13. The MAGIC Aquifer Designation (Superficial Drift) map identifies the underlying Superficial Deposits are classified as a Secondary (undifferentiated) Aquifer. In general, these layers have been designated as both minor and non-aquifers in different locations due to the variable characteristic of the rock types.

14. The MAGIC Aquifer Designation (Bedrock) map identifies the underlying solid strata (the Crag Formation) is classified a Principal Aquifer. Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously designated major aquifers.

15. The MAGIC Groundwater Vulnerability Map identifies both the secondary superficial aquifer and the principal bedrock aquifer have medium vulnerability to a pollutant discharged at ground level. Where groundwater vulnerability is described as High, Medium-High, Medium, Medium-Low, or Low.

16. The MAGIC Source Protection Zones map identifies the site as being located in a Source Protection Zone 3 Total Catchment.

Environment Agency has defined SPZ for groundwater sources such as wells, boreholes, and springs for public drinking water supply. These 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. The closer the activity, the greater the risk.

17. The Groundsure Geo Insight report identifies there are no licensed groundwater abstractions for more than 20 cubic metres per day within 2000m. There are no licensed groundwater, surface water, or potable water abstractions on site.

Hydrology & Catchment

18. An off-site drainage ditch is located on the northern boundary of the site which flows in a north-western to south-eastern direction via a pond towards the settlement of Willingham St Mary. For draining the uncontaminated run-off from the roofs and concrete hardstanding areas. Dirty water from cleaning will be stored on site in underground package tanks and periodically transferred off-site. There are no water networks or surface water features on site.

19. The Environment Agency Data Catchment Explorer identifies the site and the ditch are located in the waterbody catchment of the Lothingland Hundred. The ditch flows north-eastwards from Willingham and eventually outfalls into the Hundred River in 3.74km, east of the settlement of Ellough. The Environment Agency has designated the Hundred River a main river.

20. The Environment Agency Data Catchment Explorer identifies the Lothingland Hundred water body as having an overall classification of Moderate with Moderate ecological quality and Good chemical classifications as recently as 2016.

21. The Groundsure Enviro Insight report identifies the Waveney and East Suffolk

Chalk and Crag groundwater body underlying the site as having overall ratings of Poor, with Poor chemical and ecological ratings.

Flooding

22. The Environment Agency's Flood Map for Planning indicates the site is not in an area of flood risk owing to being in flood zone 1 with low probability of flooding (Less than 1 in 100 but greater than or equal to 1 in 1000 chance in any given year).

23. The Groundsure Insights Report indicates the Ambient Risk Analytics surface water (pluvial) FloodMap identifies no areas of the site likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding.

24. The Groundsure Insights Report identifies the site is at low risk of groundwater flooding by unusually high groundwater levels when the water table rises above the ground surface.

Environmental designations

25. The MAGIC land-based map identifies no statutory designations on site. There are areas designated for nature conservation within 2km of West End Farm Poultry Unit, including Likely Wood Ancient Woodland (AW), Great Wood AW and Sparrows Thick AW and Tital Wood Site of Special Scientific Interest (SSSI).

26. The Environment Agency Pre-application Report in July 2020 concluded detailed modelling did not have to be provided with an application for an environmental permit following an initial ammonia screening assessment.

27. The Groundsure Insights Report identifies the site is in nitrate vulnerable zones (NVZ) including the Lothingland Hundred NVZ for surface water and the Norwich Crag and Gravels NVZ for groundwater. Nitrate vulnerable zones are areas at risk from agricultural nitrate pollution. These are areas

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| | <p>of land that drain into waters polluted by nitrates. Farmers operating within these areas must follow mandatory rules to tackle nitrate loss from agriculture (e.g. Land spreading used litter in accordance with legal requirements).</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. Unlikely/none reported.</p> <p><u>Historical land-uses and associated contaminants</u></p> <p>29. Ordnance Survey maps 1883-2003 show the site has not been previously developed, and probably been used continually for arable agriculture to present day. According to Parkers Environmental Statement provided with the planning application, the field was probably also used for grazing cattle as West End Farm had a dairy herd from 1974-2005.</p> <p>30. The Groundsure Insight Report identifies there are no records of the site being used for any current or historical industrial uses, and no records of any releases of any substances to the environment that might have caused soil or groundwater pollution.</p> <p>31. The Groundsure Geo Insight report identifies BGS have estimated background soil chemistry. Provides estimated values of the likely background concentration of the potentially harmful elements, Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of 1 per 2km².</p> <p>32. The Groundsure Insight Report identifies 38 waste exemptions within 500m, the nearest 321m SE and all relating to waste activities on a farm and agricultural waste only.</p> <p>33. There will be emissions of pollution inventory substances when the poultry houses are brought into use. Operators will be reporting annually on the emissions of dust (PM10) and ammonia into the air, and nitrogen and</p> |

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| | <p>phosphorous excreted into the litter, and off-site waste transfers, including waste poultry litter, dirty water, and waste packaging.</p> <p><u>Visual/olfactory evidence of existing contamination</u></p> <p>34. Site visit and walkover with the owner on Thursday 16th July 2020. Weather conditions were fine and was conducted in the morning. Confirmed the land had been in recent agricultural use as recently as 2019 for growing cereal, evidenced by the residual short stubble and weedy green vegetation. The soil surface was generally visible across most the site and there was no visual/olfactory evidence for any previous industrial use or potential contamination.</p> <p><u>Evidence of damage to pollution control measures</u></p> <p>35. N/a</p> |
| Evidence of historic contamination, for example, historical site investigation, assessment, remediation, and verification reports (where available) | 36. No evidence for any historic contamination in the desk top study or in the site visit and walkover. |
| Baseline soil and groundwater reference data | 37. Not required. |
| Supporting information | Natural England National Character Area Profile: 83 South Norfolk and High Suffolk Claylands [online], The British Geological Survey digital geological map [online], Cranfield Soil and Agrifood Institution's Soilscape Viewer [online], Groundsure Enviro+Geo Insight; 20/07/2020; Land Adjacent West End Farm, MAGIC Land Based Designation Maps [online]; Environment Agency Data Catchment Explorer [online]; Environment Agency Flood Map for Planning [online], Ordnance Survey Maps 1883-2003. |

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| 3.0 Permitted activities | |
| Permitted activities | 1. The operator must obtain an environmental permit before bringing the poultry houses 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 |

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| | <p>in an installation with more than 40,000 places for poultry.</p> <ol style="list-style-type: none"><li data-bbox="805 302 1402 504">2. Storing feedstuffs in package silos, liquid petroleum gas (LPG) in tanks for heating, red diesel in a back-up generator, and disinfectants, and storing dirty water in package underground tanks are directly associated activities.<li data-bbox="805 548 1402 1108">3. The poultry houses will be designed and constructed to modern specifications – wide span steel portal frames, concrete panel walls and concrete floors poured over a continuous damp proof membrane and insulated low pitched roofs and dark green steel cladding. A concrete apron with a kerb around its entirety will be installed outside. The concrete floors, hardstanding and kerbs provide an impervious and permanent barrier to prevent soil and ground water pollution and runoff on to unmade ground. Buildings and equipment on site will be regularly inspected and checked for visual signs of leakage, corrosion, structural damage, security, and correct operation.<li data-bbox="805 1142 1402 1422">4. The surface water runoff will discharge into an attenuation drainage system, to contain up to and including the 1 in 100-year rainfall event including climate change. To prevent pollution to the surface waters, the underlying geology, and groundwater an appropriate level of water separation has been incorporated into the design.<li data-bbox="805 1456 1402 1881">5. Clean roof water and runoff from the open concrete apron (excluding during periods of litter removal and washout) will be channelled via stone-filled French drains with perforated pipes and solid pipes into an on-site engineered attenuation pond, next via a flow control device into the off-site ditch on the northern boundary of the site, identified as a tributary of the Hundred River. Perforated pipes in the French drains allow some clean water to infiltrate into the ground and from the attenuation pond.<li data-bbox="805 1915 1402 1982">6. Dirty waste water from litter removal and washout will be channelled into package |
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| | <p>underground concrete encased dirty water tanks and periodically transferred off-site shown on the site drainage plans.</p> <p>7. The construction of an attenuation drainage system will prevent flooding on site and may result in flooding from instantaneous run-off from the site on the surrounding land being reduced.</p> <p>8. Site will be operated in accordance with an environmental risk assessment approved by the Environment Agency.</p> |
| Non-permitted activities undertaken | <p>9. All activities at West End Farm Poultry Unit will be permitted for the rearing of poultry intensively and directly associated activities.</p> |
| <p>Document references for:</p> <ul style="list-style-type: none"> • plan showing activity layout; and • environmental risk assessment. | <p>10. Site Layout Plan showing extent of poultry rearing and directly associated activities, and Site Drainage Plan for West End Farm Poultry Unit, and C. E. Davidson Ltd drawing No. AWM-006 Drainage & Internal Layout showing further details of permanent measures for containing dirty water.</p> <p>11. West End Farm Poultry Unit H1 Environmental Risk Assessment.</p> |

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

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| Checklist of supporting information | <ul style="list-style-type: none"> • 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.

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| Checklist of supporting information | <ul style="list-style-type: none"> • Site closure plan • List of potential sources of pollution risk • Investigation and remediation reports (where relevant) |
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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.

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| Checklist of supporting information | <ul style="list-style-type: none"> • 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) |
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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.