

Scottish Environment Protection Agency	Document Number	IED-DD-02
Pollution Prevention and Control (Scotland) Regulations 2012 Application for a Permit or Variation to a PPC Part A Permit Decision Document	Issue Number	V2.0
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**H A Blackwood
Auldhouseburn Farm**

Operator Initiated Variation

PPC/A/1079002 (VAR02)

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1 Non-Technical Summary of Determination

Provide a non-technical summary of the process and determination

H A Blackwood are seeking a permit variation to permit PPC/A/1079002 to increase the current poultry operations at Auldhouseburn Farm, Muirkirk, Ayrshire, KA18 3RZ, to include an additional poultry house with 32,000 places for free range laying hens. The land and range associated with the Auldhouseburn Farm site is owned and operated by H A Blackwood, the Responsible Person.

The permit variation application is made under Part A of Section 6.9 (a) of Schedule 1 of the Pollution Prevention and Control (Scotland) Regulations 2012.

The site is located at Ordnance Survey national grid reference NS 70717 26945.

The site is currently permitted for 96,000 free range laying hens in three poultry houses. The proposal will increase the permitted number of bird places to 128,000 places for free range laying hens in four poultry houses.

The Auldhouseburn Farm complex consists of three sites; Roundwood (2008/2009), Wellwood (2010) and Glenwood (2015). The new site will be called Marchwood and will be located at Ordnance Survey national grid reference NS 70395 27114.

The location of the new site (Marchwood) has been chosen due to its proximity to the existing sites to reduce transportation of birds, eggs and raw materials. The site is located away from surface waters and has also been located down-wind and as far away from the closest sensitive receptor as possible.

The new poultry house is designed to minimise ammonia emissions. It is well insulated and will use low energy lighting. All walls and roofs are insulated to retain heat and minimise condensation. The concrete floor is protected from water ingress by an impermeable damp-course membrane. Temperature and humidity are monitored continuously by sensors located within the housing unit. The climatic conditions are recorded and adjusted accordingly to achieve optimal conditions for flock welfare and to maintain low moisture content in the litter. Litter will be monitored to ensure that it is friable and loose.

The multi-tier aviary production system used in the new free range house will be the same as the poultry houses at the existing sites and comprises nest boxes and bird perches. Free range houses also have pop-holes in the base of the housing unit so that the birds may roam. Hens will be introduced at 15 - 16 weeks of age and housed for approximately 80 weeks before the flock is depleted. Birds are housed on a littered floor of wood shavings which are topped up

throughout the cycle if required. In the free range houses pop holes will be open for a minimum of 8 hours per day.

Ventilation is automatically controlled via fresh air chimney inlets and eight gable end extraction fans.

Manure collection is via manure belts that collect manure from underneath bird perches, nesting boxes and drinking and feeding stations. Manure is dried on the manure belts using forced ventilation and removed from the poultry houses every two to three days via trailer to a covered manure store. The floor of the manure store is heated via water source heat pumps which in turn dries the manure further. Manure is spread to land out with the installation boundary.

At the end of each cycle, the poultry houses are destocked of birds and all litter and manure completely removed. The houses are then washed down and disinfected before the introduction of the next flock. Wash water is collected in sealed below ground tanks prior to being spread to land out with the installation boundary.

Feed is stored outside the poultry houses in feed silos and augered into the poultry houses from the silos. Dust cyclones are installed on the feed silos which minimises dust emission during feed delivery. Feed is distributed through the poultry houses by track feeders. Feed composition is adjusted throughout the flock cycle to provide optimal nutrient uptake and minimise loss via manure.

Water is supplied to the site via mains water supply. Nipple drinkers are used to water the birds and supplemented with collection cups. These reduce wastage of water and maintain dry litter. There is no water storage onsite.

Lightly contaminated roof and surface water drains to a swale at each site. Gable end areas are concreted to collect any dust which is directed to the swale for treatment.

Eggs are conveyed to a central services area at each site where they are packed for processing off site.

Bird mortalities are collected daily and stored in a secure container for incineration.

Chemicals used for cleaning and disinfection are stored in a bunded store at each poultry house. Procedures are in place to absorb any spillage and ensure appropriate disposal.

Disinfectant foot baths are provided at the entrance to the poultry sheds and are changed twice per week to ensure a high biosecurity standard. Spent disinfectant is disposed of with the poultry manure.

The site is powered by mains electricity with back-up diesel generators in use for each poultry house in the event of a power failure. There is also 200kWp of solar photovoltaic array.

A tree shelter belt will be planted around the new poultry house to aid in absorbing ammonia emissions, thereby reducing the impact on the surrounding environment. This is in addition to the existing mature trees across the poultry farm.

Collectively, these measures are intended to reduce the production and release of ammonia, odours, and dust from the poultry housing units, prevent liquid washings escaping to the environment, and manage the waste produced on-site. All aspects of building design and operation will be supported by management systems that aim to minimise the impact of the permitted activities on emissions to air, water, and land.

The applicant has reviewed and updated the original site condition report to include the proposed additional land area for the new poultry house and establish baseline conditions to quantify the level of any relevant hazardous substances (RHS) currently in the soil or groundwater. The report evaluates the past potential contamination and future pollution risks to both soil and groundwater. SEPA has assessed the report as satisfactory.

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. Auldhouseburn Farm lies within 10 kilometres of several designated sites (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 sites as acceptable (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/1079002 VAR02 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

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2 External Consultation and SEPA's response		
Is Public Consultation Required?		Yes
Advertisement Check:	Date	Compliance with advertising requirements
Edinburgh Gazette	15/11/2024	Yes
Cumnock Chronicle	13/11/2024	Yes
Officer Checking advert: CO		
No of responses received	None	
Summary of responses and how they were taken into account during the determination:		
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 Consultation Required?		Yes
Food Standards Agency:	<p>Consulted on 17/09/2024.</p> <p>Response received on 30/09/2024: No objection to the proposal.</p>	
Health Board:	<p>Consulted on 17/09/2024.</p> <p>Response received from NHS Ayrshire & Arran on 07/10/2024.</p> <p>The consultation raised concerns, several of which are not within SEPA's regulatory remit. These concerns are addressed below and communicated to the consultee on 19/11/2024.</p> <p>Employee Health & Safety</p> <p>The consultee raises concerns regarding public health and the health and safety of employees. The PPC Regulations specifically preclude SEPA from adding conditions to a Permit regarding the health and safety of staff or</p>	
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workers on-site, other legislation exists for that purpose. Permit conditions require that in the event of any incident or accident likely to pose a risk to the environment or harm to human health in the wider community the operator is required to take action to limit the impact and where necessary implement changes to ensure that the event does not happen again.

SEPA are therefore unable to comment further on possible public health concerns related to biosecurity and occupational health measures (vaccination, PPE etc).

Anti-microbial Stewardship

The consultee states that no detail is provided in the application regarding anti-microbial stewardship. Anti-microbial resistance (AMR) risks associated with organic material spreading to land are currently not regulated in Scotland, because AMR levels in soil are not routinely measured and key thresholds for these risks are unquantified. Consequently, there is no current scientific basis to support regulation.

Organic Material to Land

The consultee raises a concern regarding the environmental risks of manure spreading and states that no details are provided in the application of where the manure will be spread. The land on which litter and manure will be spread does not form part of the permitted installation and is therefore not controlled under the PPC Permit. The spreading of poultry litter and manure is regulated under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended), General Binding Rule 18 (GBR18), which stipulates rules for the storage and application of organic fertiliser.

PM_{2.5}/PM₁₀ (Dust)

The consultee raised a concern with regards to particulate matter, especially PM_{2.5}.

In Scotland, air quality objectives are set out in the Air Quality (Scotland) Regulations 2000 (as amended). In determining the application SEPA must consider whether any air quality standards (AQS) might be breached.

The AQS for PM₁₀ measured as a 24 hour mean is 50µg m⁻³ not to be exceeded more than 7 times per year and measured as an annual mean,

18 $\mu\text{g m}^{-3}$.

The standard for PM_{2.5} measured as an annual mean is 10 $\mu\text{g m}^{-3}$.

PM₁₀ is particles 10 microns and below. PM_{2.5} is particles 2.5 microns and below. Therefore, PM₁₀ includes PM_{2.5} and the standards for PM₁₀ will be protective for PM_{2.5}.

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 Supplementary Information submitted with the application confirms that there are no sensitive receptors (e.g. housing) within 300 metres of the proposed new housing and so dust is not considered to be a concern.

Sampling

The consultee commented on the lack of detail in relation to 'local sampling'. The applicant has submitted a Site Condition and Baseline Report which contains sample analysis of soil and groundwater (or representative surface water). The PPC Permit will require ongoing soil and groundwater monitoring at a frequency assessed by SEPA to reflect the environmental risk from the activity.

Biosecurity

The consultee expresses concern that no details to cover biosecurity were included in the application with regards to avian influenza, employee vaccination and visitors' disinfection. The PPC permit will impose conditions limiting the environmental impact from wheel washes and disinfectant footbaths, however SEPA have no remit in terms of other biosecurity requirements such as employee vaccination and visitors disinfection.

Poultry vaccines and medicines

It is not clear what information the consultee requires regarding vaccines and medicines, however the PPC Permit requires vaccines and medicines to be stored securely and in a manner which contains any spillages and prevents discharge to the water environment.

Resource Efficiency

The consultee commented on the lack of sustainability information. In determining an application, SEPA must give consideration to:

- Consumption and nature of raw materials
- Energy efficiency
- Waste generation
- Accident prevention

The above details have been provided in the Supplementary Information submitted with the application.

Information on site decommissioning is provided with the original PPC Permit application.

Odour

The consultee expresses concerns regarding odour generated from manure handling, spreading of manure and cleaning out the poultry houses. 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. A standard permit condition will control odour across the site boundary but potential odour complaints from the spreading of organic material to land is the remit of the Local Environmental Health Department.

The consultee states that the poultry houses are cleaned out every seven weeks which is not the case. This activity would take place no more than once per year.

Local Authority

Consulted on 17/09/2024 including in-combination assessment under Habitats Regulations (Conservation (Natural Habitats, &c.) Regulations 1994.

Reminder sent on 14/11/2024.

Responses received from Environmental Health on 29/11/2024 and 03/12/2024: No comments to make in relation to air quality impacts; satisfied

	that there are likely to be no significant impacts arising from the increased activity at the site and no objection to the variation being granted.
Scottish Water	Consulted on 17/09/2024. Response received on 17/09/2024: No objection to the proposal.
Health and Safety Executive	N/A
NatureScot	Consulted on PPC Regulations on 17/09/2024. Consulted on Habitats Risk Assessment on 01/10/2024 (Habitats Regulations (Conservation (Natural Habitats, &c.) Regulations 1994). Response received on 17/10/2024: No objection to the proposal.
Discretionary Consultation required?	
	Yes
<p>Scottish Government Poultry Inspectorate consulted on 17/09/2024 on in-combination assessment under Habitats Regulations (Conservation (Natural Habitats, &c.) Regulations 1994. Acknowledged receipt of the consultation on 17/09/2024.</p> <p>14/11/2024: Reminder consultation sent.</p> <p>Response received 15/11/2024. The consultee is not aware of any registrations within 10 kilometres of Auldhouseburn Farm, other than a 32,000 free range poultry farm owned by the applicant (H A Blackwood). SEPA is aware of this below threshold farm which has been in operation before December 2021 and is therefore captured in the background levels. No further assessment required.</p>	
Enhanced SEPA Consultation required?	
	No
“Off site” consultation required	
	No
Transboundary Consultation required?	
	No
Is Public Participation Consultation Required?	
(if yes provide justification and details below, otherwise delete rows below)	
STATEMENT ON THE PUBLIC PARTICIPATION PROCESS	
The Pollution Prevention and Control (Public participation)(Scotland) Regulations 2005 requires that SEPA’s draft determination of this application be placed on SEPA’s website and public	

register and be subject to 28 days' public consultation. The dates between which this consultation took place, the number of representations received and SEPA's response to these are outlined below.

Date SEPA notified applicant of draft determination

Date draft determination placed on SEPA's Website

Details of any other 'appropriate means' used to advertise the draft.

Seek advice from the communication department

Date public consultation on draft permit opened

Date public consultation on draft permit consultation closed

Number of representations received to the consultation

Date final determination placed on the SEPA's Website

Summary of responses and how they were taken into account during the determination:

Summary of responses withheld from the public register on request and how they were taken into account during the determination:

REMOVE THIS BOX FROM ANY VERSION OF THIS DOCUMENT TO BE PLACED ON THE WEBSITE OR PUBLIC REGISTER. RETAIN IN THE VERSION FOR THE WORKING FILE.

Officer: CO

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.	
Officer:	CO

4 Introduction and Background

4.1 Historical Background to the activity and variation

H A Blackwood are seeking a permit variation to permit PPC/A/1079002 to increase the current poultry operations at Auldhouseburn Farm, Muirkirk, Ayrshire, KA18 3RZ, to include an additional poultry house with 32,000 bird places for free range laying hens. The land and range associated with the Auldhouseburn Farm site is owned and operated by H A Blackwood, the Responsible Person.

The permit was first issued in March 2010 and has been varied three times.

The site is located at Ordnance Survey national grid reference NS 70717 26945.

The site is currently permitted for 96,000 free range laying hens in three poultry houses. The proposal will increase the permitted number of bird places to 128,000 places for free range laying hens in four poultry houses.

The Auldhouseburn Farm complex consists of three sites; Roundwood (2008/2009), Wellwood (2010) and Glenwood (2015). The new site will be called Marchwood and will be located at Ordnance Survey national grid reference NS 70395 27114.

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 poultry house 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.

H A Blackwood are rearing free range hens for egg production.

Directly Associated Activities include:

- Feed delivery & storage
- Generator & fuel storage
- Chemical storage
- Manure handling
- Dirty water storage
- Storage & incineration of fallen stock
- Management of lightly contaminated surface water
- Auxiliary power generation

4.3 Outline details of the Variation applied for

The proposal will increase the permitted number of bird places to 128,000 places for free range laying hens in four poultry houses. The site is currently permitted for 96,000 free range laying hens in three poultry houses.

Other changes to the permit include the drying of manure on belts via forced ventilation and a change in the installation boundary to include the new poultry house and ranging area.

See Section 8 of this Decision Document for further details on the changes proposed to the permit.

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

Auldhouseburn Farm is within 10 kilometres of the following NatureScot designated sites.

SAC / SPA

Name	Distance (km)	Qualifying interest	Latest assessed condition	Negative pressures
Muirkirk & North Lowther Uplands SPA	0.56	Gloden plover, breeding	Unfavourable declining 2015	Burning, Climate change, Forestry operations, Under grazing
		Hen harrier, breeding	Unfavourable declining 2008	Agricultural operations, Burning, Game/fisheries management, Over grazing

		Hen harrier, non-breeding	Unfavourable declining 2004	Other
		Merling, breeding	Unfavourable no change 2009	Agricultural operations, Burning, Forestry operations, Game/fisheries management
Airds Moss SAC	5.7	Blanket Bog	Unfavourable no change 2016	Forestry operations, Over grazing, Water management

SSSI

Name	Distance (km)	Designated feature	Latest assessed condition
Muirkirk Uplands SSSI	0.56	Blanket bog Breeding bird assemblage Hen harrier, breeding Hen harrier, non-breeding	Unfavourable no change 2005 Favourable maintained 2008 Favourable maintained 2008 Unfavourable declining 2004
Garpel Water SSSI	1.9	Lower Carboniferous (Earth Sciences) (Geological)	Favourable maintained 2007
Blood Moss & Slot Burn SSSI	5.3	Arthropoda (Earth Sciences) (Palaeontology) Blanket Bog Silurian (Earth Sciences) (Palaeontology)	Favourable maintained 2014 Unfavourable no change 2014 Favourable maintained 2014
Ree Burn & Glenbuck Loch SSSI	5.4	Wenlock (Earth Sciences) (Geological)	Favourable maintained 2010
North Lowther Uplands SSSI	6.8	Breeding bird assemblage Hen harrier, breeding Mineralogy of Scotland (Earth Sciences) Upland Assemblage	Unfavourable no change 2015 Unfavourable no change 2008 Favourable maintained 2016 Unfavourable recovering 2015
Kennox Water SSSI	7.0	Lower Carboniferous (Earth Sciences)	Favourable maintained 2007
Greenock Mains SSSI	7.1	Quaternary of Scotland (Earth Sciences) (Geology & Geomorphology)	Favourable maintained 2015
Shiel Burn SSSI	7.2	Silurian (Earth Sciences) (Palaeontology)	Favourable maintained 2010
Birk Knowes SSSI	8.4	Llandovery (Earth Sciences) Silurian (Earth Sciences)	Favourable maintained 2009 Favourable maintained 2012

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

Human Health Receptors

The site is located in a rural area with outspread residences and other nearby agricultural operations. There are no human health receptors within 400 metres of the installation.

Refer to Section 5.2 for an assessment of the impact of the proposal on human health receptors.

Officer:	CO
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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

Point Source emission to air:

The main point source of emission to air from Auldhouseburn Farm will be from the housing units, ventilation systems and the generators in the form of ammonia, dust and fuel fumes.

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 Auldhouseburn 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. Auldhouseburn Farm lies within 10 kilometres of eleven designated sites, please see Section 4.5 of this Decision Document.

SEPA uses the Simple Calculation of Atmospheric Impact Limits (SCAIL) screening tool to assess the impact of ammonia emissions and nitrogen and acid deposition on designated sites.

The process contribution and background values for each designated nature conservation site are obtained for the point on the site boundary which is closest to the emission point. The critical level for pollutant gas concentrations (ammonia) and the critical load for acid or nutrient nitrogen deposition to the habitat are obtained from the Site Relevant Critical Load section of the Air Pollution Information System (APIS) database (www.apis.ac.uk). During screening, the critical level and the lowest of the European range for critical load of the most sensitive designated feature for each site are used in the assessment.

The background plus process contribution, i.e. the total amount of pollutant expected to be experienced by the receptor, is called the Predicted Environmental Contribution (PEC). Where the PEC is less than the benchmark (i.e. < 100% of the critical load or level), or where the process contribution is less than 4% of the benchmark then it is considered unlikely that there will be a significant effect on the designated site as a consequence of the proposed regulated activity.

SCAIL Screening

SEPA have screened the proposal using the SCAIL screening tool based on the following emissions factors:

- Free range ammonia emission factor of 0.094 kg NH₃ /bird place/year *
 - Indoor factor (aviary) = 0.08 x 90% = 0.072
 - Outdoor factor (ranging) = 0.22 x 10% = 0.022

* Based on 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 it is estimated that the hens

spend 10% of their time on the range, and 90% of their time indoors. The ammonia emission factor has been factored accordingly to take into account the proportion of emissions from both the range and indoors.

The following reduction has been applied to the ammonia emission factor:

- 60% reduction due to manure belt drying*

**Current advice, accepted by the UK regulatory agencies is to allow a 60% reduction to the multi-tier aviary housing emission factor where belt drying of manure is applied.*

SCAIL Screening Results

Muirkirk & North Lowther Uplands SPA

- SCAIL screening fails for ammonia, however none of the qualifying interests are sensitive to ammonia and can therefore be screened out.
- SCAIL screening fails for nitrogen and acid deposition. All of the features are sensitive to nitrogen and acid deposition, however there is no expected negative impact on the species due to impact on the species broad habitat. These features can therefore be screened out.

Airds Moss SAC

- SCAIL screening passes for the blanket bog feature and can therefore be screened out.

Likely significant effect / potential damage to the sensitive ecological receptors at Muirkirk & North Lowther Uplands SPA and Airds Moss SAC can therefore be ruled out and no further assessment is required.

Muirkirk Uplands SSSI

- SCAIL screening fails for ammonia, nitrogen and acid deposition.
- Breeding bird assemblage can be screened out as the feature is not sensitive to ammonia, nitrogen or acid deposition.
- Hen harrier, breeding and non-breeding is not sensitive to ammonia. The species is sensitive to nitrogen and acid deposition, however there is no expected negative impact on the species due to impacts on the species' broad habitat. These features can therefore be screened out.
- It is however not possible to rule out a likely significant effect to the blanket bog feature.

Garpel Water SSSI and Ree Burn & Glenbuck Loch SSSI

- Geological features are not sensitive to ammonia, nitrogen and acid deposition and are

therefore screened out.

Blood Moss & Slot Burn SSSI

- Paleontological features are not sensitive to ammonia, nitrogen and acid deposition and are therefore screened out.
- SCAIL screening passes for the blanket bog feature and therefore this feature is screened out.

North Lowther Uplands SSSI

- Breeding bird assemblage and mineralogy are screened out as the features are not sensitive to ammonia, nitrogen or acid deposition.
- SCAIL screening passes for the upland assemblage and hen harrier, breeding features and therefore these features are screened out.

Kennox Water SSSI

- Stratigraphy feature is not sensitive to ammonia, nitrogen and acid deposition and is screened out.

Greenock Mains SSSI

- Geology and geomorphology feature is not sensitive to ammonia, nitrogen and acid deposition and is screened out.

Shiel Burn SSSI

- Paleontological feature is not sensitive to ammonia, nitrogen and acid deposition and is screened out.

Brit Knowes SSSI

- Stratigraphy features are not sensitive to ammonia, nitrogen and acid deposition and are screened out.

Following the SCAIL screening, it is SEPA's view that a significant effect / potential damage to the blanket bog feature at Muirkirk Uplands SSSI as a consequence of ammonia emission and nitrogen deposition arising from the proposed activity cannot be ruled out and detailed assessment is required.

Detailed Assessment

Previous Variation to the Permit (2015)

In 2015, the applicant applied for a variation to the permit to increase the bird numbers at the site with the addition of a third poultry house. The third house (Glenwood 1 & 2) was located at NS 71172 26460, within the Muirkirk Uplands SSSI and Muirkirk & North Lowther Uplands SPA. During the planning application SEPA were requested by NatureScot to assess nitrogen deposition from existing and future development on the SSSI and SPA.

Following a site visit and site-specific advice given by SEPA's Terrestrial Ecologist, SEPA concluded that it was likely that sensitive habitats 600 metres north, east, south and west of the third poultry house would exceed the Critical Load. While the impacts were considered to represent LSE, the fact that the changes would predominantly occur at the edge of the development site meant that only 113 hectares would likely be affected out of a total area of 18,600 hectares. The conclusion was that this is unlikely to adversely affect the SSSI habitat features or the integrity of the SPA. It was noted that it would be desirable to reduce impacts by tree planting. NatureScot's advice to the planning consultation is available on request

SEPA subsequently undertook ammonia monitoring at Auldhouseburn Farm and in the adjacent SSSI/SPA from April 2017 to April 2018. The results showed that the farm itself did not significantly contribute to overall ammonia levels when considering background concentrations. The report was not published, but it is available as a draft and is available on request.

Current Variation to the Permit (2024)

The proposed fourth poultry house to be constructed under this permit variation will be located at NS 70362 27124, approximately 560 metres from the closest point of the SSSI / SPA boundary. The poultry house will be the same size as the poultry house assessed for the 2015 variation, and therefore ammonia emissions will be similar. Previously it was concluded that impacts would generally be restricted to within 600 metres from the poultry house. As the proposed poultry house is not located within the SSSI, but approximately 560 metres away, it is unlikely that critical loads will be exceeded within the SSSI.

This proposal was discussed with NatureScot during pre-application discussions. NatureScot agreed the approach taken via email on 22/05/2024 and confirmed they are satisfied that the fourth poultry shed would be unlikely to present a significant effect on the nearby Muirkirk Uplands SSSI and the Muirkirk & North Lowther Uplands SPA.

In addition, the Operator proposes to dry the poultry manure on the manure belts with forced ventilation. This mitigation measure attracts a 60% reduction to the ammonia emission factor. SEPA have used the SCAIL screening tool to assess the process contribution from the fourth poultry house with and without manure drying. The table below shows the reductions achieved

in the ammonia process contribution at the designated sites with the addition of manure drying. The addition of manure drying reduces ammonia emissions by 45 – 47% at the designated sites.

	Designation	NH3 PC (ug / m3) No Reduction	NH3 PC (ug / m3) Belt Drying	% Reduction in NH3 Emissions
Muirkirk and North Lowther Uplands	SPA	0.36	0.19	47%
Muirkirk Uplands	SSSI	0.36	0.19	47%
Blood Moss and Slot Burn	SSSI	0.035	0.019	46%
Airds Moss	SAC	0.03	0.016	47%
North Lowther Uplands	SSSI	0.022	0.012	45%

Further Reductions

As a further measure to mitigate the effects of ammonia and nitrogen deposition, a tree shelter belt will be planted around the proposed poultry house. The applicant has used the UKCEH Farm Trees to Air tool to calculate the possible ammonia emission reductions that may be achieved from the tree shelter belt in the future. It is expected that ammonia emissions will be reduced by 23% after 25 years when the trees reach maturity. This is in addition to existing tree planting across the poultry farm.

NatureScot Consultation

NatureScot were formally consulted on the detailed assessment and advised that in their view the proposal would not adversely affect the integrity of the Muirkirk & North Lowther Uplands SPA nor would the proposal compromise the objectives of the Muirkirk Uplands SSSI.

Conclusion

It is SEPA's view that the proposed variation to increase the permitted number of bird places to 128,000 places for free range laying hens, with the addition of a poultry house at Auldhouseburn Farm, will not adversely affect the integrity of, or have a likely significant impact on designated sites (SPA/SAC/SSSI) within 10 kilometres of the proposal.

This conclusion has been reached on the following basis:

- SCAIL screening resulted in all designated sites being screened out for likely significant effect, with the exception of the blanket bog feature at Muirkirk Uplands SSSI.
- In 2015 it was concluded that impacts from a third poultry house located within the SSSI, would be restricted to within 600 metres from the poultry house.
- Ammonia monitoring undertaken by SEPA at the poultry farm in 2017/2018 concluded that the poultry farm did not significantly contribute to overall ammonia levels when

considering the background concentrations.

- The proposed fourth poultry house will be located approximately 560 metres from the closest point of the SSSI boundary. As the poultry house will be the same size as the third poultry house assessed in 2015, ammonia emissions will be similar. Exceedances of critical levels are likely to be restricted to within 600 metres of the poultry house.
- Further reductions in ammonia emissions will be achieved by the drying of manure on the belts using forced ventilation and the planting of a tree shelter belt.
- It is therefore concluded that the proposed variation to the permit will not adversely affect the integrity of or have a likely significant effect on the blanket bog feature at Muirkirk Uplands SSSI.

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 or less in 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.

There are no sensitive receptors located within 250 metres of the proposed poultry house at Auldhouseburn Farm and therefore no further assessment is required.

The applicant has however implemented the following mitigation measures to reduce PM₁₀ impacts:

- Coarse litter is used;
- Litter is applied by hand;
- Feeding is ad lib;
- Pellet feed system used; and
- Feed bins have cyclones which collect and contain dust during filling process.

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

Diesel Generators

It is a requirement of the animal welfare regulations that the birds have adequate heating and ventilation at all times.

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 generators will be tested for a short period once per week.

Each poultry house is supplied with a 50kW Pramac back up diesel generator. Diesel is stored internally and each generator is bunded to meet with the requirements of the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended). The exact location of the generator at the new poultry house is to be confirmed, however it will be located at approximately NS 70358 27148.

Incinerator

Mortalities are collected daily and stored in a secure container (1m³) for incineration on site. Liquid egg and broken eggs removed from the poultry houses are also incinerated. The incinerator is housed on hard standing and processes less than 50 kg/hour. A 2,500-litre double skinned diesel tank fuels the incinerator. Incinerator ash (approximately 480kg per year) is stored in a covered container within the incinerator building and collected by a registered waste carrier and animal by-product collection centre. SEPA would expect the operator to use BAT particularly with regard to servicing and maintenance to minimise visible emissions and particulates.

Fugitive emissions to air (BAT 1 & BAT 11)

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 are fitted with cyclone particle containment and mitigation to contain dust emissions as per the requirement in BAT 11.

Additional measures in place to reduce emissions of dust include:

- Coarse litter used, this is dust-extracted
- Litter is applied by hand
- Feeding is ad lib
- Pellet feed system used
- Feed bins will have cyclones which will collect and contain dust during filling process.
- Ventilation systems within housing operates at low air speed to avoid wind chill.

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 Intensive Agriculture. 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.

Odour (BAT 1, 12 & 13)

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.

The sites Odour Management Plan will be updated to include the new poultry house. It is not expected that there will be an odour nuisance at sensitive receptors, however in the event of a substantiated odour complaint, the plan will be reviewed and appropriate action taken.

5.3 Emissions to Water

Point Source Emissions to Surface Water and Sewer

Surface Water Drainage

SEPA considers the CREW Rural SuDS Guide (Rural Sustainable Drainage Systems: A Practical Design and Build Guide for Scotland's Farmers and Landowners) (CREW) as BAT for intensive agriculture installations.

Rainwater from the roof and lightly contaminated surface water from the concreted gable ends of the new poultry house will be treated via a swale. The swale design will comply with BAT which is CREW. The swale will be designed for the planning application and the design details will be made available to SEPA once planning consent has been obtained. The proposed swale outlet will be located at approximately NS 70264 27050.

Washwater is collected in sealed below ground tanks. The new poultry house will have two collection tanks, one at either end of the house, each with a capacity of 45m³.

Point Source Emissions to Groundwater

The area is not a Nitrate Vulnerable Zone (NVZ) or a Drinking Water Protected Area (DWPA).

There shall be no direct point source emissions to groundwater as a consequence of this variation to the permit.

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 installation has been operating under PPC for many years and is generally well run. There are no proposed changes to management practices.

5.4 Emissions to Land (BAT 7 & 20)

Wash water is collected in below ground sealed tanks prior to being spread on land out with the installation boundary. The spreading to land of manure and wash water out with the installation boundary is covered by GBR 18.

Manure is spread to land as organic fertiliser out with the installation boundary. No changes are proposed to existing manure handling practices.

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. Routine maintenance of fans will also prevent noise and the noise management plan will address any issues that should arise and will be updated as stipulated in the permit.

The Permit and SFIR recognise that noise can give rise to complaints. The operator is required to undertake noise assessments and produce a Noise Management Plan to prevent or minimise the impact on the local environment. In the event of a substantiated noise complaint, the plan will be reviewed and appropriate action taken.

The permit requires that emissions from the Permitted Installation are free from noise and vibration levels likely to cause pollution.

No changes are proposed to the existing noise management practices or Noise Management Plan.

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.

Water is provided to the site via the mains water supply. There is no water storage within the new poultry house.

Drinking water equipment is monitored as required for hygiene and animal welfare purposes. Water leakages are repaired as required.

Water consumption is recorded and reported to SEPA as required in line with existing permit conditions (Resource Utilisation reporting).

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 out with 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 requires the operator to identify where efficiencies can be made.

The site is powered by mains electricity with back-up diesel generators in use for each poultry house in the event of a power failure. There is also 200kWp of solar photovoltaic array.

Low energy LED lights have been installed across the site, and high efficiency fans and motors are in used throughout the poultry houses.

Energy consumption is monitored as required.

Raw Materials Selection and Use

All applicants applying to vary a PPC Part A permit 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 requires the operator to identify where any efficiencies can be made and demonstrate continuing improvement.

The raw materials to be used within the new poultry house (listed below) are the same as those used in the existing houses. Usage is expected to increase by a third.

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 on site chemicals will be kept in a secure and bunded chemical store. The maximum storage is 50 litres. Chemical use is recorded and kept on site

Biocides (including disinfectant)

Biocides include DEFRA-approved soaps and disinfectants. Variable quantities are used depending on the substance in use.

Pesticides

Rodenticides are used as needed in bait boxes. They are kept in a locked store cupboard.

Veterinary Medicines

Medicines are not stored at the installation and are brought onto the site and used as required.

Fuel Oil

Agricultural fuel oil is stored within the bunded generators across the site. The fuel storage is compliant with the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended). Each generator has a storage capacity of 100 litres. Fuel consumption is monitored as required.

Water

Water is supplied to the site via mains water supply. 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 bins are fitted with cyclone particle containment. Feed is distributed through the poultry houses by a chain conveyor. No changes are proposed to nutritional management and the feeding regime will be in line with that already in place for the installation. Three different diets are provided so that crude protein in diet is reduced as the birds age. The first two diets contain 17% crude protein and the last has 16%. A nutritionist is employed to review and optimise diets. Feed consumption is monitored and recorded. The maximum feed stored on site is 64 tonnes

(16 tonnes at each poultry house).

SEPA is satisfied that this meets the requirements of SFIR and BAT.

Wood Shavings

Shavings are used as litter for the hens and are laid into the poultry houses before they are stocked. There is no storage of shavings on site.

5.7 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 by the permit.

All plastics including shrink wrap, plastic bags and pallet covers are recycled.

All egg packing materials including trays, cardboard layer pads, corners or pallets are reused

Clinical waste (medicines and glass vials) are returned to the vet for disposal.

It is accepted that a small amount of eggs will end up in the litter within the poultry house and be spread to land with the manure. Liquid egg and broken shelled eggs removed from the poultry houses will be collected in a bucket and incinerated. No change to other waste management practices is expected.

General waste, including paper towels and personal waste are disposed of with general farm waste.

Waste Handling

Disinfectant footbaths are changed twice per week and the spent disinfectant is disposed of with the poultry manure.

Wash water is spread to land out with the installation in accordance with GBR18.

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

Mortalities are collected daily and stored in a secure container (1m³) for incineration on site. Incinerator ash (approximately 480kg per year) is stored in a covered container within the incinerator building and collected by a registered waste carrier and animal by-product collection centre.

5.8 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 installation has been operating under PPC for many years and is generally well run. The additional poultry house will be operated in line with the requirements of SEPA's Standard Farming Installation Rules (SFIR). Management techniques will remain the same across the

permitted operations and there are no proposed changes to management practices or existing maintenance schedules.

An EMS is already in place for the site and will be expanded to include the new poultry house. Additional staff training will be completed as required. Regular checking and maintenance of equipment is carried out and this will be extended to include the new poultry house. No significant changes are expected to the EMS.

Accidents and their Consequences (BAT 1)

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.

The sites Incident Prevention and Mitigation Plan will be updated to include the new poultry house.

Closure

In order to ensure that the site can be returned to its pre-PPC Permit state, SEPA require the applicant to 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).

5.9 Site Condition report

As per Regulation 48 of the PPC Regulations a Site Report and a Baseline Report is required to be submitted with the variation application.

The applicant has reviewed and updated the original site condition report to include the proposed additional land area for the new poultry house and establish baseline conditions to quantify the level of any relevant hazardous substances (RHS) currently in the soil or groundwater. The report evaluates the past potential contamination and future pollution risks to both soil and groundwater. SEPA has assessed the report as satisfactory.

In line with the current permit conditions surface water sampling was undertaken on 07/05/2019 to determine a baseline. Six sampling locations were chosen to cover upstream and downstream areas of the existing swales serving the site.

The surface water monitoring results raised no concerns with the baseline for nitrates, ammoniacal nitrogen and orthophosphate below the limit of detection at all locations. No analysis of relevant hazardous substances was undertaken as the risk of release to soil or groundwater is deemed a low risk due to operational controls and storage arrangements on site. It was concluded that if future monitoring detected these parameters in the samples, it would indicate a failure of the site handling and containment processes.

Surface water sampling was repeated on 21/08/2024. Nitrates and orthophosphates remain unchanged from 2019. Ammoniacal nitrogen increased at all locations from 0.01 mg/l to 0.02 mg/l, except at Point 2 which noted an increase from 0.1 mg/l – 0.03 mg/l. These increases are very small and raise no concerns.

The additional area of land to be included within the PPC permit is assumed to have levels of nitrates, ammoniacal nitrogen and orthophosphate in line with those identified during the 2019 and 2024 surface water monitoring. The site is considered to be free of pollution from any relevant hazardous substances to be used within the proposed poultry operations as these materials have not been used on this piece of land to date.

Management practices will ensure all substances with pollution potential are stored and used in accordance with BAT and any accidents/incidents which cause release of any substance into the environment will be reported to SEPA.

Regular soil and/or water sampling and analysis will continue to be completed in line with permit conditions and include an additional sampling point on the Auldhouse Burn, upstream of the proposed poultry house. The current sampling point 1 is located downstream of the proposed

swale to serve the new poultry house. As there is currently only farmland between point 1 and the new sampling point, point 1 will be used as the baseline for the new poultry house.

5.10 Monitoring (Bat 24, 25, 25, 27 & 29)

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.

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 introduced 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.

The operator already submits data on all of the above to SEPA on an annual basis.

Water

N/A

Soil and Groundwater

Groundwater monitoring is required by the permit every 5 years, and soil monitoring is required every 10 years. No changes are proposed to the monitoring frequency. See Section 5.9 of this Decision Document for more information.

Waste
N/A
5.11 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 variation application to benchmark farming 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 the proposal will have any impact on site designated under the above legislation?	Yes
See Section 5.2.	
Screening distance(s) used	10 Kilometres as per the SEPA Nature Conservation Procedure Guidance (NCP-P-01).
Is there any other legislation that was considered during determination of the permit (for example installations that may be impacted by the requirements of legislation involving Animal By Products, Food Standards, Waste, WEEE regulations etc).	Yes
<p>The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (As amended) (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.</p> <p>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.</p> <p>The SUDS systems to treat surface water drainage have potential to impact groundwater and therefore SuDS design must be in accordance with the CREW Rural SuDS Guide. See Section 5.3.</p> <p>The requirements for generator oil storage under these Regulations are met. See Section 5.2 for consideration of oil storage as BAT.</p> <p>Animal By-Products (Enforcement)(Scotland) Regulations 2013:</p> <p>Regulates carcass disposal. Carcass storage is a Directly Associated Activity (DAA) in the permit. See Section 5.7.</p> <p>Medium Combustion Plant Directive (MCPD):</p> <p>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</p>	
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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 the permit variation.

Officer:	CO
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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:	CO
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8 Details of the permit		
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 permit?		Yes
Outline the changes required and provide justification below:		
Proposed Condition Number:	Proposed Change:	Justification:
1.1.4.1	Four poultry houses with a capacity of 128,000 places for free range laying hens.	This paragraph is updated to include the new poultry house and increase the bird capacity of the site.
1.1.4.2	A ventilation system at each house comprising a combination of mechanical and passive gable inlets, gable outlets, side inlets, side outlets, roof inlets and roof outlets.	The paragraph in the original permit refers to 5 inlet chimneys on each house. This is not the case, and this paragraph is updated to reflect the latest permit template (IED-T-18).
1.1.5.1	Update fuel and chemical storage paragraph.	Include generator fuel storage and chemical store at new poultry house.
1.1.5.3	Update handling of manures paragraph.	The manure store and litter were omitted in error in VAR01, so are added in this variation. Air drying of manure on the conveyor belts is added at this variation.
1.1.5.5	Update auxiliary power generation facilities.	Include generator at new poultry house.
1.1.5.7	Include water source heat pumps used for drying the manure in the manure store.	Add water source heat pumps to the permit.
1.2 Site Plan	Revised site plan.	Revised site plan to include the new

		poultry house and ranging area.
1.2.5 Detailed Layout Plan of Marchwood	Site plan for the new poultry house.	Site plan for the new poultry house.
Officer:	CO	

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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

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10 Peer Review	
Has the determination and draft permit been Peer Reviewed?	Yes
Comments made:	
<p>Changed format of tables of SSSI and SAC's</p> <p>Changed reference for oil storage regulation to the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended).</p> <p>Reword on crude protein in diet, this is not to reduce ammonia as crude protein content is 16%. Current EF's account for 16%.</p> <p>Removed reference to Nature Scot advice and Muirkirk monitoring report attached to this document. Documents are available on request.</p> <p>Draft Permit; New IA permit template removes visual inspection from authorised emissions – Tables 3.2 and 3.3 have been kept in VAR02 for consistency.</p>	
Officer:	Peer Reviewer

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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,
- The applicant will ensure that the installation is operated so as to comply with the conditions of the Permit,
- 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.