

## Appendix 9. 8A – Technical Standards

### 1.0 Introduction

Holcombe Brook Farm will be purpose built to the highest possible standards to ensure maximum animal welfare with minimum environmental impact. The owners already farm an intensive poultry installation under EP permit number **EPR/XP3337HH** in East Devon

The operations director and award-winning farmer, Tom Martin will be bringing many years of experience and an unblemished environmental record into the design and build of this ‘state of the art’ farm.

The farm consists of an existing poultry house, built some 30 years ago by Harlow Bro’s Timber. This house will be re-fitted and incorporated into a suite of three buildings to house 60,000 commercial layer hens. The installation will be built specifically to prevent and reduce harmful industrial emissions, to air, water and land, while promoting the use of techniques that reduce pollutant emissions and that are energy and resource efficient.

Throughout the build and whilst in operation, the owners and their team are committed to the Available Techniques (BAT) which are the best for preventing or minimising emissions and impacts on the environment.

The overall site is rectangular with approx. a 1.5m fall from south to north and virtually level from west to east, at an overall ground level of about 24m. Such a planning application requires the submission of a surface drainage system to the latest SUDS standards. This ensures that heavy and extreme rainfall on “hard” concrete and roof areas is “fully contained” within the site and so cannot directly cause issues on lower land by adding to surface water flooding.

The main access doors to the houses for cleaning out will be on the southern side with each house serviced by a small concrete pad 6m x 6m outside the wide doors at the southern end. As access to this side is not as regular it will be provided by gravel/hardcore roads regarded as permeable. Access on a day to day basis e.g. food delivery and egg collection will be at the northern end serviced by a narrow concrete yard 6m wide.

### 2.0 Overview

#### 2.1 The operation of the farm will be in accordance with:

- The Sector Guidance Note (SGN) EPR6.09.
- Red Tractor
- DEFRA Code of Practice for the Welfare of Meat Chickens and Meat Breeding Chickens
- The framework of the Lion Code
- The guidelines established by the integrator providing the contract we work under.
- Our Veterinary Health Plan
- Our own documented Procedures and Policy
- The section 106 Agreement between the Directors and Somerset Council see **Appendix 3**.

## 2.2 Management Commitment and Staff Training

At Holcombe, the Directors and Farm Managers are committed to the overall environmental performance of our farms. In accordance with BAT, we have implemented and adhere to an environmental management system (EMS) that incorporates the following training promises:

- Educate and train staff, in particular for:
  - relevant regulations, livestock farming, animal health and welfare, manure management, worker safety;
  - understanding and respect for the natural world and the environment;
  - emergency planning and management;
  - repair and maintenance of equipment.

## 2.3 Ecology

The ecology report by Richard Green Ecology in July 2020 states that the site consists of areas of rank semi-improved grassland, ruderals, scrub, rubble/waste, trees and hard standing surrounded by species-rich hedges/line of trees.

## 2.4 Soil Types and Drainage

As a part of our planning application, we commissioned a Surface Water and Waste Water Management Plan.

The actual site appears to be virtually on the join between Soilscape 6 with the description below a “Freely draining acid soil” and Soilscape 8 (darker colour) a “slightly acid loamy and clayey soil with impeded drainage”. However, drainage tests suggested that the infiltration rates reflect a soil much nearer a 2 rating under SUDS (i.e. the free draining Soilscape 6 from Landis) this means that the location would have the lower runoff figures that would be suitable for an Attenuation Basin.

## 2.5 Feed

- Selection and use of feed is in accordance with the SGN EPR6.09.
- Protein is reduced over the growing cycle by providing different feeds.
- Feed storage bins are specifically designed to accommodate the required feeding regime.

## 2.6 Housing

- Housing design and management is in accordance with the SGN EPR6.09.
- The sheds have a damp proof course.
- The sheds are fan ventilated with a fully littered floor equipped with non-leaking drinking systems.
- The buildings will be insulated to modern standards with glass fibre insulation. Ventilation will be provided by inlets in the bays of the side walls and high-speed roof extraction chimneys which will contain 15 x 820mm Ziehl fans 3 per building.

- Litter is kept loose and friable. The quality is inspected daily, to ensure it does not become excessively wet or dry. Steps as described in the SGN6.09 will be taken to rectify any changes to the quality of the litter.
- Temperature in the sheds meets the health and welfare needs for the age and number of the birds.
- A computer automatically controls ventilation.
- The ventilation management system controls the ventilation rates depending on the health and welfare needs of the birds and the outside weather conditions.

## 2.7 Drainage

Drainage – can be split into three categories:

1. Clean Water – managed run off to bespoke Attenuation Basin
2. Dirty Water – limited to turnaround period and foot-dip disposal – Dedicated Klargesters style covered tank. (Slurry removed from site)
3. Staff Welfare facilities. Dedicated Klargesters style covered tank. (Slurry removed from site)

## 3.0 Main Measures Employed to Control Emissions

### 3.1 Ventilation management and ammonia output

#### 3.1.1 Controlling the Shed Temperature

Only Minimum Ventilation Levels will be used throughout the crop unless the internal temperature exceeds 20°C. Then the heat buildup in the sheds will require additional ventilation to control the house temperature

The maximum ventilation rate will only be switched to when outside temperatures are around 24 °C or above, which is only likely between 11am and 5pm. The other 18 hours would be ventilated using varying amounts of the extract fans.

All poultry houses will be fitted with climate-controlled misting systems.

#### 3.1.2 Controlling the Ammonia Output

Managing the ammonia output of a poultry house is dependent on good management and smart ventilation systems to maintain litter quality. Good quality litter is vital for animal and staff welfare.

*Best practices to manage litter quality include the following:*

- Using good quality Defra approved litter (Wood Shavings) to the correct depth.
- Daily Housing Checks by well trained staff to manage litter.

- Checks include:
  - **Drinker management:** Ensure that drinkers are properly managed to prevent spillage, which can lead to wet litter.
  - **Preventing leaks:** Regularly check and maintain watering systems to prevent leaks that can cause litter to 'cake'.
  - Regularly remove any spoilt areas where moisture is trapped and can promote bacterial growth.
  - **Aeration:** If necessary, aerating the litter can help it dry and release moisture.

### 3.1.3 Ventilation Management

- Using a Climate Computer allows the relative humidity levels to be controlled and recorded 24h hours per day throughout each crop cycle.
- Keeping the humidity level below 65% - helps control ammonia levels, which can be detrimental to bird health, staff health and the environment.
- Helps remove excess moisture from the litter, preventing it from becoming wet.

### 3.1.4 Inlet Control

- The velocity of the incoming air and the thickness of the inlet opening are crucial to creating the correct air pattern and distribution.
- The velocity of the air at the inlets is directly related to the differential negative pressure caused by the level of fan extraction. The Climate Computer monitors the differential pressure (Pascals) and controls the inlets according to the set pressure relevant for the building width and design.

### 3.1.5 House Ventilation and Dust

- The new houses will have high velocity outlets through the ridge so that stale air is carried upwards and is not deflected down the roof line which encourages dust to settle.
- There is unlikely to be any measurable volume of dust requiring the house roofs to be periodically washed down.
- Any odours also will tend to be carried away from the site by the prevailing wind aided by the high-level outlets.

### 3.1.6 Other Features

- The buildings are fully insulated to eliminate any possibility of cold air draughts causing damp litter.

## 3.2 Poultry Feed Storage

- Selection and use of feed are in accordance with Sector Guidance Note (SGN) EPR6.09 'How to comply with your environmental permit for intensive farming'

- Feed is stored in purpose-built, covered, feed silos, located next to the poultry houses. Dry feed is delivered to the farm by lorry from feed accredited suppliers. Feed is blown, augured, or pumped directly from the lorry into the relevant storage silos.
- Feed is piped from the silos to the sheds, minimising dust emissions.
- Feed storage vessels are protected from collision damage by curbing and barriers
- Areas around buildings are kept free from spilt feed
- Protein and phosphorus levels in the rations are matched to the animals' needs by providing at least two different feed formulations.

### 3.3 Clean Water, Dirty Water (Slurry) & Litter – Storage and Management

In August 2020 Natural England alerted affected councils to the high levels of phosphates in the Somerset Levels and Moors, stressing the need to protect them from further phosphate pollution. The entire farm both inside the poultry houses and the external areas is designed to minimise polluting elements.

#### 3.3.1 Clean Water - Attenuation Basin

The site design and ventilation system ensure that any dusts that can get caught up by rainfall are negligible meaning that during normal operating periods all water running from the farm can safely run to an Attenuation Basin.

The new houses will not have gutters and so the rainwater will run off the house roofing directly into stone drains also acting as soakaways containing a perforated plastic drain running to an attenuation basin at the northern end. These drains will also take rainwater from the service yard and pads which can be regarded as clean all the time.

It is suggested that these will measure 400mm wide x 1m deep the length of the new buildings also passing under the service yard (6m). By marginally exaggerating the width and depth of these drains over "standard" French drains they can also form an effective soakaway coping "immediately" with about 1/3rd of the peak rainfall considered below. These give a potential soil to stone soakaway surface area of 2.4 sq. m per metre length and requiring 0.4 m<sup>3</sup> of stone per metre run. Up to 250mm perforated drainage pipe within the stone drains will be installed. The pipes will not be laid on the bottom of the trench but will be slightly raised to encourage the water to soak away rather than flow through the pipes.

With a 1 in 200 fall and following the natural fall on the land from south to north potentially there can be at least 600mm of stone above the pipes. Following **Buildings Digest 365** we note the encouragement towards long narrow trench soakaways and if we allow for 50% of the depth acting as a soakaway on the sides and exclude the base as advised we have a total of 638m<sup>2</sup> of soakaway area for all the eaves drains (638m total length x 2 sides x 0.5m soakaway depth). Clearly initially, perhaps for the many years, the infiltration rate will be very much greater i.e. in addition through the base before it starts to silt up. Using the average site infiltration rate of 1.52x 10<sup>-5</sup> m/sec, for all 6 drains over 5 minutes the rate water will enter the subsoil is 2.9 m<sup>3</sup>. In addition once the basin is full, following the same principles, we need to add in the sides of the basin (see below). As a general guideline on free draining land a figure of 1 cu. metre of soakaway per 50 sq. metres of rainfall catchment is reasonable. Overall this would mean a need for a total eaves soakaway volume of about 152 cu. metres. The stone French drains alone as proposed will have a total volume of 255m<sup>3</sup> suggesting they are more than adequate to cope with the normal volume of roof and yard water. Assuming stone of a 40mm nominal size the total void volume will be of the order of 30% i.e. 77m<sup>3</sup>.

The advantage of trench soakaways is therefore the high ratio of trench sides (and so the soakaway area) to surface area available.

### 3.3.1.1 Rainfall Data

The average long-term rainfall for the area is 744mm and looking at the 1 in 100 return period as requested local rainfall figures for the site and the overall hard area considered of 7,611 m<sup>2</sup> (houses and yard area) the volumes are:-

Storm Duration	* Depth of Rainfall mm	Total Volume of Rainfall on 7,611 m <sup>2</sup>	**Volume allowing an extra 40% for global warming m <sup>3</sup>	Volume draining away via eaves soakaways m <sup>3</sup>	Void Volume within stone m <sup>3</sup>	Extra Storage Volume/Soak away required m <sup>3</sup>
5 mins	15.3	116	163	3	77	83
15 mins	27.8	212	296	9	77	210
30mins	36.6	279	390	17	77	304
1 hour	46.0	350	490	35	77	378
2 hours	55.5	422	591	70	77	444
3 hours	61.2	466	652	104	77	471
4 hours	65.3	497	696	139	77	480
6 hours	71.2	542	759	209	77	473
12 hours	82.3	626	877	418	77	382
24 hours	94.8	722	1010	835	77	98
30 hours	98.6	750	1051	1,044	77	Nil
36 hours	102.7	782	1094	1,252	77	Nil
48 hours	108.5	826	1156	1,670	77	Nil
72 hours	117.2	892	1249	2,506	77	Nil
96 hours	126.1	960	1344	3,340	77	Nil
8 days	160.4	1221	1709	6,681	77	Nil
25 days	247.1	1881	2633	20,880	77	Nil

The overall annual rainfall has been taken from UKSuds and the hourly factors obtained from AS Modelling & Data based originally on Met. Office figures. \*\* Factors from various council SUDS sites. The drainage design needs to allow for rainfall on the new house roofs and immediate service yard area to match 1 in 100 year figures **plus 40% for global warming** over the lifespan of the houses believed to be less than 50 years. (Council demands seem to vary from 20% and 40%.) It's virtually impossible to size a traditional soakaway that would fully contain the 1 in 100 year rainfall **plus 40% global warming** but by having a grassed overflow attenuation basin the whole volume can be contained and held while it soaks away. Drainage into the ground at the low rate is occurring all of the time during rainfall.

The most challenging period for storage is at or around 4 hours requiring up to 480 m<sup>3</sup> of buffer capacity (see above) in a long balancing basin on the northern side allowing the excess water to seep away through the sides of the basin with some flowing back up the pipes and soaking away through these sides. Careful pipe levels and the base of the basin should be taken at the time of installation to minimise the fall on the eaves pipes and so maximise the retention and then water flowing back into the pipes to soak away as the water level in the basin

subsides. This suits the south to north fall on the site (see notes below). The basin will broadly measure the total width of the buildings plus the gaps between.

This layout also minimises the costly pipework necessary which will then run directly into the basin, without needing to link up.

### 3.3.1.2 Grass lined Attenuation basin sizing

90m x 9.0m at the surface = 810m<sup>2</sup>

Depth 1.0m

Sloping sides 1 in 3

84m x 3.0 at the base = 252 m<sup>2</sup>

Capacity 531 m<sup>3</sup>

The fall from south to north is approximately 1.5m.

Some of the spoil on the site will be used to create shallow banks on the sides which will minimise the depth of dig thereby encouraging more water to flow back into the eaves drainage pipes as the water level subsides.

Water will also be soaking away through the basin sides as the water level will be dropping and along 1/4 of the drainage pipes giving a total infiltration area of:-

Basin sides 2 x 87m plus 2 x 6m x 1/2m deep = 90 m<sup>2</sup>

Once the initial flush settles down 1/4 length of the eaves drainage channels will start to help out i.e. 6 x 2 x 95m/4 x 1/2m deep adds a further 142m<sup>2</sup> of soakaway area.

Total soakaway area = 232 m<sup>2</sup>.

Infiltration rate over 5 minutes at  $1.52 \times 10^{-5}$  m/sec (as above) = **1.05m<sup>3</sup>**

On this basis to fully empty the basin after this level of rainfall will take a total of 38 hours (480/1.05). In practice totally ignoring any infiltration through the base of the basin a big “ask.” It will be many years before this would be truly silted up, if ever, with healthy grass roots helping to keep the surface “open” and no traffic movement to compact the surface soil. If we include the base of the basin 84m x 3m this more than doubles the soakaway area thereby halving the time to about 19 hours.

### 3.3.2 Dirty Water - Storage and Management

The dirty water storage facilities will conform to the technical measures detailed in the ‘Water resources control of pollution (silage, slurry and agricultural fuel oil) regulations 2010 (England) and as amended 2013’ (SSAFO). The base of the storage tank and all parts of the drains and reception pits will be impermeable.

All the buildings will have a link to the underground dirty water catchment tank on site. The collection system will comprise 1no. 20,000 litre Klargest style environmental storage tank wrapped in 225mm of concrete and underneath a reinforced concrete slab. The tank will be emptied as and when required and taken away by the registered contractor in accordance with the Section 106 Agreement – see Appendix 3.

At the end of the cycle, all birds are depleted off site with the buildings being dry cleaned by means of compressed air being used to remove dust build up from the building internals and equipment before litter is removed. The buildings are then washed clean using high pressure water which is collected and removed from site for land spreading before all building internals are disinfected to point of run.

All dirty water is generated solely during the clean down process. To ensure no pollution risks are posed this effluent must be handled appropriately. The new buildings will benefit from power floated level unobstructed concrete floors and as the brushing down of the floor after clearing out the litter will be carried out there will be very little solid matter to be carried away with the washing water. This will run to the manholes/sumps and onto the underground tanks.

Therefore, there is very little solid matter left to block drains and most of this settles out on the concrete 'en route' and can be swept up separately. The yard area will also be kerbed to ensure all material is contained within the site.

The floors have a fall of approximately 200mm-300mm to allow wash water to fall to the dirty water drain. In practice because of the warm temperature of the concrete floor inside the houses some of this water will evaporate.

### 3.3.3 Staff Welfare Sewerage

Foul water from the staff washroom facilities does not enter either the Attenuation Basin nor the Dirty Water Tank. Drains will be installed within the units and run to a dedicated Klargest style sewerage treatment plant

### 3.3.4 Litter - Management

There is no storage of litter on site and all spent litter is handled in accordance with the **Section 106 Agreement – see Appendix 3.**

On an annual basis, the waste bedding will be removed by skid steer at the end of the crop and taken by tractor and sealed trailer offsite.

During the clean out period

the outside service area will be treated as fouled with wash water being diverted to the containment tank.

Following removal of waste, the buildings will be pressure washed and disinfected prior to a new batch of hens entering the facility.

Holcombe Farms operate within the standards set for poultry units (DEFRA Code of Practice for the Welfare of Meat Chickens and Meat Breeding Chickens). Under Disease Control and Biosecurity regulations, farmers are asked to ensure that used litter is removed from the houses and removed from site before re-stocking.

All waste bedding is taken off site to third party landowners for spreading in accordance with the Code of Good Agricultural Practice (COGAP). Such waste to land provides environmental and cost saving benefits and reduces reliance on inorganic fertilisers. The manure is rich in N, P and K and so greatly reduces crop fertiliser costs.

All waste removed from site is recorded by the contractor – details include description of the waste and quantity, waste regulation codes and how the waste is contained. Additionally, the site where the waste is removed from, the person removing the waste (the transferee) and where it is being transferred to is recorded. A copy of this information is held with the waste producer, the transferee, and the receiver of the waste. A similar record of waste removal/transference is kept for the integrator.

In addition to the requirements under Section 106, the Conformity to the Red Tractor Scheme also ensures that waste must be disposed of correctly and a comprehensive Manure Management Plan is essential to ensure that standards are adhered to.

## 4.0 Fuel, oils and chemical storage - Bunding & Containment

- Fuel oil, oils, pesticides, and veterinary medicines are all stored in fire resistant, bunded areas capable of retaining any spillage and are dry, frost free and secure.
- Fuel oil for the standby generator is stored in a bunded tank that meets the requirements of the Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations 1991 (amended 1997) and meet the requirements outlined in SGN EPR6.09. The bund has a capacity of 110% of the oil tank. The bund base and walls are impermeable to oil and water, and designed to catch leaks from tank fittings (including the tanker connection point, site gauge and shut-off valve). The tank is not within 10 m of a watercourse.
- There are no yard drains, ditches or land drains within 10 m.
- The tank tap through which fuel oil can be discharged is within the bund. The tap is locked shut when not in use
- There is a flexible delivery pipe permanently attached to the primary tank, which is fitted with a self-closing tap at the end. The hose and tap are locked inside the bund when not in use
- Tanks/Bunds are regularly inspected.

## 5.0 Feed

- Feed is kept in silos adjacent to the flock houses. No liquid feed is stored at the site. The silos are sited away from site traffic and protected from collision damage.

## 6.0 Housing

Housing design and management is in accordance with SGN EPR6.09 'How to comply with your environmental permit for intensive farming'

The only housing systems in use at the farm are deep litter wood shavings. Refer to the building inventory (page 12) for more detail

The existing building was erected in 1996. After the site has been re-developed the existing housing and drainage has been assessed as BAT (refer to the Housing and Drainage Reviews **Appendix 13. .5 8e**). The two new houses will be built to BAT standards

The new buildings will be connected by way of a new link room containing shared control room facilities for biosecurity and use the most up-to-date construction technology to bring about a modern breeding system

The three poultry houses will be linked by a biosecurity corridor at the northern end. The new buildings will measure 91.63m x 24.4m and the extended present building 99.0m long x 20.6m wide plus the corridor 81.6m long x 6.15m wide deep. There will be a narrow concrete service area across the northern end measuring 82m long x 6m and a small pad outside each of the main doors at the southern end to remove the litter. The remaining access down the side of the buildings to the southern end will be gravelled and so regarded as permeable (**see plan Appendix 4.1**).

Overall including the present building there will be an increased “hard” impermeable roof and yard totalling as follows:-

	Proposed m <sup>2</sup>
2 new sheds 2 x 91.63m x 24.4m	4,471
Extended existing shed 99.0m x 20.6m	2,039
Biosecurity linking corridor linking 3 sheds proposed new sheds 81.6m x 6.15m	501
Service yard 82m long x 6m	492
3 pads for cleaning out 3 x 6m x 6m	108
Totals	<b>7,611</b>

## 6.1 Building Construction

- The buildings to be provided will be sited on new or existing concrete slabs of approximately 100mm thick (with thickened edge beam footings) and will be of a steel framed, clear span construction and clad with box profile polyester coated steel sheeting.
- The building will be insulated to modern standards with glass fibre insulation.
- Ventilation will be provided by inlets in the bays of the side walls and high-speed roof extraction chimneys which will contain 7 x 820mm Ziehl fans per building.

## 6.2 Building Management

- All buildings and structures on site will be maintained in good repair, in accordance with the management system. (see **Appendix 2**)
- There is a programme of inspection and planned preventative maintenance for the housing and drainage.
- Floors and walls are kept clean.
- Any cracks and damaged areas of yards and walls will be repaired
- The slat systems remain fairly clean without accumulation, allowing excrement to transfer quickly to the pits underneath

## 7.0 Livestock Numbers and Movements

A system is in place to record the number animal places and animal movements. These records will be available for inspection.

## 8.0 Fallen Stock and Scrapped Eggs

Fallen stock and Scrapped Eggs are disposed of in accordance with the current Animal By-Products Regulations. Carcasses and Eggs are stored as soon as possible in locked freezers and collected by **Animal and Plant Health Agency (APHA)** approved contractors, for incineration at licensed facilities. Records of collections will be kept to ensure compliance with all regulations.

## 9.0 Flies

The farm manager will undertake regular inspections of the site. Appropriate actions will be put into place to prevent and control flies, should a nuisance arise. See Pest Management Plan (page 18).

## 10.0 Veterinary Medicines and Pest Control Storage

- Vermin control products and any veterinary medicines are kept in a store capable of retaining spillage, resistant to fire, and are kept dry, frost-free, and secure.

## 11.0 Hazardous waste

- Veterinary waste is removed by the vet for safe disposal.
- Other hazardous waste, such as fluorescent light bulbs, waste oil, aerosols, etc. are removed by a licensed contractor with an adequate audit trail, meeting the requirements of the Environmental Permitting Regulations

## 12.0 Odour

- There are a few neighbours (sensitive receptors) within 400m of the farm.
- There is no history of odour complaints resulting from the activities at the farm.
- In accordance with the SGN EPR6.09. Please see **Appendix 10 - Odour Management Plan.**

## 13.0 Noise and vibration

- There are a few neighbours (sensitive receptors) within 400m of the farm.
- There is no history of noise complaints resulting from the activities at the farm.
- In accordance with the SGN EPR6.09. Please see **Appendix 11 - Noise Management Plan.**

## 14.0 Dust and Bioaerosols'

- There are a few neighbours (sensitive receptors) within 400m of the farm.
- There is no history complaints resulting from the activities at the farm.
- In accordance with the SGN EPR6.09. Please see **Appendix 11 – Dust and Bioaerosols' Management Plan.**

Buildings inventory - For location of buildings, refer to the Site Layout Plan (Appendix 4.3 - .5 5a)

Building name and ref on plan	No of places	Type of ventilation	Floor type	Bedding	Feed	Other
Poultry House 1	18,670 Layer Hens	Computer controlled ventilation and heating. Side air inlets (controlled) and roof-mounted exhaust fans	Solid floor	Wood Shavings – Deep Litter	Dry feed	Insulated building
Poultry House 2	20,660 Layer Hens	Computer controlled ventilation and heating. Side air inlets (controlled) and roof-mounted exhaust fans	Solid floor	Wood Shavings – Deep Litter	Dry feed	Insulated building
Poultry House 3	20,660 Layer Hens	Computer controlled ventilation and heating. Side air inlets (controlled) and roof-mounted exhaust fans	Solid floor	Wood Shavings – Deep Litter	Dry feed	Insulated building
Gate House	N/A	N/A	Solid Floor	N/A	N/A	

Emissions – See Appendix 4.2 5.5a

**Table of emission points**

Emission point reference	Emission point description and location	Source
<b>Air</b>		
Appendix. 4.2	Showing high-speed roof extraction chimneys which will contain 7 x 820mm Ziehl fans per building.	Houses 1-3
<b>Land</b>		
Appendix. 4.1	Attenuation Basin as identified on the site drainage plan	Roof water from buildings and the surrounding yard area
<b>Water</b>		
	None	None

# Site operations and pollution prevention measures

1.Site operations (storage and use)	2. Substance	3. Relevant activity	4. Possible failure mechanism and potential for pollution	5. History/records or visual evidence of leaks of polluting substances to land associated with the activities that could result in ongoing emissions to land, e.g. in hard standing, leaking tank or bund Detail any incidents of spills from the relevant This can be based on visual assessment during site walk or other records and data sources	6. Do prevention measures for relevant activity?  Yes/No	7. Provide details of pollution prevention measures  To include: primary, e.g. tanks or pipework; secondary, e.g. bund or hard standing and, where present, tertiary, e.g. oil interceptor	8. Testing and inspection of pollution prevention measures  Note: If you are not able to supply all of this information at present, you may submit the details with your Accident Management Plan
Vehicle, Machine and generator fuel	Red Diesel	Main storage	Failure of tank leading to spillage to concrete	None identified	Yes	Concrete base and bund containing tank and fill point  Double valves locked when not in use Sight gauge enclosed by guard Complies with SSAFO Regulations	Tank, fittings and bund visually  inspected monthly and following any notified spill
		Delivery by road tanker to installation and road tanker off-loading	Spillage from road tanker on installation yards entering clean drainage and hence soakaways Spillage from road tanker or delivery pipework to yard	None identified	Yes	Delivery by supplier's vehicle.  Tank and fixed pipework within bunded area Concrete hard standing Spill kit available to soak up minor spills	Concrete hard standing area visually inspected monthly Bunded area and tank visually inspected before each delivery
		Fueling vehicles	Spillage on yard, overflowing tanks	None Identified	Yes	As above. Automatic closing trigger, locks on valves stored in bund when not in use Record kept of fuel use,	As above

## HOLCOMBE BROOK FARM – TECHNICAL STANDARDS

1.Site operations (storage and use)	2. Substance	3. Relevant activity	4. Possible failure mechanism and potential for pollution	5. History/records or visual evidence of leaks of potentially polluting substances to land associated with the activities that could result in ongoing emissions to land, e.g. cracking in hard standing, leaking tank or bund Detail any incidents of pollution or spills from the relevant activity. This can be based on visual assessment during site walk over or other records and data sources	6. Do prevention measures for activity?  Yes/No	7. Provide details of pollution prevention measures  To include: primary, e.g. tanks or pipework; secondary, e.g. bund or hard standing and, where present, tertiary, e.g. oil interceptor	8.Testing and inspection of pollution prevention measures  Note: If you are not able to supply all of this information at present, you may submit the details with your Accident Management Plan
Feed	Nutrients: Phosphorus and nitrogen	Delivery to storage areas: dry bulk	Spillage, split or failed pipework, dust, failure of bins	None	Yes	Purpose-made dedicated stores	Pipework and bins regularly inspected to assess condition
	Dust	Distribution: all	Broken augers	None	Yes	Auger runs kept to minimum, mostly within buildings	Regular inspection of facilities and equipment
(Dirty water)	(Nutrients)  ammonia, nitrate, phosphate	Storage  within tank   Transfer from storage to tanker	Structural failure  Overflow to clean water Attenuation Basin  Reception pit overflow during agitation  Leaking tanker	None	Yes	Dedicated purpose-built facilities, including impermeable yards and aprons, falls and gradients arranged to direct flow to appropriate storage facilities and minimise contamination Regular monitoring of tank and store contents  Store fitted with double gate valves  All equipment regularly serviced	Regular inspection of facilities and equipment

## HOLCOMBE BROOK FARM – TECHNICAL STANDARDS

1.Site operations (storage and use)	2. Substance	3. Relevant activity	4. Possible failure mechanism and potential for pollution	5. History/records or visual evidence of leaks of potentially polluting substances to land associated with the activities that could result in ongoing emissions to land, e.g. cracking in hard standing, leaking tank or bund Detail any incidents of pollution or spills from the relevant activity. This can be based on visual assessment during site walk over or other records and data sources	6. Do pollution prevention measures exist for relevant activity?  Yes/No	7. Provide details of pollution prevention measures  To include: primary, e.g. tanks or pipework; secondary, e.g. bund or hard standing and, where present, tertiary, e.g. oil interceptor	8.Testing and inspection of pollution prevention measures  Note: If you are not able to supply all of this information at present, you may submit the details with your Accident Management Plan
Biocides	See Table 2 – Section 8 for Raw Materials	Delivery and transfer from vehicle to on-site storage  Application foot dip and wheel wash use  Disposal of waste packaging	Spillage, leaks, overflowing, contamination of clean drains	None	Yes	Transfer directly from delivery vehicle to dedicated bunded store Damaged or suspect packaging rejected at time of delivery Dedicated contained store to current specification Records kept  Trained staff with appropriate qualifications Relevant Codes of Practice followed Foot dips on good concrete, Emptied to dirty water system  Wheel wash constructed from reinforced concrete with sealed joints Dedicated container, impermeable hard standing within bund Removed from site by licensed contractor	Deliveries monitored Regular inspection of facilities and equipment Full application records Regular inspection of storage area Records kept

## HOLCOMBE BROOK FARM – TECHNICAL STANDARDS

1.Site operations (storage and use)	2. Substance	3. Relevant activity	4. Possible failure mechanism and potential for pollution	5. History/records or visual evidence of leaks of potentially polluting substances to land associated with the activities that could result in ongoing emissions to land, e.g. cracking in hard standing, leaking tank or bund Detail any incidents of pollution spills from the relevant activity. This can be based on visual assessment during site walk over or other records and data sources	6. Do pollution prevention measures exist for relevant activity?  Yes/No	7. Provide details of pollution prevention measures  To include: primary, e.g. tanks or pipework; secondary, e.g. bund or hard standing and, where present, tertiary, e.g. oil interceptor	8.Testing and inspection of pollution prevention measures  Note: If you are not able to supply all of this information at present, you may submit the details with your Accident Management Plan
Dirty water	Nutrients, biocides	Wash waters from clean out process	Failure to switch between Clean and dirty drainage System.  Tank failure	None	Yes	Dedicated purpose-built facilities, including impermeable yards and aprons, falls and gradients arranged to direct flow to appropriate storage facilities and minimise contamination Regular monitoring of tank and store contents  Store fitted with double gate valves All equipment regularly serviced	Regular inspection of facilities and equipment
Lightly contaminated surface waters	Ammonia, nitrates, phosphates, dusts and organic particles	Surface water drainage	Contamination of land, surface and ground waters	No	Yes	Impermeable yards, and aprons, falls and gradients arranged to direct flow to Attenuation Basin, constructed in accordance with guidance in How to comply and in accordance with the groundwater regulations 1998	Hard standing inspected monthly, belowground drainage surveyed Annually.  Basin grasses cared for

Source	Method	On site check	PMP check	Comment
PMP	Manage site activities in accordance with the PMP			
Fly monitoring	Follow routine monitoring for flies using: resting counts; adhesive paper fly catches, fly larval counts, other			Specify which monitoring method(s) were used
	Trigger levels followed for the relevant monitoring method/s to initiate insecticidal control			Specify the trigger level for each monitoring method used, if applicable
Manure management	Daily check of water lines and drinkers for defects and/or spillages			
	Buildings are watertight, with no water ingress from outside			
Infrastructure	Buildings are in good condition and kept well maintained			
Housekeeping	Spillages are cleaned up as soon as possible			
	Rubbish bins are emptied regularly			