REF: TS

Technical Standards

Operations

Operations at Restarigg Farm and Parsons Field will be in accordance with SGN EPR6.09 'How to comply with your environmental permit for intensive farming'. Many aspects of compliance are embedded within the assurance schemes which the farm is subscribed.

Feed

Selection and use of feed is in accordance with SGN EPR6.09 'How to comply with your environmental permit for intensive farming'.
Vitamins, minerals and trace elements are adjusted as required over the laying period. Feed storage bins are specifically designed to accommodate the required feeding regime. Feed and water consumption together with bird weights are carefully monitored to ensure condition is maintained and nutritional requirements are optimised.

Housing

Housing design and management is in accordance with SGN EPR6.09 'How to comply with your environmental permit for intensive farming'.
The housing in all units are insulated. Roof and wall panels are 40mm Kingspan composite sheets.

Laying Shed 1 is a natural ventilation system with eaves inlets and ridge outlet. A gable end fan supplements ventilation. A deep litter system is inspected daily and conditions monitored to ensure litter is dry and friable. A scratching area is provided which is maintained dry. Eggs are removed by *conveyor to the egg packing room.*
Access to the building is through the egg packing vestibule. Birds have access via pop holes to an outdoor shaded foraging area during daylight hours.
Within 2 years of obtaining the environmental permit planning permission will be sought to replace the current building with a new steel frame building with an aviary system as Laying Shed 2 and Laying Shed 3.

Laying Shed 2 is currently in the final stages of construction. The building design and construction follows Best Available Techniques as detailed in SGN EPR6.09 'How to comply with your environmental permit for intensive farming'. The ventilation system is a computer controlled unit which delivers air through roof mounted inlet chimneys and outlet fans (See Appendix 1)
A multi deck aviary system provides nesting for laying. Eggs are removed to the egg packing room by conveyor.
Manure is removed daily by conveyor to a covered trailer.
Birds have access via pop holes to an outdoor shaded foraging area during daylight hours.

Laying Shed 3 has been granted planning permission. The building has been designed and will be constructed in line with Best Available Techniques as detailed in SGN EPR6.09 'How to comply with your environmental permit for intensive farming'. The building will be managed and operated as Laying Shed 2.

General Management

In accordance with the management system at the farm the buildings are regularly inspected an maintained. The floors and walls of the laying sheds are kept clean. All external areas are tidy and well maintained.

Livestock Numbers and Movements

A flock book is maintained. The number of animal places and animal movements are recorded. All records are available for inspection.

Manure Management

Laying Shed 1 is a deep litter system where litter is removed following depletion. Litter is removed with a skid steer unit and loaded onto contractors spreaders for removal. No litter is spread on land associated with the operator. Litter is removed and spread to land further than 4 miles from the installation. Records are maintained of quantities and the dates of removal.

Laying Shed 2 and Laying Shed 3 will operate a daily cycle of manure removal from the sheds to a covered trailer which will transfer manure from the installation twice weekly. The manure will be spread to land further than 4 miles from the installation. Records will be maintained of quantities and the dates of removal.

Records will be maintained of all farms which accept manure exported from the installation. Names and addresses will be recorded. The receiving landowner will sign a docket to confirm that the manure is spread in accordance with the Code of Good Agricultural Practice, or in accordance with the manure management plan for the receiving land.

Emissions and Monitoring

Table of emission points

Emission point description/source and location	*Source*
Air	
Ridge outlets and gable end fan on Layer Shed 1 as shown on the site emissions plan	Layer Shed 1
Roof fan outlets on Layer Shed 2 as shown on the site emissions plan	Layer Shed 2
Roof fan outlets on Layer Shed 3 at Parson Field	Layer Shed 3
Exhaust from generators at Restarigg Instillation as shown on site emissions plan	Generator
Land	
Soakaway as identified on the site drainage plan	Roof water from Layer Shed 1 and Layer Shed 2
Water	
Clean water from machinery/straw store	Roof and uncontaminated yard water from Machinery store and clean yard areas

There are no emissions to groundwater other than surface water from hard core access tracks.

Fugitive emissions

Appropriate measures for preventing fugitive emissions are in place in accordance with SGN EPR6.09 'How to comply with your environmental permit for intensive farming'.

Buildings are maintained in good repair.
Areas around the buildings are kept clean and free of manure and spilt feed.
Drainage from Laying Sheds water from cleaning sheds is collected in an underground tank as shown on the site drainage plan. Diverter bungs are used at wash down periods to ensure there is no contamination of surface water systems and to divert dirty water to the underground tank. Clean drainage systems are not contaminated.
Drains from contaminated areas are collected in the dirty water tank.
The dirty water tank is built to conform with the specifications in SGN EPR6.09. 'How to comply with your environmental permit for intensive farming'.
Spent disinfectants are added to the dirty water collection tanks.

Dust

Feed is stored in purpose built feed bins adjacent to the Laying Sheds. All feed is delivered to the farm in bulk lorries direct from the feed suppliers. Feed is blown directly to the feed bins. Feed is transported from the feed bins directly to the Laying sheds via a piped feeding system.
Ventilation systems are operated to achieve optimum humidity levels for all weather conditions.
Ventilation in Laying Shed 1 is controlled to ensure litter is maintained in a dry and friable state. Dust is controlled through the management of litter and air quality. Laying Shed 2 has a computer controlled ventilation system to control humidity and air flow.
No litter is stored on site.

During clean out of Layer Shed 1 litter is loaded directly onto contractor spreaders. The operations are managed by the site manager and staff are trained to handle litter with care to minimise dust emissions.

Carcass management

Fallen stock are stored in a deep freeze until collection by a licenced collector.

Flies

There have been no incidents of fly nuisance at the farm. Appropriate control measures will be implemented to control flies should a nuisance occur.

Bunding and containment.

Fuel oil is stored in bunded tanks and comply with the requirements of the Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) Regulations 2010 (SSAFO Regulations) and meet the requirements outlined in SGN EPR6.09. 'How to comply with your environmental permit for intensive farming'. Tanks are regularly inspected.

Pesticides and veterinary medicines are kept in a store capable of retaining spillage, resistant to fire, dry, frost free and secure.

Foodstuff

Feed is kept in bulk feed silos away from site traffic. Safety guard rails will be fitted to protect them from collision.

Odour

There is one neighbour (sensitive receptor) within 400 metres of Restarigg and Parsons Field instillations. There is no history of odour complaints resulting from the activities of the existing activities. Laying shed 2 and eventually Laying Shed 3 will operate a system where manure is removed from sheds daily and stored in a covered trailer. The trailer will transport manures away from the farm to be spread on land more than 4 miles from the instillations.

In accordance with the SGN EPR6.09. 'How to comply with your environmental permit for intensive farming' and the H1 assessment refer to the Odour Management Plan.

Noise and vibration

There is one neighbour (sensitive receptor) within 400 metres of Restarigg and Parsons Field instillations. There is no history of noise complaints resulting from the activities of the existing activities.

In accordance with the SGN EPR6.09. 'How to comply with your environmental permit for intensive farming' and the H4 guidance on noise management.

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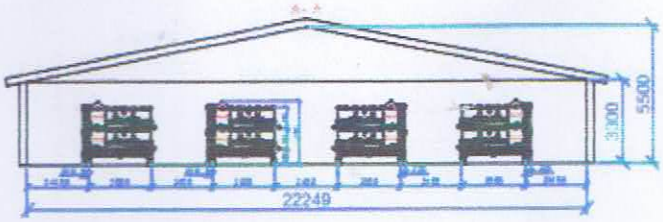
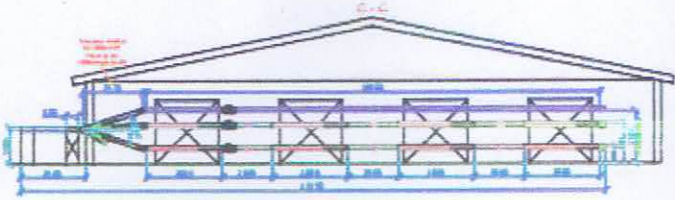
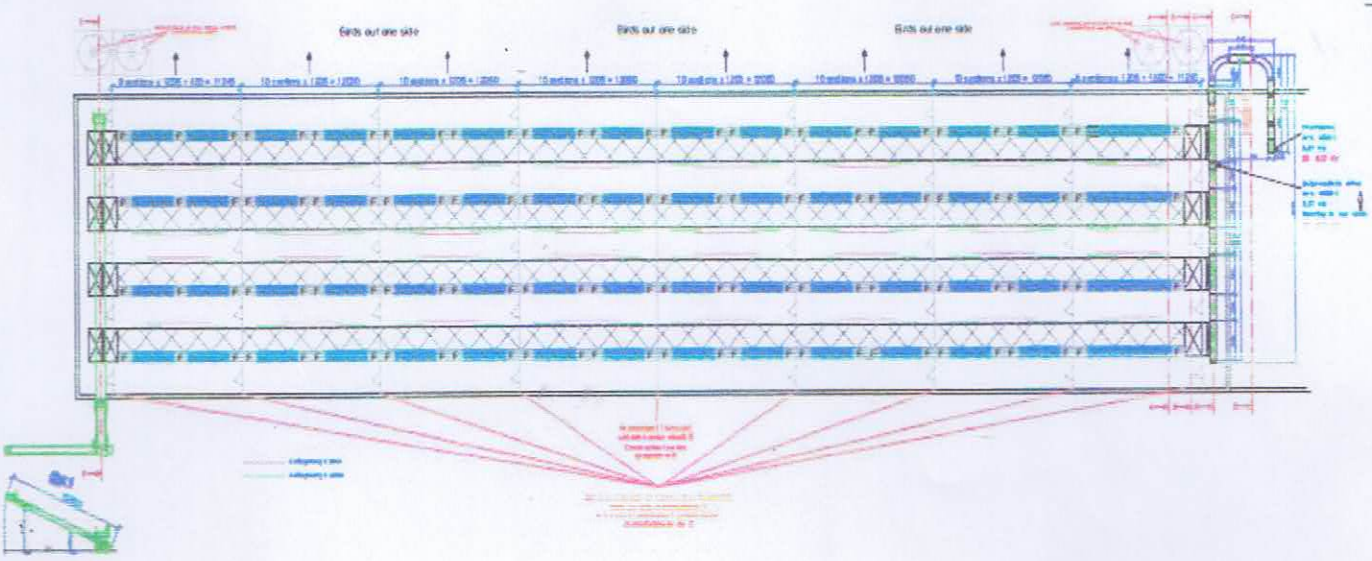
Project Dennis Ohagan, 25-01-2018

Project drawing:







Principle of the system:
We call it an "Balanced ventilation system"
We bring air in by 10 air inlet units with a chimney with a fresh air valve and a recirculation valve separate controlled by de Microfan Argos P1 computer.

Per 16 Cel

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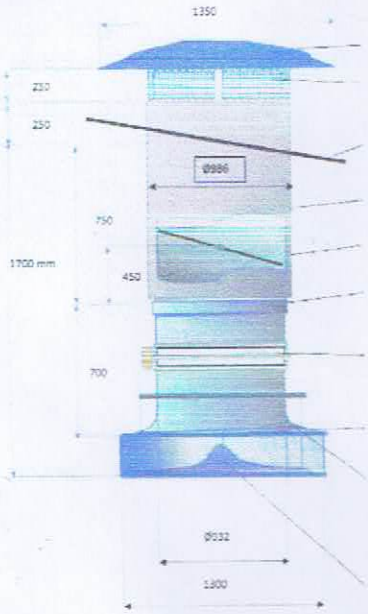

REMARK: the dimensions of the chimney are not right because we use here a chimney with a diameter of 710 mm instead of 920 mm. the length of the chimney stays the same.

6 exhaust fans get the air out of the shed. Under the fan we engineer a throttle unit for control the outgoing air at cold weather.
The exhaust chimney has a diameter of 920 mm.

This is the bases of the ventilation principle.
We use Our Argos P1 computer to control the air flow by using a ventilation table in our computer.

1. We will measure Temperature outside and inside. Humidity, pressure different via a pressure sensor.
2. We have manual switches for the valves for the fresh air valve, the recirculation valve and the throttle valve.
3. We have also manual switches for the frequency convertor at the controller for incoming and exhaust air.
4. The alarms unit is also mounted in the Switch panel.

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Specifications:

Free range layer house for 32.000 birds divided in 2 sections of 16.000 birds.

House is for 32.000 birds

Length	99 m
Width	22,25 m
Wall	3,3 m
Rooftop	5,5 m

Electric : single phase.

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16.000 birds length of the house is 50m.

minimum ventilation	0.6	0,6	m^3/h/kg life weight
Maximum ventilation wall inlets		4,0	m^3/h/kg live weight
Maximum ventilation		4,0	m^3/h/kg live weight

Needed ventilation capacity	1,3 kg	1,9 kg	
Minimum ventilation	12.480	18.240	m^3/h
maximum ventilation inlet chimneys		121.600	m^3/h
Maximum ventilation exhaust chimneys		121.600	m^3/h

Diameter of the inlet Chimneys is 710 mm
Diameter of the exhaust fans is 920 mm.