



Scoping Report

Planning application for a
Broiler Unit at:
Cwmafan
Llanafan Fawr
Builth Wells
Powys
LD2 3PF

Prepared for
JRM & HH Jones and Son

Client's Address

JRM and HH Jones and Son

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Builth Wells
Powys
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Broiler Unit

Planning Authority

November 2019

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CHAPTER 1

INTRODUCTION

1.0 Introduction

This report is compiled in order to assist Powys County Council in the Environmental Impact Assessment (EIA) Scoping process for the proposed poultry unit at Cwmafán, Llanafan Fawr, Builth Wells, Powys, LD2 3PF.




This report is produced by Roger Parry & Partners LLP in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 and associated guidance. This document outlines the scope and content of the EIA.

The aforementioned regulations require that for certain types of development an EIA is undertaken. The regulations prescribe the types of development for which an EIA is mandatory (Schedule 1 development) and others may require an assessment if they have potential to give rise to significant environmental impacts (Schedule 2 development).











The Proposed Poultry Installation is consistent with Schedule 1 of the regulations and an EIA is therefore mandatory. On this basis no formal Screening Opinion has been sought from the Local Planning Authority.

1.1 Objectives and Purpose of an EIA

To identify the potential environmental impacts of a proposed development, taking into account the characteristics of the development and the local environment;

-  To interpret the nature of potential impacts;
-  To identify measures to mitigate adverse impacts; and
-  To report the results of the assessment in an EIA for submission to the planning authority.

Schedule 4 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 specifies the general information that should be included within an EIA as best practice. An EIA should identify, describe and assess the likely significant impacts of the development on the environment with reference to:

-  *Population;*
-  *Climate;*
-  *Flora;*
-  *Fauna;*
-  *Landscape;*
-  *Soil;*
-  *Air;*
-  *Water;*
-  *Material assets (including architectural and archaeological heritage); and*
-  *Any inter-relationships between the above"*

The EIA Regulations also require that EIA should cover:

“Direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the development, resulting from:







- a) *the existence of the development;*
- b) *the use of natural resources;*
- c) *the emission of pollutants, the creation of nuisances and the elimination of waste.”*

1.2 Scoping

Scoping (i.e. determining the amount of information on each of these principal subjects to be presented in an ES), whilst not mandatory, is regarded as an important first step in the overall EIA process. The primary aim of EIA scoping is to facilitate the planning of a focused EIA that concentrates on the resolution of substantive environmental issues, whilst giving appropriate emphasis to those of less potential importance and, where appropriate, excluding any non-issues for further consideration. Regulation 10 of the EIA regulations allows potential applicants to ask the Local Authority to state, in writing, the information that should be set in an EIA. The EIA Scoping Opinion is to be provided following consultation with the relevant bodies.

This Scoping report is issued to Powys County Council in order for the Authority to formulate their official Scoping Opinion which will then be sent to statutory consultees and other organisations as agreed with the Council, for their comment.

Included within this report are;

-  Location plan (Appendix 1)
-  Description of proposed site and surrounding area and outlines the process operation and design
-  Alternative sites considered
-  Identification of key organisations to be consulted with during EIA process
-  Consideration of main issues
-  Draft outline of the proposed EIA

1.3 Background

The farm business trading as JRM & HH Jones and Son has been established for many years and is a partnership between Lyndon Jones and his parents. The farm business extends to 118.58 hectares (293 acres). The farm operates arable, beef and sheep enterprises.

The farm business has made the decision to diversify into a poultry enterprise to support their successful beef and sheep enterprises and the partners wish to enhance the business to create a sustainable future for themselves and the next generation. Lyndon has two sons aged 18 and 16 who have a keen interest in agriculture. Ryan is 18 and studying an NVQ in Agriculture and Dylan 16.

CHAPTER 2

THE DEVELOPMENT PROPOSAL











2. The Development Proposal

This chapter sets out the requirement for and process of scoping the EIA, summarises the receiving environment in the vicinity.

2.1 The Proposal

JRM and HH Jones and Son propose the development of a poultry installation that will produce poultry meat for human consumption. As a worst case the development will accommodate 100,000 birds.

The site will include the following elements:

-  Two poultry sheds
-  Four Feed bins
-  Generator store
-  Office
-  Shower Room
-  Control Room
-  Tool Room
-  Hardstanding to front of sheds for turning, loading and unloading
-  Vehicular access
-  Area set aside for landscaping

It is proposed that two new broiler houses are constructed. The poultry houses will each measure 101.87 metres by 24.4 metres. The total floor area for each shed will therefore be 2,485.628 m². Eaves and ridge height will be 2.48 metres and 5.53 metres respectively. Each of the new houses will have the potential to accommodate 50,000 “standard” broilers.


The new buildings will be typical of modern poultry sheds. Colours will be to Local Planning Authority approval but suggested colour is slate grey in line with the existing farm buildings at Cwmafán.

Each building will comprise of a steel portal framed construction with insulated box profile steel sheet cladding.

The roof pitch will be 10°.

The broiler houses will be insulated with fibre glass insulation to the walls and roofs. The walls will be insulated with 100 mm insulant and the roofs with a 200 mm insulant. The U value will be <0.4 W/m² °C and therefore condensation on the inner lining of the buildings will be eliminated and the solar heat gain into the houses will be minimal.

The houses are erected with a smooth easily washable concrete floor on a damp proof membrane. The walls will rest on a poured concrete foundation. The specification is as follows:-

-  100 mm concrete floor thickened to 200 mm thick below perimeter walls, 1,000ga DPM minimum 125 mm consolidated blinded hardcore.

The ventilation system will consist of a computer-controlled mechanical ventilation system.

- There will be twelve inlets in each gable end.
- There will be fifteen 800mm diameter extraction fans in the roof of each shed down the slope to minimise the skyline impact.

The gable fans are incorporated as a method of ventilation in very hot weather; the majority of the time the roof fans will provide sufficient ventilation for the building.

Tunnel ventilation is a system where exhaust fans are located at one end of the house and two large openings are installed at the opposite end. Air is drawn through these openings, down the house, and out of the fans which act like pumps, like a wind tunnel. A baffle area will be located beyond the ventilation fans to control emissions.

Polycarbonate windows based on 3% of the floor area to RSPCA Welfare Standards will be incorporated and linked into automatic dusk till dawn sensors with a U value of 1.7 at 62% light transmissions. The windows will be 4 / 6 60mm 20mm / 4mm units with a quoted R_w of 29dB.

Hours of operation will be 24 hour seven days a week due to the fact that it is a livestock enterprise requiring continual husbandry. Short six day periods between crop cycles will occur when there will be no birds on the site. A layout plan for the facility is shown in Appendix 1.

The chickens will be grown in 7.6 42-day crop cycles per annum with six-day turn around periods per crop. It is expected that, on the receipt of planning permission, the construction would commence in 2019 with operation commencing after a three month construction period.

The proposed intensive poultry installation is to be located at Land at Cwmafan, Llanafan Fawr, Built Wells, Powys, LD2 3PF (Ordnance Survey Grid Reference: SN962553). A number of management decisions are to be made that will keep vehicle movements to a minimum.

2.2 The Proposal

DEFRA data shows that broiler production is in relatively rapid decline since 2005, the six month rolling average at March 2009 was down to 120,000 tonnes per month from a peak of about 135,000 tonnes and production is now at its lowest since 1995. This is due in part to many existing broiler houses reaching the end of their productive life when production either ceases or suffers (Savills, 2009).

The UK was 97% self-sufficient in poultry meat in the late 1980s and is now around 90% self sufficient and imports a greater volume than it exports; in 2006 imports were valued at £1 billion and exports almost £200 million. Imports peaked in the fourth quarter of 2005 at over 130,000 tonnes.

The Sterling exchange rate has weakened considerably over the past 24 months, which makes imports relatively more expensive. An increase in domestic production to create a vibrant UK broiler sector would create a greater security of supply.

The proposal is a sustainable economic development that will contribute positively to the UK poultry sector. In addition to the wider national benefit, the development will create a full time employment position as well as indirectly contributing to the local economy through feed contracts, building contracts, veterinary employment etc.

It should be noted that the need for more poultry buildings in the UK is also being driven by the consumer demand for higher welfare chicken (HWC) meat. As an example broiler meat produced for the Freedom Food Standards endorsed by the RSCPA requires 30% additional floor area than meat produced under the lower welfare standards of the Assured Poultry Meat Scheme.

2.3 Site Location

The proposed site is located to the south west of Llanafan Fawr in the County of Powys; the local authority is Powys County Council, and the Community Council is Llanafan Fawr Community Council. It lies within an existing livestock unit.

The surrounding land is exclusively agricultural. The site is classed as open countryside in the Powys County Council Local Development Plan.

2.4 Alternative Sites

In selecting the chosen development site other possible sites on the farm have been considered in detail by the Applicant but discarded.

The first site was closer to the county highway, but it was considered to be too visually intrusive to the highway, the second was closer to the farmhouse at Cwmafan but the site would have required the removal of hedgerow to accommodate and would again be visually intrusive.

2.5 Consultations

To refine the Scope of the EIA the following principal consultees will be approached for both their opinion and specialist information as to the Scope of the study required to complete the full EIA required by the proposed development:

-  Powys County Council
-  Natural Resources Wales
-  Powys Council Highways Authority
-  North Wales Wildlife Trust
-  British Horse Society
-  Llanafan Community Council

CHAPTER 3

BASELINE CONDITIONS

3. Summary of Baseline Conditions

A preliminary understanding of the baseline conditions for the EIA study area in respect of the proposed development at Cwmafan has been gained through a combination of reviewing existing data and information held by Powys County Council. A summary of the key baseline issues is presented below;

3.1 Air Quality

Local air quality is dominated by traffic sources include the B4358. There are no Air Quality Management Areas within the vicinity of the site.

3.2 Landscape

The site lies within a rural area with the chosen site not being included within any areas designated for their landscape character and quality.

The site encompasses permanent pasture. The site is bounded by tree plantations, hedgerows and the existing farm complex.

The landscape around the site is gently undulating.

The population in the immediate surroundings is greatly dispersed with only Llanafan Fawr in close proximity. Other key receptors in the vicinity of the site include walkers, horse and cycle riders and road users.

3.3 Highways

The site is accessed off the B4358 from Newbridge to Beulah and then via a right turning onto an unclassified road. The site is accessed off the council maintained highway, from an improved access as per the site and location plans leading to buildings.

3.4 Population/Socio-Economics

The site lies within the open countryside with limited isolated residential properties close by and small villages in the surrounding landscape. The site lies within the unitary authority area of Powys County Council and the Parish of Llanafan Fawr.

3.5 Noise

The noise environment in the area is dominated by road traffic sources from the two surrounding highways. The surrounding community comprises of a mixture of scattered agricultural holdings with some residential dwellings within small settlements. Noise levels across the site are considered to be typical of a rural area.

3.6 Geology, Soils, Ground Stability and Contamination

Within the area surrounding the proposed site, the geology of Lower ground of upland plateau in E to SE dipping Lower Silurian mudstones, dissected by shallow E-W fault controlled tributary valleys and by deeper NW-SE Chwefri valley. Boulder clay on plateau and in valleys, some peat, alluvium and alluvial fans along river. N-S tributary to Irfon along ridge to W.

3.7 Ecology

A relatively narrow range of habitats has been recorded with the site in question having been pasture land for many years and improved through utilisation of fertiliser and farm yard manure.

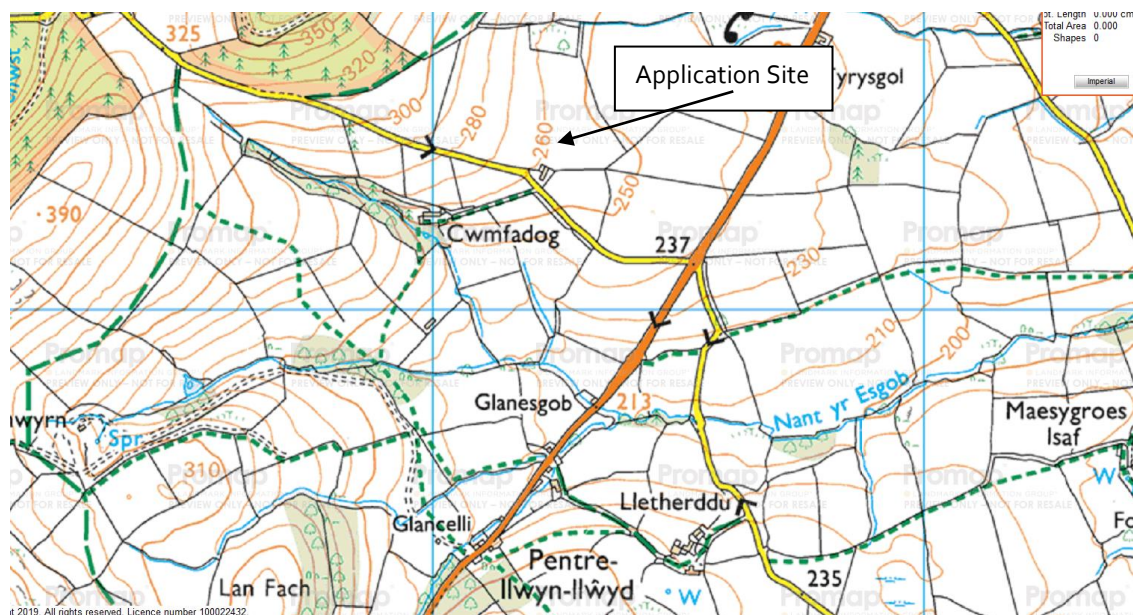
No standing water is evident within 500 metres of the site and therefore no survey for Great Crested Newts or other amphibians was necessary other than the land other noted habitats were the surrounding hedgerows and off site tree plantations.

The established hedgerows surrounding the site may provide habitats for nesting birds and other small wildlife.

No trees are likely to require felling to accommodate the proposed development and as a result it is likely that any bats will be significantly affected. Planting proposals will support the formal application together with an Ecological Report.

3.8 Water Resources

Watercourses as shown on the plan below;



3.9 Cultural Heritage

The chosen site itself has no apparent cultural heritage or archaeological interest. This very extensive area is principally given over to agriculture and forestry, its terrain consists of highland and lowland, with mixed sizes of farms, field boundaries, afforestation, minerals extraction and communications. The area is sparsely populated. Within 500 metres of the site there are no listed buildings.

3.10 Other Developments

Planning and permitted developments in the locality will be included in the assessment both in terms of potential impacts upon them, but also in relation to potential cumulative effects with the proposals.

At this initial stage indications are that there are no relevant proposals within the vicinity of the site.

CHAPTER 4

ENVIRONMENTAL IMPACTS

4. Environmental Impacts

In considering the existing environment surrounding the proposed development site for a Poultry Installation at Cwmafan, Llanafan Fawr, the potential sources of environmental impacts have been identified in the tables appended below. The tables are based on three principle phases of the development being Construction, Operation and Decommissioning respectively.

4.1 Potential Environmental Impacts

The EIA will consider the magnitude, duration and significance and any mitigation measures of any impacts arising both directly and indirectly from the construction and operation of the proposed Poultry Installation. Assessments will also consider abnormal operations and emergency scenarios where appropriate.

Note is made that reference to a potential impact source does not imply any quantitative assessment to adversity, neither is the list considered as being exhaustive. It is a working document and new issues and targets may become apparent through further consultation.

Table 1: Summary of key potential impacts

Potential receptors of impact		Activities & potential Impacts	
		Construction Phase	Operation phase
		Decommissioning Phase	
WATER	Surface water hydrology and channel morphology	<p>Use of vehicles and machinery</p> <ul style="list-style-type: none"> - Increase in surface runoff from soil compaction <p>Works near watercourses</p> <ul style="list-style-type: none"> - Change in flow velocities - Increased flood risk <p>Earthworks</p> <ul style="list-style-type: none"> - Increased sedimentation of watercourses <p>Buildings and ancillary structures</p> <ul style="list-style-type: none"> - Changes to runoff characteristics and infiltration rates 	<p>Use of vehicles and machinery</p> <ul style="list-style-type: none"> - Increase in surface runoff from soil compaction
	Surface water quality	<p>Earthworks</p> <ul style="list-style-type: none"> - Pollution from suspended material <p>Materials management</p> <ul style="list-style-type: none"> - Pollution from spills or leaks of fuel, oil and construction materials 	<p>Water and manure management</p> <ul style="list-style-type: none"> - Decrease in water quality from sudden releases (e.g. from tank failure or yard washing) or gradual seepage of contaminated water into nearby watercourses <p>Materials management</p> <ul style="list-style-type: none"> - Pollution from agricultural chemicals, spills or leaks of fuel and oil - Eutrophication of watercourses - Leechate from manure heaps entering watercourses - Runoff after manure spread on land affecting watercourses
Groundwater	Earthworks and site drainage	Use of borehole for water supply	Termination of abstraction

		Activities & potential Impacts		
Potential receptors of impact		Construction Phase	Operation phase	Decommissioning Phase
	hydrology	<ul style="list-style-type: none"> - Reduction in water table - Changes to groundwater distribution and flow 	<ul style="list-style-type: none"> - Lowering water table 	<ul style="list-style-type: none"> - Rebound of water table
	Groundwater quality	Materials management <ul style="list-style-type: none"> - Pollution from spills or leaks of fuel, oil and building materials 	Landspreading of waste <ul style="list-style-type: none"> - Contamination from infiltration arising from over-application Materials management <ul style="list-style-type: none"> - Contamination from agricultural chemicals, spills or leaks of fuel and oil 	
LAND	Landscape	Excavation and earthworks <ul style="list-style-type: none"> - Creation of a new landform - Change in character of landscape Creation of housing <ul style="list-style-type: none"> - Change in character of landscape 	Presence of poultry housing <ul style="list-style-type: none"> - Change in character of landscape Presence of feed bins <ul style="list-style-type: none"> - Change in character of landscape Presence of manure <ul style="list-style-type: none"> - Change in character of landscape 	
	Soils	Use of vehicles and machinery <ul style="list-style-type: none"> - Compaction Earthworks <ul style="list-style-type: none"> - Further erosion of exposed soil 	Spreading of animal manure <ul style="list-style-type: none"> - Changes in soil nutrient levels and heavy metals Use of vehicles and machinery <ul style="list-style-type: none"> - Soil compaction - Soil erosion 	
AIR	Local Air quality	Use of vehicles and machinery <ul style="list-style-type: none"> - Dust generation 	Storage/spreading manure <ul style="list-style-type: none"> - Release of gases to the atmosphere - Ammonia emissions Animal housing	









Potential receptors of impact		Activities & potential Impacts	Construction Phase	Operation phase	Decommissioning Phase
				<ul style="list-style-type: none"> - Ammonia emissions <p>Use of vehicles and machinery</p> <ul style="list-style-type: none"> - Exhaust emissions 	
Regional global quality	/ air	<p>Change in vegetation</p> <ul style="list-style-type: none"> - Changes in uptake of CO2 		<p>Storage / spreading of manure</p> <ul style="list-style-type: none"> - Release of gases to the atmosphere - Ammonia emissions <p>Animal housing</p> <ul style="list-style-type: none"> - ammonia emissions <p>Animal housing</p> <ul style="list-style-type: none"> - increase in domestic production leading to reduction in greenhouse gas emissions through transportation of overseas produce 	
FLORA AND FAUNA	Aquatic ecology	<p>Drainage works and use of vehicles</p> <ul style="list-style-type: none"> - negative impact on flora and fauna from increased sediment loading of streams <p>Materials management</p> <ul style="list-style-type: none"> - harm to aquatic flora and fauna from oil, fuel or other substances entering watercourses 	<p>Surface runoff</p> <ul style="list-style-type: none"> - pollution of watercourses by contaminated runoff - sedimentation of watercourses <p>Site drainage</p> <ul style="list-style-type: none"> - indirect effect on aquatic flora and fauna from ongoing changes to stream hydrology and morphology <p>Materials management</p> <ul style="list-style-type: none"> - direct and indirect effects from agro-chemicals, oil, fuel or other substances entering the aquatic environment 	<p>Post-closure land-use</p> <ul style="list-style-type: none"> - changes in habitat type - opportunity for increase in uncultivated areas 	

Potential receptors of impact		Activities & potential Impacts Construction Phase	Operation phase	Decommissioning Phase
Terrestrial ecology		Earthworks and excavations <ul style="list-style-type: none"> - habitat removal, fragmentation or severance - disturbance to, or loss of species 	Storage / spreading of manure <ul style="list-style-type: none"> - deposition of ammonia onto vegetation Animal housing <ul style="list-style-type: none"> - deposition of ammonia onto vegetation Physical presence of building and ancillary structures <ul style="list-style-type: none"> - alteration or loss of terrestrial habitats - creation of new habitats Manure spreading <ul style="list-style-type: none"> - disturbance to, or loss of species 	Post-closure land-use <ul style="list-style-type: none"> - changes in habitat type opportunity for increase in uncultivated areas
HUMAN ENVIRONMENT	Socio-economic		Farming operation <ul style="list-style-type: none"> - continued flux of people away from or towards the farm 	Closure of farm <ul style="list-style-type: none"> - movement of people away from the farm
	Health & Safety	Negative publicity <ul style="list-style-type: none"> - adverse reaction to perceived health issues 	Waste disposal operations <ul style="list-style-type: none"> - risk of nuisance or harm from manure storage (e.g. consumption of contaminated groundwater) - risk of harm from landspreading manure 	
	Amenity		Presence of building, ancillary structures and field boundaries <ul style="list-style-type: none"> - possible alteration of rights of way or reduction in access Vehicle movements	

Potential receptors of impact	Activities & potential Impacts Construction Phase	Operation phase	Decommissioning Phase
		<ul style="list-style-type: none">- increase in number and frequency of vehicles- noise and vibration from vehicle movements <p>Storage / spreading of manure / feed</p> <ul style="list-style-type: none">- increase in flies and vermin	

4.2 Issues not to be assessed

Issues scoped out from the Environmental Assessment are as follows;

-  Public safety during the construction, operation and decommissioning phases as the site will be secure at all times;
-  Landscape features during the construction, operation and decommissioning phases as no significant features occur on site;
-  Night time lighting during the construction and decommissioning phases;
-  Water use during the decommissioning phase;
-  Blight during the decommissioning phase as the source of any potential blight would be removed;
-  Utilities during the construction and decommissioning phase;
-  Stack, fugitive, odour and carbon emissions during decommissioning as there will be no combustion, odorous or other sources of non-dusty emissions on site and fuel use is likely to be minimal;
-  Archaeology during decommissioning

CHAPTER 5

PROPOSED ASSESSMENT TECHNIQUES

5. Proposed Assessment Techniques

The paragraphs appended below outline the techniques that will be employed in assessing the potential impact of the proposed Poultry Unit on the immediate and surrounding environment.

5.1 Traffic

Several assessments will be undertaken within the Traffic Assessment. The Traffic Assessment will be carried out in accordance with the DfT's 'Guidance on Transport Assessment' (2007).

Baseline Traffic Assessment and Safety Methodology

Existing traffic flow will be assigned to the applicant's existing business will be obtained from the applicants and verified by Roger Parry & Partners LLP using their experience of agricultural traffic generation from similar enterprises and will be assessed against likely future movements of traffic.





Personal Injury Accident (PIA) records will be reviewed for the local area covering five years (01 December 2004 to 30 November 2009).

Traffic Generation and Assignment (Including Construction/Demolition Traffic Generation)

The expected worst case maximum HGV movements to be generated by the operation of the proposed poultry installation are derived principally from experience of existing poultry units for which planning permission was obtained.

Data from Defra and industry standards for Broilers will also be used to assess tonnes of feed consumed and bird outputs.

To ensure that generation estimates are robust and as a worst case scenario the following assumption will be used:




-  When calculating total movements 7.6 crop cycles per year will be assumed.
-  When calculating manure production the highest Defra figures will be assumed.
-  When calculating bird output the highest kilograms per square metres will be assumed.
-  When estimating feed deliveries the highest Feed Conversion Rates will be assumed.






Construction traffic will be derived from estimating the maximum numbers of construction workers and material deliveries to the construction site given the nature of the proposals and the expected four month construction programme.

Assessment will include a description of the necessary design works.

5.2 Noise & Vibration

The noise impact assessment will assess the potential impact of noise and vibration from the proposed poultry installation (including both normal noise emissions and any occasional intense noise sources) and alterations to traffic flows during the construction, operation and decommissioning phases. The following guidance will be used for the assessment;

-  Planning Policy Guidance, PPG24, 'Planning and Noise', 1994
-  BS5228: 1997 'Noise and Vibration Control on Construction and Open Sites',
-  BS4142: 1997 'Method for Rating Industrial Noise Affecting Mixed Residential and Industrial Areas',

-  BS7445: 2003 'Description and Measurement of Environmental Noise',
-  Department of Transport 'Calculation of Road Traffic Noise' 1984
-  World Health Organisation 'Guidelines for Community Noise', 1999.
-  Institute of Environmental Management and Assessment (IEMA), and Institute of Acoustics (IOA) 'Guidelines for Noise Assessment', 2002
-  Highways Agency 'Design Manual for Roads and Bridges –Volume II', 1994

5.3 Amenity





The risk assessment technique used will be based on guidance relating to intensive livestock farming (from the Environment Agency's (EA's) 'Simple assessment of environmental risk for accidents, odour, noise and fugitive emissions (EPR – H1) – Version 080328 (March 2008)) and includes comprehensive management plans based on accepted guidance and Best Available Technique (BAT). The methodology utilises a range of simple checklist tables to identify sources, receptors and pathways in relation to potential amenity issues.

The types and sources of potential nuisances will be identified and the potential sensitivity of individual receptors qualitatively assessed, based upon the nature of, and proximity to hazard generating activities, general wind direction frequencies and the nature of the receptor. In addition, the scope and efficacy of integral controls will be accounted for.

In addition to the above method, historic complaints made to the Environmental Health Department regarding other poultry sites in the vicinity will be analysed in order to judge the frequency of complaints in relation to the amenity issues being assessed at similar sites. Magnitude and significance will be assessed using professional judgement based on the general expected intensity and frequency of any potential impact against the number, nature and sensitivity of receptors potentially affected. For example, a major, long term, release of odour, dust or flies etc. affecting large numbers of residential receptors to a level that would be likely to cause nuisance and complaint, and which is assessed to be a probable occurrence, would constitute an impact of Major Significance. Conversely, a minor release, barely detectable by a very limited number of industrial receptors, and which is assessed as being unlikely to occur, would constitute an impact of Minor or Negligible Significance.

5.4 Socio-Economics

The key purpose of socio-economic impact assessment is the examination of how a proposed plan, project or development is likely to change the lives of current and future residents of a community and to inform the design and decision-making processes accordingly. The Inter-organizational Committee on Guidelines and Principles for Social Impact Assessment (1994) outline the processes for assessing social impacts that are consistent with the EIA framework. The socio-economic assessment of this project will cover:







-  Employment
-  Impact on neighbouring industrial and residential properties (including effects on house prices and provision of heat and power)
-  Services and utilities (including consideration of provision of heat and power for surrounding communities)
-  Quality of life issues (including health, safety and recreation/amenity with reference to other assessments e.g. air quality, amenity, noise, landscape etc.)

Quantitative data will be provided where possible sourced from census and local authority records. In addition, there will be consultation exercises with statutory bodies and members of the public that will be directly affected by the development (including residential and industrial neighbours). It is expected that a range of meetings and face-to-face interviews will be carried out to allow all those affected to have a reasonable opportunity to comment on the proposals and to enable identification of appropriate mitigation.

5.6 Landscape

The landscape and visual impact assessment will be carried out according to the methodology contained in *'The Guidelines for Landscape and Visual Assessment'*

This assessment will show the;

-  Extent of potential/theoretical visibility (Zone of Visual Influence – ZVI);
-  Views and viewers affected;
-  Degree of visual intrusion or obstruction that would occur (both day and night time);
-  Distance of views;
-  Resultant impacts on the character and quality of views; and
-  Potential for mitigation of visual impacts.

The assessment of impact significance will be quantified where practicable, and determined through a combination of survey, professional judgement and views expressed during consultation (particularly from local residents and representative bodies). Mitigation works will be sympathetic to the landscape character of the area.

5.7 Water Resources

The assessment of potential impacts on water resources arising from the proposed development will be undertaken by analysing any interactions between the construction and operational processes on surface water drainage patterns and groundwater characteristics.

The assessment will identify the likely risks of groundwater and surface water contamination during construction, operation and decommissioning of the proposed poultry installation and investigate the appropriate use of Sustainable Drainage Systems (SUDS) to minimise such impacts, taking into account advice provided by the Environment Agency (EA). This will involve a qualitative assessment to establish the significance of the predicted effects through consideration of the likelihood of the event, sensitivity of the groundwater / surface water receptors and effectiveness of proposed mitigation measures at reducing the risk of impact. The significance of the effects (incorporating any mitigation measures and the management of abnormal operations - e.g. spillages) will then be assessed using quantitative techniques (where appropriate) and professional judgement.

The assessment will identify the likely risks of groundwater and surface water contamination during application of poultry manure to agricultural land. This will involve preparing a farm manure management plan to identify high and very high risk areas and areas where spreading is not permitted. The assessment will be carried out with reference to the Nitrate Pollution Prevention Regulations 2008.

The Natural Resources Wales flood map shows that the site is outside the floodplain however the site is over 1ha and the EA is likely to object to any planning application unless it is accompanied by a Flood Risk Assessment which demonstrates that flood issues have been adequately considered within the final development plans.

5.8 Soils

The assessment of potential impacts on soils arising from the proposed development will be undertaken by analysing any interactions between the construction and operational processes on soil conditions. This section of the impact assessment would inevitably be linked with the assessment of Water Resources and would follow a similar method of assessment.

The assessment will identify the likely risks of soil contamination during the construction, operation and decommissioning of the proposed poultry installation. This will involve a qualitative assessment to establish the significance of possible effects through consideration of the likelihood of the event, sensitivity of the soil as a receptor and effectiveness of proposed mitigation measures at reducing the risk of impact. The significance of any effects (incorporating any mitigation measures) will then be assessed using quantitative techniques (where appropriate) and professional judgement.

The assessment will commence with a desk study complemented by site investigations as necessary. A site visit will also be undertaken along with a background data search utilising the data from the Water Resources assessment and data from the Historic Environment section.

The above data will be used to develop a conceptual site model, in line with current guidelines, to determine source-pathway-receptor linkages. If the initial desk study indicates that there are likely to be very low risks or insignificant effects then this will form the basis of the assessment. If more significant effects are likely then more detailed assessment will be carried out potentially involving further site investigations (e.g. soil sampling as necessary to determine soil quality baseline data). Mitigation measures will also be identified as appropriate.

5.9 Ecology and Conservation

A number of environmental studies will be carried out to inform the proposed developments. The topics to be addressed will be as follows:

Impact on Designated Sites

This will include any Special Areas of Conservation, Special Protection Areas, Ramsar sites, Sites of Scientific Interest and Areas of Outstanding Natural Beauty.

The assessment will also include any impact on Local Nature Reserves, non-statutory nature conservation sites, BAP habitats and species.

With respect to air emissions an assessment of the impact of aerial ammonia emissions on any SSSIs within 5km or European Sites within 10km.

Species

A Phase 1 habitat survey will be carried out to establish if, and to what extent, the site is used by protected species. An assessment will be carried out to identify any direct habitat loss resulting from the scheme, any impacts on protected or BAP species present in the vicinity and whether there are any opportunities for mitigation and enhancement.

The assessment will provide a review of existing information, utilising literature searches and drawing upon local and where appropriate, national expertise. Surveys, assessments and recommendations

for mitigation measures will be undertaken by a suitably qualified and experienced ecologist holding any licences that may be required.

5.10 Air and Climate

The potential effects of atmospheric emissions from the proposed poultry development and associated traffic movements will be assessed. This will take account of air quality standards and guidelines, potential health effects, effects on internationally and nationally designated conservation sites, and climate change. A baseline survey of current air quality will be carried out. The potential effects of the proposed facility will be assessed using atmospheric dispersion screening tools where appropriate, and other applicable approaches.

PM10 Emissions - Reference Site

A Reference Site will be used for assessing the impact of PM10 emissions.

Ammonia Emissions – Screening Tool

An assessment of the effect of ammonia emissions from the poultry installation on sites of ecological value will be carried out by using the Simple Calculation of Ammonia Impact endorsed by the Centre for Ecology and Hydrology to estimate potential impacts from ammonia at identified ecologically sensitive locations in the proximity of the site. Information regarding the size, location and bird numbers of the sheds will be inputted into the screening tool along with information regarding the relative locations of sensitive receptors to the site.

Emissions form Road Traffic

A decision will be made whether or not emissions from road traffic need to be modelled if they are considered significant.

Baseline Air Quality

In order to carry out the assessments it will be necessary to compile background information regarding the background air quality and the existing situation.

Information on baseline PM₁₀ concentrations in the vicinity of the proposed site will be obtained from nationwide estimates of baseline air quality made by the Department for Environment, Food and Rural Affairs (Defra) for each square kilometre in the UK. The estimates are based upon principal local and regional sources of emissions and ambient monitoring data.

5.11 The Historic Environment

Sources of Information

Details of Listed building will be obtained from the Register of Listed Buildings, details of all Registered Parks and Gardens, Scheduled Monuments, Registered Battlefields etc will be obtained from the www.magic.gov.uk website. The Historic Environment Officer will be consulted regarding archaeological deposits directly affected by the development.

5.12 Material Assets

A quantitative assessment will be made of the types and volumes of materials, fuels and energy required to construct and operate the proposed Poultry Installation, including fuel associated with bird delivery movements.

The potential for recycling of materials will also be explored on the decommissioning of the Poultry Units.

5.13 Planning Policy and Guidance

The proposal will be assessed against the baseline and relevant existing planning guidance and policies, including National Planning Guidance Policy notes (PPGs), Regional Planning Guidance notes (RPG's), Strategic and Local Plan policies.

CHAPTER 6

ENVIRONMENTAL IMPACT ASSESSMENT

6. Proposed Contents of Environmental Statement

A preliminary content for the Environmental Statement is detailed below, based on issues identified during the Scoping Exercise.

Non Technical Summary (NTS)

The provision of a NTS is a mandatory requirement. It will present an accurate and balanced account of the key information contained within the main EIA. It will describe the project, the main alternatives studied, the design/environmental assessment approaches, the predicted environmental impacts and the effectiveness of any mitigation measures. The NTS will be produced as a stand-alone user-friendly, affordable document suitable for use as a press release and for public dissemination.

Introduction

This section will introduce the proposals and the legislative background against which they are set. It will also include a method statement and details of the EIA team and assessment criteria.

Scoping and Key Issues

This section will present the conclusions of the Scoping Exercise, summarising how the topics to be assessed and methods to be used were chosen via the initial application process together with any subsequent issues that have arisen as a result of the EIA process. The formal Scoping Opinion will also be included.

Alternatives

This section will describe the alternatives considered including the 'Do-Nothing Scenario' and alternative locations, in terms of their physical, operational, economic and environmental feasibility.

Development Description

This section describes the construction, use and physical nature of the proposed plant and its use, including delivery and access issues.

Policy and Legislative Context

This section will summarise whether and how the proposals accord with relevant policies, in particular the current Development Plan of the area and with general reference to the relevant National and Regional policies.

The Environmental Assessment Chapters

Each significant environmental issue will be presented as a separate chapter within the EIA. Even issues previously scoped out of the EIA will receive reference in order to show that they have been considered.

All chapters will begin with a detailed description of the baseline conditions relevant to the particular topic being discussed. Any supporting data such as figures and results will be referenced and included as appendices.



The assessment techniques used will be outlined and the predicted construction, operation and decommissioning impacts will be described in terms of their nature, duration, and magnitude, the consumption of natural resources, the emission of pollutants and creation of nuisance.

The magnitude of any impact is likely to be a combination of the extent of the geographical area affected and the scale of the effect. The EIA will show how any adverse environmental impacts can

Chapter 6 Environmental Impact Assessment

be enhanced. Each chapter will conclude with an analysis of any adverse effects that cannot be eliminated detailing how they will be mitigated to an acceptable level by appropriate design and management.

Those Environmental Assessment Chapters to be included are appended below;

-  Air Quality, Health and Climate;
-  Landscape and Visual Impacts;
-  Traffic;
-  Amenity Issues;
-  Ecology;
-  Noise and Vibration;
-  Water Resources;
-  Soils;
-  Socio-Economics; and
-  Archaeology and Cultural Heritage.

Finally, **Summary and Conclusions** will be provided detailing an overview of the assessment.

APPENDICES

This section will include any technical data from the baseline studies, details of consultation responses and any other relevant information.

APPENDIX