

# Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Richard Towse and Helen Towse

Marl Farm Cliffe Lane Holme-on-Spalding-Moor Yorkshire YO43 4EB

Permit number

EPR/ZP3432JX

## Marl Farm Permit number EPR/ZP3432JX

## Introductory note

#### This introductory note does not form a part of the notice.

The main features of the permit are as follows.

Marl Farm is situated approximately 2.5 kilometres east of the village of Holme-Upon-Spalding-Moor. The installation is approximately centred on National Grid Reference SE 83767 37471.

The installation is operated by Richard Towse and Helen Towse and comprises three poultry houses, numbered one to three. The three poultry houses provide capacity for 100,000 broiler birds.

Birds will be housed at 1 day old and de populated at around 49 days of age with approximately 7 days empty, which will give 7 cycles per annum. This will be done on an all-out all-in basis.

Before bird arrival the houses will be pre-warmed with hot water heaters fuelled by LPG boilers. Floors will be covered with a layer of bulk sawdust. Temperature and humidity is computer controlled, and will be closely monitored on a daily basis to achieve a target level of 21° C post brooding and a relative humidity of 60-65%. This should achieve litter with a dry matter content of between 60-70%. Ventilation is controlled by a negative pressure system, with side wall air inlets high velocity roof ridge mounted extraction fans with an efflux velocity of 11 m/s at a height greater than 5.5m. Water is delivered to birds via a nipple drinking system fitted with cups to reduce leakage and spills leading to drier litter. Water from the washout of poultry houses is channelled to dirty water tanks by means of diverter valves. The contents of the dirty water tanks are tankered off site after wash down has been completed to be spread on land owned by the operator. Roof water drains via French drains to an unnamed field ditch at the south eastern boundary of the installation. All clean water drains have sediment traps which are emptied at the end of each cycle and sent off site with the litter.

The birds will be fed a minimum of three diets with reducing levels of protein and phosphorous, as the bird weight increases with age. Feed is delivered from a UKAS accredited feed mill and blown into bulk feed bins situated at the ends of the houses. From the feed bins the feed is delivered by auger into the houses and distributed to the birds via a pan feeding system.

At depletion the litter will be removed from site and sold. The farm will then be pressure washed disinfected, dried out prior to the cycle beginning again.

Fallen stock during the production cycle will be collected and recorded daily. These will be collected by a licensed disposal contractor under the National Fallen Stock Scheme.

There is 1 Special Area of Conservation (SAC), Special Protection Area (SPA), Ramsar site (the same site, designated as a SAC, SPA and Ramsar site) located within 10 kilometres of the installation. There is 1 Site of Special Scientific Interest (SSSI) located within 5 km of the installation. There are no Local Wildlife Sites (LWS), Ancient Woodlands (AW) or Local Nature Reserves (LNR) within 2 km of the installation. An assessment of the impact of emissions has been carried out and the installation is considered to have no adverse effect on the nature conservation sites.

We have reviewed the permit for this installation against the revised BAT Conclusions in the Intensive Farming BAT conclusions document dated February 2017. The permit conditions and schedules ensure the compliance of this installation with this BAT conclusions document.

The status log of the permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit				
Description	Date	Comments		
Application EPR/ZP3432JX/A001	Duly made 21/03/18	Application for an intensive farming poultry installation permit.		
Schedule 5 notice issued 05/07/2018	10/07/18	Information demonstrating BAT compliance, odour management plan, noise management plan and dust and bioaerosol management plan.		
Request for further information issued 10/08/2018	13/08/18	Confirmation of dust emissions reporting, as well as clarification of site drainage.		
Permit determined EPR/ZP3432JX (Billing reference: ZP3432JX)	17/09/18	Permit issued to Richard Towse and Helen Towse.		

End of introductory note

## Permit

### The Environmental Permitting (England and Wales) Regulations 2016

#### Permit number

#### EPR/ZP3432JX

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

Richard Towse and Helen Towse ("the operator"),

of

Marl Farm Cliffe Lane Holme-on-Spalding-Moor Yorkshire YO43 4EB

to operate an installation at

Marl Farm Cliffe Lane Holme-on-Spalding-Moor Yorkshire YO43 4EB

to the extent authorised by and subject to the conditions of this permit.

Name	Date
David Griffiths	17/09/2018

Authorised on behalf of the Environment Agency

## Conditions

## 1 Management

#### 1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
  - (a) in accordance with a written management system that identifies and minimises risks of pollution, so far as is reasonably practicable, including those risks arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
  - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of the permit.

### 1.2 Energy efficiency

- 1.2.1 The operator shall:
  - (a) take appropriate measures to ensure that energy is used efficiently in the activities; and
  - (b) maintain records of fuel and energy consumption used in the activities.

#### 1.3 Efficient use of raw materials

- 1.3.1 The operator shall:
  - (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities; and
  - (b) maintain records of raw materials and water used in the activities.

# 1.4 Avoidance, recovery and disposal of wastes produced by the activities

- 1.4.1 The operator shall take appropriate measures to ensure that the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities and that;
  - (a) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
  - (b) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

## 2 **Operations**

#### 2.1 Permitted activities

2.1.1 The only activities authorised by the permit are the activities specified in schedule 1 table S1.1 (the "activities").

### 2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

### 2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 The operator shall maintain and implement a system to record the number of animal places and animal movements.
- 2.3.4 The operator shall ensure that a diet formulation and nutritional strategy is used to reduce the total nitrogen and total phosphorous excreted.
- 2.3.5 The operator shall take appropriate measures in disposal or recovery of solid manure or slurry to prevent, or where this is not practicable, to minimise pollution.
- 2.3.6 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.7 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
  - (a) the nature of the process producing the waste;
  - (b) the composition of the waste;
  - (c) the handling requirements of the waste;
  - (d) the hazardous property associated with the waste, if applicable; and
  - (e) the waste code of the waste.

## 3 Emissions and monitoring

#### 3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points specified in table S3.1 and S3.2.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

### 3.2 Emissions of substances not controlled by emission limits

3.2.1 Emissions of substances not controlled by emission limits shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.

- 3.2.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits; and
  - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

#### 3.3 Odour

3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.

### 3.4 Noise and vibration

3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.

### 3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
  - (a) point source emissions specified in tables S3.1 and S3.2; and
  - (b) process monitoring specified in table S3.3.
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

### 3.6 Pests

- 3.6.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.
- 3.6.2 The operator shall:
  - (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution, hazard or annoyance from pests; and
  - (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

## 4 Information

### 4.1 Records

- 4.1.1 All records required to be made by schedules 3, 4 and 5 to this permit shall:
  - (a) be legible;
  - (b) be made as soon as reasonably practicable;
  - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
  - (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
    - (i) off-site environmental effects; and
    - (ii) matters which affect the condition of the land and groundwater.
- 4.1.2 The operator shall maintain convenient access, in either electronic or hard copy, to the records, plans and management system required to be maintained by this permit.

### 4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 For the following activities referenced in schedule 1, table S1.1 a report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
  - (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
  - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.2; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

### 4.3 Notifications

- 4.3.1 In the event:
  - (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately :---
    - (i) inform the Environment Agency,
    - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
    - (iii) take the measures necessary to prevent further possible incidents or accidents.
  - (b) of a breach of any permit condition the operator must immediately :---
    - (i) inform the Environment Agency, and

- (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time.
- (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (a) any change in the operator's name or address; and
- (b) any steps taken with a view to the dissolution of the operator.

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.
- 4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
  - (a) the Environment Agency shall be notified at least 14 days before making the change; and
  - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

#### 4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately", in which case it may be provided by telephone.

# Schedule 1 – Operations

Table S1.1 activities			
Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity	
Section 6.9 A(1)(a)(i) Rearing of poultry intensively in an installation with more than 40,000 places	The rearing of poultry in a facility with a capacity for 100,000 broiler places.	From receipt of birds, raw materials and fuels onto the site to removal of birds and associated wastes from site.	
Directly Associated Activity	Description of specified activity	Limits of specified activity	

Table S1.2 Operating techniques			
Description	Parts	Date Received	
Application EPR/ZP3432JX/A001	Responses to Part B3.5 of the application form and referenced supporting documentation.	09/03/18	
Response to Schedule 5 Notice dated 05/07/18	Response to request for information demonstrating BAT compliance (document titled "Marl Farm"), odour management plan (reference "Odour management plan"), noise management plan (reference "Noise management plan") and dust and bioaerosol management plan (reference "Dust management plan").	10/07/18	

# Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification

# Schedule 3 – Emissions and monitoring

Table S3.1 Point source	e emissions to	air – emissior	n limits and m	nonitoring rea	quirements	
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
High velocity roof fan outlets on poultry houses 1, 2 and 3 as shown on the site plan labelled "Marl Farm Layout Drainage Plan" submitted with the application EPR/ZP3432JX/A001	Poultry houses 1, 2 and 3					
Gable end fan outlets on poultry houses 1, 2 and 3 as shown on the site plan labelled "Marl Farm Layout Drainage Plan" submitted with the application EPR/ZP3432JX/A001	Poultry houses 1, 2 and 3					
Vent from diesel tank as shown on the site plan labelled "Marl Farm Layout Drainage Plan" submitted with the application EPR/ZP3432JX/A001	Diesel tank					
Exhaust from standby generator as shown on the site plan labelled "Marl Farm Layout Drainage Plan" submitted with the application EPR/ZP3432JX/A001	Standby generator					

Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
Outlet to surface water, un-named Dyke south east of installation boundary as indicated on the site drainage plan reference 'Marl Farm Layout Drainage Plan' in application EPR/ZP3432JX/A001	Roof water from poultry houses 1, 2 and 3 and associated yard water intercepted by French drains prior to discharge (excluding periods of washout)					

Table S3.3 Process m	Table S3.3 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Limit (incl. Unit)	Monitoring frequency (1)	Monitoring standard or method	
the site plan labelled place/ "Marl Farm Layout	kg N excreted/animal place/year	0.6 kg N/animal place/year	Annually	Estimation by using manure analysis for total nitrogen content.	
Drainage Plan" submitted with the application EPR/ZP3432JX/A001.	kg P <sub>2</sub> O <sub>5</sub> excreted/animal place/year	0.25 kg P₂O₅ animal place/year	Annually	Estimation by using manure analysis for total phosphorus content.	
	kg NH₃/animal place/year	0.08 kg NH₃/animal place/year	Annually	Estimation using emission factors.	
	Dust	n/a	Annually	Estimation using emission factors.	

# Schedule 4 – Reporting

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Process monitoring Parameters as required by condition 3.5.1		Every 12 months	1 January

Table S4.2 Reporting forms			
Media/parameter	Reporting format	Date of form	
kg NH <sub>3</sub> /animal place/year	Form Process Monitoring 1 or other form as agreed in writing by the Environment Agency	17/09/18	
kg N excreted/animal place/year & kg P <sub>2</sub> O <sub>5</sub> excreted/animal place/year	Form Process Monitoring 1 or other form as agreed in writing by the Environment Agency	17/09/18	
Dust atmospheric mass emission	Form Process Monitoring 1 or other form as agreed in writing by the Environment Agency	17/09/18	

## **Schedule 5 – Notification**

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

## Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution		
To be notified within 24 hours of detection		
Date and time of the event		
Reference or description of the location of the event		
Description of where any release into the environment took place		
Substances(s) potentially released		
Best estimate of the quantity or rate of release of substances		
Measures taken, or intended to be taken, to stop any emission		
Description of the failure or accident.		

(b) Notification requirements for the breach of a limit		
To be notified within 24 hours of detection		
Emission point reference/ source		
Parameter(s)		
Limit		
Measured value and uncertainty		
Date and time of monitoring		
Measures taken, or intended to be taken, to stop the emission		

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

(c) Notification requirements for the detection of any significant adverse environmental effect		
To be notified within 24 hours of detection		
Description of where the effect on the environment was detected		
Substances(s) detected		
Concentrations of substances detected		
Date of monitoring/sampling		

# Part B – to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	
Name*	
Post	
Signature	
Date	

\* authorised to sign on behalf of the operator

## Schedule 6 – Interpretation

"accident" means an accident that may result in pollution.

"application" means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

"authorised officer" means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

"building" means a construction that has the objective of providing sheltering cover and minimising emissions of noise, particulate matter, odour and litter.

"emissions to land" includes emissions to groundwater.

"emissions of substances not controlled by emission limits" means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit.

"EP Regulations" means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

"groundwater" means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

"Hazardous property" has the meaning in Annex III of the Waste Framework Directive.

"Industrial Emissions Directive" means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions.

"List of Wastes" means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time.

"Manure and slurry" have the following meaning:

- Manures may be either slurries or solid manures.
- Slurries consist of excreta produced by livestock whilst in a yard or building mixed with rainwater and wash water and, in some cases, waste bedding and feed. Slurries can be pumped or discharged by gravity.
- Slurry includes duck effluent, seepage from manure and wash water.
- Solid manures include farmyard manure (FYM) and comprise material from straw-based housing systems, excreta with lots of straw/sawdust/woodchips in it, or solids from mechanical separators.
- Most poultry systems produce solid manure (litter).
- · Solid manure can generally be stacked.

"pests" means Birds, Vermin and Insects.

"SGN How to comply – Intensive Farming" The EPR Sector Guidance Note 6.09 for intensive pig and poultry farmers, Version 2 published January 2010.

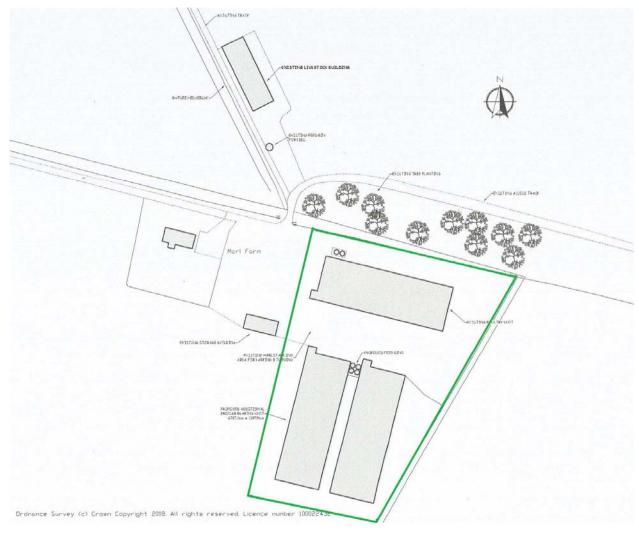
"Waste code" means the six digit code referable to a type of waste in accordance with the List of Wastes and in relation to hazardous waste, includes the asterisk

"Waste Framework Directive" or "WFD" means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste.

"year" means calendar year ending 31 December.

# Schedule 7 – Site plan

Site plan - showing installation boundary as referred to in condition 2.2.1.



END OF PERMIT

Permit Number:

EPR/ZP3432JX

**Operator:** 

**Richard Towse and Helen Towse** 

Facility

Marl Farm

Form Number:

Process Monitoring 1 17/09/2018

#### Reporting of other performance indicators for the period DD/MM/YYYY to DD/MM/YYYY

Ammonia emissions

Animal type/housing	Emission Factor utilised in Kg NH <sub>3</sub> /animal place /year	Total Value for animal type/housing type in kg NH3/year
		Total value for each animal type/housing
Total	-	Aggregate value to provide total installation emissions

Operator's comments:

#### Nitrogen excretion

	Emission Factor utilised in	Total Value for animal type/housing type in kg N excreted/year
	Kg N/animal place /year	
		Total value for each animal type
Total	-	Aggregate value to provide total installation emissions

Operator's comments:

#### Phosphorous excretion

	Emission Factor utilised in	Total Value for animal type/housing type in kg P excreted/year
	Kg P/animal place /year	
		Total value for each animal type
Total	-	Aggregate value to provide total installation emissions

Operator's comments:

#### **Dust emissions**

	Emission Factor utilised in Kg PM <sub>10</sub> dust/animal place /year	Total Value for animal type/housing type in kg PM₁₀ dust /year
		Total value for each animal type
Total	-	Aggregate value to provide total installation emissions

Operator's comments:

Signed .....

Date.....

(Authorised to sign as representative of Operator)

Permit number EPR/ZP3432JX