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	Wayland Farms Limited
Activity address	EPR/XP3632QE Methwold Farm Pig Unit (comprising Airfield Farm, Feltwell Farm and Methwold Farm), Methwold Group, Brandon Road, Methwold, Thetford, Norfolk, IP26 4RJ
National grid reference	Study area for SCR centred on TL 72690 92888
Document reference and dates for Site Condition Report at permit application and surrender	1. Document reference; Q5c Site Condition Report Feltwell Fm Pig Unit Extension April 2023. 2. Created SCR on land relating to extension of installation boundary at Feltwell Fm to enclose 5.88 + 0.06 +0.49ha ~~4.34ha~~ adjacent greenfield agricultural land (the study area) to erect 14no new houses for intensively rearing pigs and enclose soakaway No.1 (0.06ha) and lagoon A (0.49ha) inside the installation boundary as instructed by EA in a letter dated 03/05/24[12] and email dated 22/07/24 respectively (Total installation area 13.04ha ~~12.55ha~~ ~~11.05ha~~) A SCR was also likely created for the environmental permit application for existing installation at Airfield Fm, Feltwell Fm and Methwold Fm (the Methwold Group). 3. Used desk top study to identify and examine in broad terms readily available information without intrusive investigation.
Document references for site plans (including location and boundaries)	• OS Map: EPR/XP3632QE Methwold Farm Pig Unit (Airfield Fm, Feltwell Fm and Methwold Fm. Shows areas covered by existing installation with the enclosures of adjacent greenfield agricultural lands on west side of Feltwell Fm and south side of Methwold Fm. • Groundsure Insights; 20/04/2023; Formerly RAF Methwold, Brandon Road, Methwold, IP26 4RJ created at the 1:2500 scale. Shows 5.88 + 0.06 + 0.49ha ~~4.34~~ha to be enclosed into existing installation boundary at Feltwell Fm marked in green. • Proposed site layout plan includes location of activities, sources of emissions/releases. • Proposed site drainage includes site surfacing.

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	**<u>Landscape setting</u>** 1. Feltwell Fm installation and study area located in National Character Area Profile: 85 The Brecks[5]. Area characterised by an 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. Flow westwards, cutting through the Brecks' dry chalk plateau before flowing out of the NCA into the neighbouring flat expanse of rich peaty Fens and into The Wash. Views are often framed by areas of conifer plantation, and vast commercial conifer plantations form a forest landscape, unique in lowland England. Agricultural land focused on arable production - cereals, sugar beet oilseed rape, and vegetable crops, etc. With 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. Intensive indoor and outdoor pig and poultry rearing farms are common with processing plants in the area. 2. Study area bounded by agricultural land mostly under arable cultivation, and existing pig rearing houses at Feltwell Fm to the east. There are 13 dwelling houses located to the south east of the study area. Warren Energy, an anaerobic digestion plant is located to the east of Feltwell Fm, however this is not associated with Wayland Farms Ltd. **<u>Topography</u>** 3. The topographic survey in the Flood Risk Assessment indicates that the proposed development is in an area with a

maximum ground level of approx. 15.30mAOD in the northwest of the site and a minimum ground level of approx. 12.09mAOD in the southwest of the site. The topographic survey shows the general fall of the site is from northwest to southeast[3].

Geology

4. No records for any artificially modified ground or natural superficial deposits[1], however a limited amount of topsoil and granular subsoil can be expected.

5. Bedrock geology is Holywell Nodular Chalk and New Pit Chalk Formations, undifferentiated[1].

6. Local geology has been logged in BGS borehole reference TL79SW12 within 600m northwest of study area[2]:

Topsoil	Ground level/topsoil	0-5m
Middle chalk	Hard chalk	5-26m
Lower chalk	Chalk mixed with clay & black flints. Grey clay mixed with cobbled chalk	26-29m 29-37m
Gault clay	Grey & blue clay with odd black flints. Grey clay mixed with black flints	37-44m 44-46m

(Create table at bottom of page, copy & paste in)

Soil vulnerability classification - leaching potential

7. Soil characterised as shallow, lime-rich over chalk or limestone, loamy, and freely draining. Particularly vulnerable to leaching of nitrate to groundwater[4].

Hydrogeology

8. The middle chalk has high intergranular and/or fracture permeability providing a high level of water storage and can support water supply and/or baseflow to rivers, lakes, and wetlands on a strategic scale (drinking water supply). Groundwater held within the bedrock chalk formations is classified as a principal bedrock aquifer[6]. Principal aquifers were previously classified as major aquifers.

9. Groundwater has high vulnerability to pollutants discharged at ground level owing to high leaching soil and absence of low permeability superficial deposits[6]. Groundwater vulnerability is classified as high, medium, or low based on hydrological, geological, hydrogeological and soil properties:

High	Areas able to easily transmit pollution to groundwater. Likely characterised by high leaching soils and absence of low permeability superficial deposits.
Medium	Intermediate, between high & low vulnerability
Low	Areas that provide greatest protection from pollution. Likely characterised by low leaching soils and/or presence of low permeability superficial deposits

10. Study area is not located inside a Source Protection Zone[6]. Nearest is an outer Zone 2 approx. 0.8km to the east, updated in Feb-24 result of the SPZ having been enlarged. Environment Agency has defined SPZ around large and public potable groundwater abstraction sites to provide additional protection to safeguard drinking water quality. Zones show risk of contamination from activities that might cause pollution in the zone. Zone 1 is an inner protection zone, 2 is an outer protection zone and zone 3 is the total catchment. Closer the activity, greater the risk.

11. Study area is not located inside a Drinking Water Safeguard Zone for groundwater[6]. Nearest is approx. 12.2km to southeast. Agency has established zones around public water supplies where additional pollution control measures are needed. Water Framework Directive (WFD) requires that Drinking Water Protected Areas be identified and given necessary protection with the aim of avoiding deterioration in quality to reduce the level of purification treatment required in the production of drinking water.

12. Study area is located inside a nitrate vulnerable zone[6]. Areas designated as being at risk from agricultural nitrate pollution. Farmers operating within these areas must follow mandatory rules to tackle nitrate loss from agriculture.

13. Groundwater level recorded at 11.88mbgl (below ground level) within 0.26km to the east of the study area at BGS borehole reference TL79SW49 at Feltwell Fm[2]. Borehole licensed to Wayland Farms Ltd for abstraction of groundwater for general farming and domestic use. No groundwater or surface water abstractions inside study area.

Surface waters, hydrology & catchment

14. There are no surface water features or networks onsite.

15. Study area located within Water Framework Directive Cut-off Channel surface water body catchment, a tributary of Great Ouse main river[7]. WFD surface water bodies may be rivers,

lakes estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set for each water body and reported on by the Environment Agency end of each six-year cycle.

16. Study area located within WFD Cam and Ely Ouse Chalk groundwater body. Groundwater bodies also covered by WFD, and same regime of objectives and reporting detailed in the previous section is in place. Cam and Ely Ouse Chalk overall rated poor as recently as 2019[7].

Sources of flooding

17. Fluvial flooding is caused by rivers and will occur when the river channel capacity is exceeded by its flow. Most rivers have a natural floodplain. Study area inside Flood Risk Zone 1 and therefore at very low risk of flooding from rivers, less than 0.1% (1 in 1,000) chance of flooding in any year[8]. The closest flood zones 2&3 are approx. 1.5km north of the study area.

18. Nearest watercourse is the Cut-off Channel approx. 2.4km to the west. The Cut-off Channel is a man-made waterway which runs along the eastern edge of the Fens in Norfolk and Suffolk. It is part of flood defence measures, and carries the headwaters of the River Wissey, Lark, and River Little Ouse. In times of flood water is discharged via Denver Sluice into the River Great Ouse[3].

19. Tidal flooding from the sea occurs when high tides and/or storm surges raise the level of tidal waters above the level of the shore or riverbank. The study area is 35km inland and therefore at very low risk of flooding from the sea. The watercourses outlined above are not considered to be influenced by the tides at the study area[3].

20. Surface water flooding sometimes known as flash flooding happens when heavy rain cannot drain away. It is difficult to predict as it depends on rainfall volume and location, can happen up hills and away from rivers and other bodies of water, is more widespread in area with harder surfaces like concrete. Medium risk of surface water flooding in the study area, chance of flooding between 1.0% and 3.3% (1 in 100 and 1 in 30) chance of flooding in any year[8]. Generally limited to southeast corner where pig houses and concrete apron are proposed.

21. Groundwater flooding is caused by unusually high groundwater levels when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a

<table>
<tr><td></td><td>longer duration than surface water flooding, lasting weeks, or months. High and moderate-high risk of groundwater flooding predicted inside the study area and limited to southeast corner[9]. The infiltration testing carried out in 2020 in preparing a drainage strategy for the proposed development showed no evidence for groundwater. Therefore, risk from groundwater is considered to be low[3].</td></tr>
<tr><td>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</td><td><u>Pollution incidents that may have affected land</u>

22. No records of any substantiated pollution incidents that may have affected land inside the study area[9].

<u>Historical land-uses and associated contaminants</u>

23. Established historical land-uses from OS maps at 1:10,000, and 1:2,500 scale[10], and recent aerial photographs[9].

<table>
<tr><td>1883
1906
1950</td><td>Greenfield, arable agriculture, and no building onsite</td></tr>
<tr><td>1957
1964</td><td>Site shown as being part of an airfield, and with runways and buildings. Loop type hardstanding and taxi way for aircraft constructed inside study area but mostly still greenfield.</td></tr>
<tr><td>1983</td><td>Airfield showing as disused, most runways and buildings removed. In study area hardstanding reduced in size and a poultry house has been erected in same place as the taxi way.</td></tr>
<tr><td>1999</td><td>Aerial photograph shows the loop type hardstanding for aircraft entirely removed leaving only the taxi way on south side, still in use as roadway today, and the poultry house has been removed. The pig rearing houses, associated buildings and lagoons have been erected at Feltwell Fm.</td></tr>
<tr><td>2001
2010
2023</td><td>Site indicated as being location of Feltwell Farm, and next to Breckland Farm.</td></tr>
</table>

<u>Licensed industrial activities (Part A(1))</u>

24. No records for any licensed industrial activities inside the study area. Wayland Farms Ltd: Process: Intensive farming; >2,000 pigs Production Pigs. Issue date 21/06/01, at Feltwell Fm. Warren Energy Ltd; Process: Disposal of >50T/D non-hazardous waste (>100T/D if only AD) involving biological treatment. Issue date 07/03/2016, 0.3km to the east[9].

25. No records for any waste exemption activities inside the study area. Wayland Farms Ltd waste exemptions at Feltwell Fm for burning waste in the open, storing waste in a secure place, use of waste in construction, and spreading waste to benefit agricultural land, expiry dates 30/11/24[9]. Latter potentially</td></tr>
</table>

	includes land spreading slurry and solid manure on arable farmland inside the study area. **<u>Visual/olfactory evidence of existing contamination</u>** 26. See evidence for historic contamination, below. **<u>Evidence of damage to pollution control measures</u>** 27. No records for any pollution control measures inside the study area.
Evidence of historic contamination, for example, historical site investigation, assessment, remediation, and verification reports (where available)	28. Risk assessment prepared for the Environmental Impact Assessment for planning application by Harrison Group Environmental Limited[11]. 29. Proposed area for expansion is currently an arable field and was the location of runways associated with the former Methwold Airfield. Potential contaminants of concern from agriculture include nutrient nitrogen, phosphorous, ammoniacal nitrogen, and from historical airfield operations metals, PAH, and petroleum hydrocarbons[11]. 30. Under hazard assessment *"Historical airfield operations could have resulted in soil contamination. However, the land on which new sheds will be constructed have been arable fields for the past 30 years, and such, the risk of contamination is assessed as low"*[11]. 31. Mitigation measures include site investigation and soil testing of former airfield land, risk assessment, and remediation if warranted. *"The investigation should include an assessment of the potential for contaminated soil from the historic uses of the site and the potential for migration of contamination from surrounding areas. However, based on the information available, it is not considered likely that any gross contamination is likely to be present which may otherwise limit the development potential"*[11].
Baseline soil and groundwater reference data	32. Based on the information available intrusive investigation to establish baseline soil and groundwater reference data was not considered warranted.
References & supporting information	1. British Geological Survey (2010); *Thetford; England and Wales Sheet 174 Bedrock and Superficial Deposits; 1:50,000*. 2. British Geological Survey; *Onshore borehole records.* Available at bgs.ac.uk 3. Canham Consulting Ltd (2023); *Flood Risk Assessment; On Proposed Extension of Pig Rearing Facility, Feltwell, Norfolk; For Wayland Farms.* 4. Cranfield Soil and Agrifood Institute *Soilscapes Map*. landis.org.uk 5. Government website *National Character Area Profiles*. www.gov.uk

	6. Government website *Aquifer Designation (Bedrock), Drinking Water Safeguard Zones (Groundwater) (England), Groundwater Vulnerability, Nitrate Vulnerable Zones 2017 Designations (England), Source Protection Zones (England).* Available at magic.defra.gov.uk (Accessed April-23) 7. Government website *Catchment Data Explorer*. environment.data.gov.uk 8. Government website *Check long-term flood risk for an area in England.* Available at www.gov.uk 9. Groundsure (2023) *Enviro + Geo Insight.* 10. Groundsure (2023) *Historical Maps Insight.* 11. Harrison Group Environmental Limited; *Desk Study Report; Project: Wayland Farms, Pig and Poultry Sites, Methwold; Reference No: EN23821_DS; November 2021: Prepared for: Wayland Farms Ltd*. 12. Environment Agency *We need more information about your application and incorrect payment of applicated charge* dated 03/05/2024.

3.0 Permitted activities

Permitted activities	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- (ii) 2,000 places for production pigs (over 30kg), (iii) 750 places for sows. Permit number EPR/XP3632QE/V003; Wayland Farms Ltd; Schedule1–Operations; Rearing of pigs intensively in an installation with a capacity for 20,948 production pig places. Airfield Fm: 4,874 places for pigs. Feltwell Fm: 16,074 places for pigs. Methwold Fm: capacity for 1,360 sow places. Authorised 28/03/08. License number AN/033/0051/002 to abstract groundwater; Wayland Farms Ltd; For general farming & domestic use; Annual volume 60,480m3, Max. daily volume 168m3. Expiry date 31/03/2027.
Non-permitted activities undertaken	Wayland Farms Ltd exemptions at Feltwell Fm for D7 Burning waste in the open, S2 Storing waste in a secure place, U1 Use of waste in construction, and U10 Spreading waste to benefit agricultural land. Expiry date 30/11/2024.
Document references for: • plan showing activity layout; and • environmental risk assessment.	Q6a Environmental risk assessment Feltwell Fm

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.

Sections 4.0-10.0 not required for the permit application.

4.0 Changes to the activity	
Have there been any changes to the activity boundary?	1. SCR relates to application to vary permit to extend installation boundary to enclose approx. 5.88 + 0.06 +0.49ha ~~4.34ha~~ greenfield agricultural land (Total installation area 13.04ha ~~12.55ha~~ ~~11.05ha~~). Otherwise, no previous boundary changes since permit was issued in 2008.
Have there been any changes to the permitted activities?	2. First application to vary permit to extend installation boundary to erect 14no new houses for intensively rearing pigs with a capacity for 14,000 places at Feltwell Fm.
Have any 'dangerous substances' not identified in the Application Site Condition Report been used or produced as a result of the permitted activities?	3. Updated the H1 Environmental Risk Assessment and Management Plan on any substances that could pollute soil or groundwater in accordance with SGN EPR 6.09 and information on government website. 4. No substances would be classified as 'dangerous' under the Control of Major Accident Hazards (COMAH) regulations.
Checklist of supporting information	• Plan to show 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

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.