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Application for a Permit or Variation to a PPC Part A Permit Decision	Date of Issue	
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# **D.G.Jolly (Partnership)**

# Home Farm Poultry Unit, Straloch, Newmachar, Aberdeenshire, AB21 0RU

# **Permit Application**

# PPC/A/5010104

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## 1 Non-Technical Summary of Determination

#### Provide a non-technical summary of the process and determination

Free Range hens will be kept in 2 No. Buildings; the original housing, House 1 will house 32,000 birds and the proposed housing, House 2 will house a further 16,000 birds, making 48,000 in total. Build is scheduled for 2025. The site lies within the Moray, Aberdeenshire, Banff and Buchan Nitrate Vulnerable Zone and therefore sufficient area for the site will be required to limit nitrogen deposition from ranging birds to that section of the aquafer.

Sixteen week old birds will be introduced onto a littered floor (wood shavings) of a pre-sterilised building and kept for a period up to 65 weeks. On depletion, the birds will be removed to another farm for subsequent introduction into the food chain. Only small amounts of additional wood shavings would be added through the campaign if required. After depletion there will be an approx. 2 week period during which full cleansing of the house will be undertaken before flock re-introduction. Both houses will be well insulated and therefore maintaining temperature is less demanding than say broiler units working at higher operating temperature. Concrete floors with a DPM ensure there is no ingress of ground water although there are no springs in the area of construction and therefore build will be above the water table. Sensors linked to the site computer will ensure the internal air quality conditions are maintained within a narrow band throughout the year, keeping temperatures around 210C and humidity between 50% and 70%. Litter is likely to be over 70% dry matter.

Ventilation arrangements will include roof mounted inlet fans and gable end exhaust fans for air exchange and passively through the 'pop-holes' during daylight hours. Heat supplied to the house will largely be through the birds themselves so that exhausting heat is the predominant requirement. Insulation of both walls and roof is high, helping retain heat during winter and prevent overheating in summer.

Primary electricity will be through PV panels and augmented by mains electricity. Water is supplied to birds by way of modern designed nipple drinkers, and daily volume consumed, recorded.

Feed is milled off site and changed in composition throughout the life cycle to ensure the diet meets bird needs at any specific age and that 'waste' is minimised. Feed will be tailored by an accredited bird dietitian.

The principal emissions from the installation will be ammonia from the degradation of faeces and dust. Ammonia however will be minimised by maintain dryness throughout and preventing biodegradation which could yield ammonia being released. Tree shelter belts are already present in and around the site. These will act positively in removing and metabolising residual ammonia and dust emissions. However, additional planting will occur on the ranges for bird welfare and a shelter belt at the west gable end of House 2 to enhance environmental protection standards.

Full control of feed and manure will help prevent odours, dust and ammonia generation. Retaining nitrogen in the litter additionally contributes to its benefit as fertiliser when taken off site. All manure to either the wider farm or others will be calculated to be part of the farm nutrient budgeting scheme. This is additionally important as the site is within the Nitrate Vulnerable zone where protection of aquafer is paramount.

The system to be used is an 'aviary' system with belts removing manure regularly. This will be transferred to a trailer and removed from site twice weekly to farm manure stores (own and neighbours) for subsequent spreading.

Site and Baseline Reports have been submitted with the application and have been assessed as satisfactory to meet PPC Schedule 4 Part 1. There are duties placed on SEPA for the protection of designated sites under The Conservation (Natural Habitats, &c.) Regulations 1994 and the Nature Conservation (Scotland) Act 2004. Home Farm lies within 10 kilometres of five designated site (please see Section 4.5 of this Decision Document). SEPA has assessed the impact of ammonia emissions and

nitrogen and acid deposition on the designated site. There are no predicted breaches of critical loads and levels (see Section 5.2 of this Decision Document).

The application submitted complies with both the requirements of PPC and the Standard Farming Installation Rules (SFIR). Determination was therefore to issue the Permit PPC/A/5010104 based on the application submitted.

## Glossary of Terms

BAT - Best Available Techniques BREF – Best Available Techniques Reference Document BAT-C – Best Available Technique Conclusions ELV – Emission Limit Value CO – Coordinating Officer SFIR – Standard Farming Installation Rules

2 External Consultation and SEPA's response							
Is Public Consultation Required? (if no delete rows below)							
Advertisement C	heck:	Date	Compliance with advertising require	ments			
Evening Express	5	21/02/2025	Yes				
Edinburgh Gazet	tte	18/02/2025	Yes				
Officer Checking	advert:CO						
No of responses received	None	C					
Summary of resp	oonses and how	they were tal	ken into account during the determina	tion:			
N/A							
Summary of responses withheld from the public register on request and how they were taken into account during the determination: N/A							
Is PPC Statutory (if no delete rows		equired?		Yes			
	Food Standards Agency: Consulted on 10/02/2025. Response received 06/03/2025: considered it unlikely that there will be any unacceptable effects on the human food chain from this installation.						
Health Board:	Co	onsulted on 10	/02/2025. No response received.				
Local Authority Consulted on 10/02/2025. Response received 28/02/2025: No EIA required. Environmental Health response: additional.							
Scottish Water							

	for Scotland 4th Ec	ditions 201	comply with Sewers f 8, including provision ottish Water assets.	or Scotland and Water n of appropriate		
Health and Safety Executive	N/A					
NatureScot	Consulted on 10/02 comments to make		esponse received 14	/03/2025: No		
Discretionary Consultation re		vice delete		No		
(if yes provide justification and o	details below, otherw		(10w)			
Enhanced SEPA Consultation	required?			No		
(if yes provide justification and		vise delete	e row)			
"Off site" consultation requir			```	No		
(if yes provide justification and o	details below, otherw	vise delete	e row)			
Transboundary Consultation	roquirod?			No		
(if yes provide justification and o		vise delete	e row)	NO		
Is Public Participation Consu	-			Yes		
(if yes provide justification and of <b>STATEMENT ON THE PUBLIC</b>						
The Pollution Prevention and C				2005 requires that		
SEPA's draft determination of the	his application be pla	aced on SI	EPA's website and p	ublic register and be		
subject to 28 days' public consu						
number of representations received and SEPA's response to these are outlined below.						
Date SEPA notified applicant	of draft determinat	tion	11 July 2025			
Date draft determination placed on SEPA's Website    11 July 2025						
Details of any other 'appropri	ate means' used to	)	N/A			
advertise the draft. Seek advice from the community	cation department					
Date public consultation on d			11 July 2025			
Date public consultation on d	Iraft permit consult	ation				
closed		ation				
Number of representations re	eceived to the cons	ultation				
Date final determination placed on the SEPA's Website						
Summary of responses and h	now they were take	n into acc	ount during the det	termination:		
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## 3 Administrative determinations

#### **Determination of the Schedule 1 Activity**

As detailed in the application and supporting documentation.

Determination of the Stationary Technical Unit to be permitted

As detailed in the application and supporting documentation.

#### **Determination of Directly Associated Activities**

As detailed in the application and supporting documentation.

## **Determination of Site Boundary**

As detailed in the application and supporting documentation.

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## 4 Introduction and Background

## 4.1 Historical Background to the activity and variation

The application by DG Jolly (Partnership) is for a new free range egg production farm located on agricultural land at Home Farm, Straloch, approximately two kilometres northwest of Newmachar, Aberdeenshire. The farm will be called Home Farm Poultry Unit. The land and the range associated with the Home Farm, Straloch site is owned by and will be operated by DG Jolly (Partnership), the Authorised Person.

The site is located at Ordnance Survey national grid reference NJ 86382 21650 and is near to the Burn of Straloch. The area is a Nitrate Vulnerable Zone (NVZ). House 1 currently houses 32,000 birds and a proposed additional shed, House 2 will house a further 16,000 birds, making 48,000 in total. Build is scheduled for 2025.

The applicant was required to demonstrate that the poultry housing units were designed having regard to the following principles outlined in the BREF and the BAT Conclusions:

- reducing the ammonia-emitting surface;
- removing the manure frequently to an external store (e.g., with belt removal systems);
- quickly drying the manure;
- using surfaces which are smooth and easy to clean;
- lowering the indoor temperature and ventilation as much as animal welfare and/or production allow.

The proposals for the new housing demonstrate that the chosen design addresses the above principles.

## 4.2 Description of activity

The activity proposed is rearing poultry intensively in an installation with more than 40,000 places as described in Part A of Section 6.9 (a) of Schedule 1 of the Regulations.

House 1 is currently housing 32,000 birds and a proposed additional shed, House 2 will house a further 16,000 birds, making 48,000 in total. Build is scheduled for 2025.

Directly Associated Activities include:

- Feed delivery & storage
- Generator & fuel storage 
  Water storage
- Chemical storage
- Manure handling
- Dirty water storage

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• Storage of fallen stock for disposal

Management of lightly contaminated surface water

Auxiliary power generation

#### 4.3 Outline details of the Variation applied for

N/A. New permit application.

## 4.4 Guidance/directions issued to SEPA by the Scottish Ministers under Reg.60 or 61.

None.

#### 4.5 Identification of important and sensitive receptors

Home Farm is within 10 kilometres of three NatureScot designated site as follows:

Name	Distance from Home Farm	Designation
Coby, Lily and Bishops Loch	8.6km	SSSI
Hill of Barra	8km	SSSI
Balmedie Quarry	8km	SSSI

Refer to Sections 5.2 and 6 for an assessment of the impact of the proposal on the identified designated site.

The site is located in a rural area with outspread residences and other nearby agricultural operations. The nearest human health receptors are Newark Cottage Home Farm Cottage and North Lodge, approximately 150m to the west of the closest gable end of the new poultry houses at Home Farm. Refer to Section 5.2 for an assessment of the impact of the proposal on human health receptors.

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## 5 Key Environmental Issues

## 5.1 Summary of significant environmental impacts

SEPA aims to control environmental impacts arising from intensive agriculture activities through permit conditions and by the requirement for the Operator to comply with BAT as indicated in the SFIR.

Potential environmental impacts from intensive agriculture activities include:

- Ammonia emissions
- Manure and slurry storage
- Surface water drainage
- Protection of soil and groundwater
- Odour 
  Noise
- Chemical use
- Fuel containment
- Energy efficiency
- Waste minimisation, storage and disposal
- Resource utilisation
- Environmental management systems

The potential impacts from the proposed activity and how they will be managed are addressed in the sections below.

#### 5.2 Emissions to Air

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Point Source emission to air:

The main point source of emissions to air from Home Farm, Straloch will be from the housing units, ventilation system and the generator in the form of ammonia, dust and fuel fumes.

Ammonia and dust will be minimised by carefully managing air exchange to control humidity levels within the sheds and maintaining the dry matter content of the litter at an optimal value of between 60-65%.

## Ammonia (BAT 23 & 31)

Ammonia can be carried on the air and deposited in lochs and ponds causing eutrophication. It is assessed that the main point source of ammonia from the installation will be from the housing and ventilation. To quantify the amount of ammonia which will be emitted, SEPA use DEFRA-approved emission factors. The emission factors are specific to each housing system. Some housing systems are more efficient than others and will result in a lower emission factor. The proposed housing at Home Farm meets the description in BAT Conclusion 31 (b) (4) 'manure belts (in case of aviary).'

There are duties placed on SEPA for the protection of designated sites under The Conservation (Natural Habitats, &c.) Regulations 1994 and the Nature Conservation (Scotland) Act 2004. Home Farm lies within 10 kilometres of three designated sites, but only Corby, Lily and Bishops Lochs SSSI has an sensitive habitat type. (please see Section 4.5 of this Decision Document).

SEPA uses the Simple Calculation of Atmospheric Impact Limits (SCAIL) model to assess the impact of ammonia emissions and nitrogen and acid deposition on designated sites. SCAIL has been run for this proposal using the ammonia emission factor for free range laying hens of 0.108 kg NH3/bird place/year (ammonia produced by an average sized bird). SEPA's default position is the estimated emission factor for time spent on the ranging area is 0.22 kg, with the indoor aviary emission factor being 0.08 kg. In addition is it estimated that the hens spend 20% of their time on the range, and 80% of their time indoors. The applicant has put forward that at Home Farm hens will spend approximately 10% of their time on the range and 90% of their time indoors. SEPA has accepted this position and therefore factored the ammonia emission factor accordingly to take into account the proportion of emissions from both the range and indoors. The SCAIL run further included the estimated emissions from the proposed manure store.

The SCAIL results showed that the process contribution (PC) from the installation will not contribute more than 4% of the ammonia critical level for the designated site; and the predicted environmental contribution (PEC) remains below 100% of the critical level. The process contribution together with the most recent APIS background for ammonia also remains below the ammonia critical level. There are no habitat or species sensitive to nitrogen or acid deposition at Hill of Barra SSSI and Balmedie Quarry, and therefore no impact from these parameters. Corby, Lily and Bishops Lochs SSSI has sensitive habitat features (freshwater and fens) but SCAIL has predicted no breach of the critical load or level at the designated site, it is concluded that a significant effect is unlikely, and no further assessment is required.

										N Dep		
		NH3						N Dep	N Dep	Critical	PEC N	1
	PC NH3	Background	NH3 PEC (ug	NH3 EAL	PEC NH3 as	PC NH3	PC N Dep	Background	Total	Load	Dep as	PC N Dep
Receptor	(ug m3)	(ug m3)	m3)	(ug m3)	%EAL	as %EAL	(kg/ha/yr)	(kg/ha/yr)	(kg/ha/yr)	(kg/ha/yr)	%EAL	as %EAL
Corby  Lily and Bishops Lochs												
SSSI	0.0203	0.68	0.7003	1	70	2%	0.11	7.88	7.99	15	53	1%
	1											

The applicant has proposed to plant the free-range area with trees and an existing shelter belt will be added at each gable end of the poultry houses. Once mature, the trees will act as a shelter belt for ammonia emissions affording greater protection of the surrounding environment. It is noted that there are no other relevant projects within 10 kilometres of Home Farm, Straloch and therefore in combination assessment is not required,

## Dust (PM10) (BAT 11)

Dust from poultry houses mainly originates from feathers, skin particles and used litter and to a lesser extent from feed and bedding. PM10 dust particles (particulate matter 10 micrometres of less in

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diameter) are subject to statutory air quality standards. In Scotland, air quality objectives are set out in the Air Quality (Scotland) Regulations 2000 (as amended).

Where sensitive receptors are located within 250 metres of a poultry unit, SEPA requests that the applicant screens the emission of particulate matter to establish whether the emission will cause any air quality objectives to be breached.

The nearest human health receptors are Newark Cottage, Home Farm Cottage, The Mill, Livery Yard, Wicketwells and North Lodge, approximately 150m to the west of the closest gable end of the new poultry houses at Home Farm. SEPA have undertaken PM10 screening using the SCAIL tool.

The process contributions (PC) for the annual average and 90th percentile daily average are below 10% of the critical level but the process contribution for the 98th percentile daily average exceeded the 10% threshold therefore detailed modelling was required. The detailed modelling undertaken by Redmore Environmental concluded there was no predicted exceedances in the relevant air quality standards due to the proposed development. To further mitigate emissions, the applicant has proposed to plant a tree buffer zone to the west of the gable end fans nearest to the two residential receptors. The trees will assist in dissipating dust emissions.

SEPA has therefore assessed the risk to human health as acceptable.

#### Fugitive emissions to air:

There are a few potential fugitive emissions to air. These include the release of dust and ammonia during cleaning or opening of the housing units for fallen stock removal, and from the birds themselves. SEPA accepts that some fugitive releases are unavoidable, for example, unplanned releases due to an unforeseen incident; others such as poor cleaning practices can be controlled through the relevant management techniques. SEPA views fugitive releases to air from these activities as an indication of process or maintenance issues and would require any defects to be reported and rectified as soon as possible.

Feed silos will be fitted with cyclone particle containment and mitigation to contain dust emissions as per the requirement in BAT 11.

Although not specifically covered by conditions within the permit, maintenance issues are covered by the PPC Regulations under Regulation 22 which requires the use of BAT. SEPA seeks to reduce these occurrences by requiring operators to record maintenance issues and demonstrate a high degree of environmental management over the activities they undertake. SEPA has a number of regulatory instruments it can use to gain compliance should the operator fail to comply.

SEPA does not have any specific policies in relation to bioaerosols from IA processes. There are currently no health criteria values available for interpreting the results of bioaerosol monitoring. Routine monitoring would be required at receptors within 250 metres should appropriate criteria for assessment be identified.

## **Diesel Generator**

It is a requirement of the animal welfare regulations that the birds have adequate heating and ventilation at all times. The site will be powered by solar panels and supplemented by mains grid electricity. However, in the event of a power failure, a back-up diesel generator will be used. SEPA are aware that diesel generators can give rise to dense fume, especially at start up, or if the generator is poorly maintained. SEPA would expect the operator to use BAT particularly with regard to servicing and maintenance to minimise visible emissions and particulates from the exhaust. The generator will be tested for a short period once per week.

The generator will have an internal bund and be located on a concrete plinth away from vehicle collision risk. A filling protocol will be in place and emergency absorbent material will be stored in the central

services area in the event of an accidental spill.

#### Odour:

SEPA has identified potential odour issues from intensive poultry farms. These include ammonia and odours from chlorinated cleaning materials or disinfectants to clean the housing units.

SEPA acknowledges that odour from intensive agriculture installations can give rise to complaints and requires operators to undertake odour assessments, and to formulate and implement an Odour Management Plan to reduce the impact on the local environment.

BAT 1 requires the permit holder to produce an Odour Management Plan having regard to BAT 12 detailing odour techniques and reduction of odour emissions in accordance with BAT 13.

An Odour Management Plan has been submitted with the application and will be implemented on site. The permit will require that offensive odours are not emitted beyond the site boundary.

## 5.3 Emissions to Water

Point Source Emissions to Surface Water and Sewer:

## Foul Drainage

There are no public sewers within the vicinity of Home Farm Free Range Egg Unit and therefore there will be no discharges to the sewer. A septic tank will be installed to collect all domestic wastewater from the welfare amenities and discharge to a soakaway in front of the poultry houses. This is to be authorised under The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended). The foul effluent system is not considered part of the Permitted Installation.

#### Surface Water Drainage

For House 2, the application proposed a Sustainable Drainage System (Rural SuDS) designed to comply with the CREW Rural SuDS Guide (Rural Sustainable Drainage Systems: A Practical Design and Build Guide for Scotland's Farmers and Landowners) (CREW), considered BAT for intensive agriculture installations. Aberdeenshire Council did not comment on the SuDS proposal during statutory consultation with SEPA.

It is up to the applicant to ensure that what has been required by the Council and will be authorised by the PPC permit matches what is built on the ground. A condition will be added to the PPC permit requiring the submission of an as built drainage layout plan three months after the site has been brought into operation.

The application states that Surface water run-off from the proposed new housing unit (House 2) roofs, scratch areas and low-contamination yards will be piped to a series of swales. The location of the swales is shown on the site plan. The scratch area will be underlined with an impermeable membrane to ensure that all scratch area drainage is captured and directed to the swales. The swales will be fenced off to restrict poultry access.

However, the application proposes that the existing house (House 1) will continue to be served by the existing soakaway to the east of the site. This is not in line with the CREW guidance. When an existing farm expands into PPC, the entire installation including existing sheds needs to meet BAT which for treatment of lightly contaminated run off is the CREW guidance. Soakaways are mainly gravel filled trenches providing no treatment, whereas swales slow down the flow of water and allow sediment to settle out naturally filtering out pollutants. CREW only allows a soakaway for relatively clean water with a low level of pollution i.e. clean roofs, surfaces where there is no ranging and no gable fan emissions.

In this case the operator has agreed to accept more frequent groundwater monitoring (representative surface water sampling) to gather a data set to support the justification that the soakaway is not causing an impact. This, together with the fact that there are no gable fans and roof water is clean supports the proposal.

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## Point Source Emissions to Groundwater:

There shall be no direct point source emissions to groundwater as a consequence of this application. The applicant has demonstrated that the swales are designed in line with SEPA advice and are sufficiently sized and located. If maintained properly, they will provide sufficient treatment of lightly contaminated run off and therefore this is not considered to be a point source discharge to groundwater. SEPA has assessed as satisfactory the Site & Baseline Report submitted with the application subsequent to further clarifications. This report evaluates past potential contamination and future pollution risks to both soil and groundwater (please see Section 5.9 of this Decision Document).

## Fugitive Emissions to Water: BAT 1&6

There are several potential sources which could lead to fugitive emissions to water. These include, poorly maintained surfaces and drainage systems, bird delivery and collection, and lack of care during cleaning of the housing units, all of which can lead to contamination of surface waters.

SEPA views fugitive releases as avoidable and can usually link these incidents to either operational error or negligence. SEPA seeks to reduce these occurrences by requiring the permit holder to implement BAT and to provide training to relevant staff in environmental issues, exercising a high degree of environmental management, and continual maintenance of the activities they undertake.

The applicant is installing SuDS which has been designed to be fit-for-purpose and meets BAT.

A knapsack sprayer will be used to disinfect vehicle wheels when arriving at or leaving site. Areas of spraying must be at least 10m away from surface water drains and preparation of spray should be in a bunded area.

## 5.4 Emissions to Land (BAT 7 & 20)

In the case of free-ranging hens, SGRPID considers that deposition on a range will be constant across the whole area. In order to ensure that an installation is BAT and that an Operator is taking all appropriate preventative measures against pollution in the NVZ, the applicant is required to demonstrate that deposition on the ranging area is in accordance with the limit advised by SGRPID as 170 kg N/Ha under the Action Programme for Nitrate Vulnerable Zones (Scotland) Regulations 2008. For 32,000 birds to meet the limit of 170 kg N/Ha the range area is required to be at least 20 hectares. The range area for this proposal totals approximately 21.7 hectares. The entire ranging area will be included in the installation boundary. The manure collected from the housing at least twice a week on manure belts will be conveyed to the covered manure store. During the closed NVZ period from October – February manure will be stored in the manure stores. From March – September, the manure stores will still be used, however spreading of manure will be more frequent, roughly every 2 weeks – 1 month. Manure will be spread to land as organic fertiliser out with the installation boundary. The spreading to land of manure and washwater out with the installation boundary is covered by the Water Environment (Controlled Activities) (Scotland) Regulations 2011, General Binding Rule 18 (GBR 18).

## 5.5 Noise (BAT 9&10)

Noise at the permitted installation is covered by Section 2.9 of the SFIR which is considered by SEPA to meet BAT Conclusions 9 & 10 which the operator is required to have regard to when operating an intensive agriculture site under the PPC Regulations.

The predominant source of noise from poultry housing units is generated from the ventilation systems. Other sources of noise related to this type of activity can include vehicle movements in and around the site and the placement and removal of the birds. The latter two are considered unlikely to cause issues as these activities will take place for such short durations as well as being infrequent. Due to the close proximity of the residential receptors and concerns raised by Aberdeenshire Council Environmental Health Department, SEPA requested a noise impact assessment. The results of the assessment

showed that overall broadband levels were low, with outdoor predicted levels of ~30 to 33dB(A) with all fans on. Therefore, SEPA concluded that there will be no significant impact due to noise from the activity.

The operator is also required to produce a Noise Management Plan to prevent or minimise the impact on the local environment.

A Noise Management Plan has been submitted with the application and will be implemented on site. The permit will require that noise which has a significant impact on the environment, people or property must not be emitted beyond the site boundary.

## 5.6 Resource Utilisation

## Water use (BAT 5)

Water use within the food production sector is primarily an animal welfare issue as the operator of the installation is required under other legislation to provide an adequate supply of clean water for both the welfare of the birds and to undertake adequate cleaning of vehicles.

It is up to the operator to demonstrate the use of BAT to minimise water usage, but SEPA does directly regulate water use through permit conditions requiring the operator to minimise water consumption and explore options for minimisation, and to report consumption in the resource efficiency report.

The greatest volume of water consumed is drinking water for the birds. Fresh mains water will be delivered to poultry via nipple line drinkers with drip collection cups to prevent spillages (as outlined in the SFIR and BAT standards) thereby reducing wastage and ensuring dry litter.

Water is also used for cleaning the poultry units at the end of the cycle. The housing units are washed down and disinfected before the introduction of the next flock.

## Energy use and generation (BAT 8)

A computer-controlled system maintains the temperature within the housing units. This is directly linked to the ventilation system to prevent over-heating and lack of free ventilation. SEPA recognises that energy usage is dependent on several factors outwith the control of the operator who has to maintain the welfare of the birds in extremes of weather.

A permit condition requiring the formal systematic assessment of energy consumption on site will require the operator to identify where efficiencies can be made.

The primary source of electricity will be from solar panels, with additional power supplied by the grid if required. A standby diesel generator will supply back-up power in the event of a mains outage.

The site will not be covered by a Climate Change Agreement.

## Raw Materials Selection and Use

All applicants applying for PPC Part A permits are required to examine their Raw Materials usage and seek ways to reduce their impact on the environment. The standard permit condition requiring the formal assessment of resource utilisation on site will require the operator to identify where any efficiencies can be made and demonstrate continuing improvement.

## **Chemicals**

Chemicals used in poultry rearing include cleaning and disinfection chemicals, pesticides, rodenticides, herbicides, insecticides and fungicides. All of these chemicals are required to be DEFRA-approved. Once onsite chemicals will be kept in the chemical storage area located in the central services building. The applicant has designed a bund within which the chemicals will be stored. The bund will have a dedicated mixing / diluting area and an internal sump. Procedures are in place to absorb any spillage and ensure appropriate disposal.

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## Veterinary Medicines:

Veterinary medicines are not held on site and will only be brought onto the site and used as required. Procedures are in place to absorb any spillage and ensure appropriate disposal.

# Fuel Oil:

Agricultural fuel oil is stored within the bunded generator itself and there is no separate storage on site. The generator will be sited on a concrete plinth away from vehicle collision risk. The fuel storage is compliant with The Water Environment (Miscellaneous) (Scotland) Regulations 2017.

# Water:

Water is sourced from the mains network and stored in overhead tanks in the Central Services Area. Water is used to supply drinking water to the birds and for washing down the housing units at depletion. Water consumption is monitored.

# Feed (BAT 3 & 4):

Feed will be supplied to the site, pre-mixed, into 4 fully enclosed silos each fitted with cyclone particle containment and mitigation and protected from vehicle collision. Feed will then be transported into the feed chain systems within the units by augers. Any feed spillages will be cleared up immediately to prevent any potential contamination of ground water or watercourses and to deter pests. Rations are formulated by poultry nutritionists. Feed specifications are created to minimise the amount of nitrogen and phosphorous excreted by the birds over the flock cycle by optimising crude protein output and feed utilisation. SEPA is satisfied that this meets the requirements of SFIR and BAT.

# Litter:

Wood shavings will be used as bedding litter at the beginning of each flock cycle and topped up as required. Litter is brought onsite as required and no additional litter is stored onsite.

## 5.6 Waste Management and Handling

## Waste Minimisation

Standard permit conditions require the operator to minimise waste and where possible develop and implement recycling or recovery strategies. Records are required to be kept on site of all waste streams and the source, quantity and disposal routes taken. This data will be reviewed every 4 years in the resource efficiency report required in the permit.

It is not anticipated that there will be much waste generated by the site. Packaging such as plastic, paper and cardboard will be collected and stored on the concreted waste storage area outside the front of the poultry houses and sent for recycling as appropriate. General farm waste will also be stored in the waste storage area and uplifted by an appropriately licensed contractor.

## Waste Handling

Foot baths are located at various locations around the site. The foot baths have lids and will therefore not overtop in wet weather. Spent disinfectant will be disposed of into the underground washwater tank. Where a disinfectant or effluent from cleaning may contain list I or II substances, washwater must be exported from site and disposed of at a suitably licenced facility. When a disinfectant does not contain list I or II substances, washwater can be spread to land in accordance with GBR 18.

Mortalities will be removed daily to a secure, vermin proof freezer in the Central Services Area. Final removal will be by registered contractors under the fallen stock scheme. All disposal of carcasses will be undertaken in accordance with the Animal By-Products (Enforcement)(Scotland) Regulations 2013.

It is inevitable that a small number of eggs will end up in the litter and manure within poultry housing and will result in waste eggs being spread to land out with the permitted installation with the litter and manure, but the volume should be minimal and is considered by SEPA to be unavoidable. Adding waste/broken eggs to the litter or manure after the eggs have been removed from the bird area, for example from

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grading/sorting facilities and packing stations, changes the status of the litter and manure and it all becomes a waste which will need to be collected and disposed of by an authorised waste contractor. Waste/broken eggs must be collected, stored and disposed of appropriately. Broken eggs are a CAT 3 waste. If there is no facility on site to handle broken eggs the following procedure should be followed:

- Collect broken eggs in a plastic lined bucket / bin.
- Freeze in the plastic liner (in the fallen stock freezer is ok).
- Arrange for uplift as required by an authorised CAT 3 waste contractor

The volume of other wastes stored on the site is minimal and all will be considered in the relevant section of the resource efficiency assessment required under the standard permit condition. The onus of Duty of Care shall apply to all waste management at the installation.

Waste Recovery or Disposal

As above

## 5.7 Management of the site

Environmental Management System (BAT 1&2)

Good site management is a requirement not only of the PPC Regulations & BREF but also the Food Safety Act 1990, regulated by the Food Standards Agency, and the Animal Welfare Act 2006. Agricultural installations are subject to regulatory controls requiring Operators to operate installations to a high standard both to ensure welfare of animals and to protect products entering the food chain.

BAT 1 requires that the permitted activity is operated in accordance with an environmental management system (EMS). The BREF requires that in order to improve the overall environmental performance, the EMS should incorporate the following key features:

- Management commitment
- Environmental policy
- Financial planning and investment
- Relevant procedures (training, record keeping, maintenance, emergency procedures)
- Checking performance (monitoring, preventative action, auditing)
- Review
- Continual improvement
- Benchmarking
- Noise Management Plan
- Odour management Plan

BAT 2 requires good housekeeping to prevent or reduce the environmental impact and improve overall performance. This includes training, routine maintenance and an emergency plan.

The applicant has indicated that the installation will be operated in full compliance with Section 2.1 of SFIRs requiring an appropriate person and deputy, a management system, competent staff, and record keeping.

Accidents and their Consequences

The PPC Regulations specifically preclude SEPA from adding conditions to a Permit regarding the Health and Safety of Staff or workers on-site; however should an accident or incident occur that is likely to pose a risk to the environment or harm to human health in the wider community then SEPA would require, under the conditions of the permit, that not only must the Operator take action to limit the immediate environmental impact but where necessary implement changes to try to ensure that the event does not happen again.

In general, all accidents or incidents likely to cause pollution and all complaints to the site regarding

nuisance emissions are required by Schedule 7 of the Permit to be recorded and dependent on the severity, notified to SEPA. Emergency preparedness and response (incident prevention and mitigation) are required as per BAT 1 as part of the Environmental Management System for the site.

## Closure

In order to ensure that the site can be returned to its pre-PPC Permit state, SEPA have required the applicant detail any pre-application problems prior to permitting so that a site surrender report can be compared with the Site Condition and Baseline Reports. Surrender of the permit is by an application to SEPA who have to be satisfied that the requirements of Regulation 19 of the PPC Scotland Regulations 2012 (as amended) are complied with.

As per the PPC Regulations the applicant shall need to remediate the site where required to the levels cited in the baseline report (please see Section 5.9 below for more information).

The operator has agreed to meet Section 2.15 of the SFIR for Decommissioning

## 5.8 Site Condition report

As per Regulation 48 of the PPC Regulations a Site Report and a Baseline Report was submitted with the application.

The applicant did not submit soil sample analysis to inform the baseline and site reports. Due to the sensitive nature of the groundwater and the area (NVZ & Drinking Water Protection Area), SEPA requested soil sampling was undertaken during the permit determination and that the baseline and site condition reports were updated.

Following receipt of the updated baseline and site condition reports, SEPA undertook a Hydrogeological review.

Historical mapping indicates no other land use other than arable farming over the past 120 years. All land to be used for the site (including the range area) has predominantly been used for cereal production. As such, no site specific contamination is expected. However, diffuse pollution, especially nutrient enrichment, is possible as a result of agricultural practices. The site sits within a NVZ.

A single round of surface water sampling was undertaken at two monitoring points to the east of the proposed poultry houses on a dry day but with rain in the previous 24hrs. Water levels were not elevated and water for not coloured. The results indicate that contaminant concentrations are relatively low.

However, the use of a soakaway at House 1 is not in line with the CREW guidance and the operator has agreed to accept more frequent groundwater monitoring (representative surface water sampling) to justify that the soakaway is not causing an impact. This, together with the fact that there are no gable fans and roof water is clean supports the proposal.

Soil and groundwater monitoring will be a permit condition requiring groundwater to be sampled every 6 months and soil every 10 years.

## 5.9 Monitoring

Air

SEPA places a lot of emphasis on self-monitoring and record-keeping as keys to the successful running of a PPC installation. The operator is required within the permit to undertake odour and noise assessments.

General monitoring of the site is also covered in the Permit to assess operational conditions and environmental performance.

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Various permit conditions require the operator to monitor the level of inputs and the volume of outputs and to consider how changes made benefit the environment. The 2017 BREF introduces the following additional monitoring requirements:

- 1. The total nitrogen and total phosphorus excreted in manure
- 2. Ammonia emissions to air
- 3. Dust emissions
- 4. Process parameters

The European Commission during deliberations around the revised BREF, accepted the proposal from the UK technical Working Group to estimate emissions by using DEFRA approved emission factors to comply with the monitoring requirements for 1-3 identified above.

Process parameters include water consumption, energy consumption, fuel consumption, incoming and outgoing bird numbers, feed consumption and manure generation. This is already well documented and will be formally required via the resource utilisation permit condition.

Water

N/A

# Soil and Groundwater

Soil and groundwater monitoring will be a permit condition requiring groundwater to be sampled every 6 months and soil every 10 years.

Waste

N/A

# 5.10 Consideration of BAT and compliance with BAT-Cs if appropriate

SEPA published its view of indicative BAT relating to intensive agriculture operation in its Standard Farming Rules (SFIRs). SFIRs are based on the BAT Reference Document (BREF) for Intensive Agriculture Installations published by the European IPPC Bureau in 2017. The SFIRs have been used throughout this permit application to benchmark faming activities. The application indicates that the installation will be operated in accordance with Best Available Techniques (BAT).

# 6 Other Legislation Considered

Nature Conservation (Scotland) Act 2004 & Conservation (Natural Habitats &c.) Regulations 1994		
Is there any possibility that under the above legislation	the proposal will have any impact on site designated ?	Νο
	the action and justification below:	
Refer to Section 5.2 above.		
Screening distance(s) used10 Kilometres as per the SEPA Nature Conservation Procedure Guidance (NCP-P-01).		
(for example installations the involving Animal By Produce	n that was considered during determination of the permit nat may be impacted by the requirements of legislation cts, Food Standards, Waste, WEEE regulations etc). the legislation, action and justification below:	Yes
Action Programme for Nitrate Vulnerable Zones (Scotland) Regulations 2008: The applicant demonstrated that the size of the ranging area is sufficient that deposition is in accordance with the limit of 170 kg N/hectare. See Section 5.4.		

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The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR) and Nitrates Directive: This primarily applies to land-spreading activities that will be taking place out with the installation boundary. These will need to comply with GBR 18. See Section 5.4.

Foul drainage systems such as a septic tank to soakaway will be regulated separately under CAR and this will not form part of the permitted installation.

The swale systems to treat surface water drainage has potential to impact groundwater and therefore SuDS design must be in accordance with the CREW Rural SuDS Guide. See Section 5.3.

The Water Environment (Miscellaneous) (Scotland) Regulations 2017: The requirements for the generator oil storage under these Regulations are met. See Section 5.2 for consideration of oil storage as BAT. There are no conflicts with ongoing CAR regulation of this process.

Animal By-Products (Enforcement)(Scotland) Regulations 2013: Regulates carcass disposal. Carcass storage is a is a Directly Associated Activity (DAA) in the permit. See Section 5.7.

Medium Combustion Plant Directive (MCPD): For all proposed plant >1MW regulated as DAA on IA installations, BAT will apply and SEPA should complete Local Air Quality Management and Nature Conservation Habitat screening. If required, SEPA will impose monitoring of emissions within 4 months and then every 3 years with ELVs from Process Guidance Note 1/3 or the MCPD. There is no proposed plant >1MW on site at the time of permit issue.

#### Officer CO

## 7 Environmental Impact Assessment and COMAH

How has any relevant information obtained or conclusion arrived at pursuant to Articles 5, 6 and 7 of Council Directive 85/337/EEC on the assessment of the effects certain public and private projects on the environment been taken into account?

N/A, not a COMAH site.

How has any information contained within a safety report within the meaning of Regulation 7 (safety report) of the Control of Major Accident Hazards Regulations 1999 been taken into account?

N/A, not a COMAH site.

Officer:

## 8 Details of the permit

CO

Do you propose placing any non standard conditions in the Permit?	No
Do you propose making changes to existing text, tables or diagrams within the	No No
permit?	

9 Emission Limit Values or Equivalent Technical Parameters/Measures		
Are you are dealing with either a permit application, or a permit variation which would involve a review of existing ELVs or equivalent technical parameters?	No	
Outline the changes required and provide justification below:		
N/A, standard ELV's apply.		
Officer: CO		

10 Peer Review	
Has the determination and draft permit been Peer Reviewed?	No

#### **Comments made:**

Additional information about noise and broken eggs. Also change groundwater to 6 monthly monitoring to ensure soakaway not causing impact.

Officer: Peer Reviewer.

## **11 Final Determination**

#### Issue of a Permit - Based on the information available at the time

**Issue a Permit** – Based on the information available at the time of the determination SEPA is satisfied that

- The applicant will be the person who will have control over the operation of the installation/mobile plant,
- The applicant will ensure that the installation/mobile plant is operated so as to comply with the conditions of the Permit,
- The applicant is a fit and proper person (specified waste management activities only),
- Planning permission for the activity is in force (specified waste management activities only),
- That the operator is in a position to use all appropriate preventative measures against pollution, in particular through the application of best available techniques.
- That no significant pollution should be caused.