

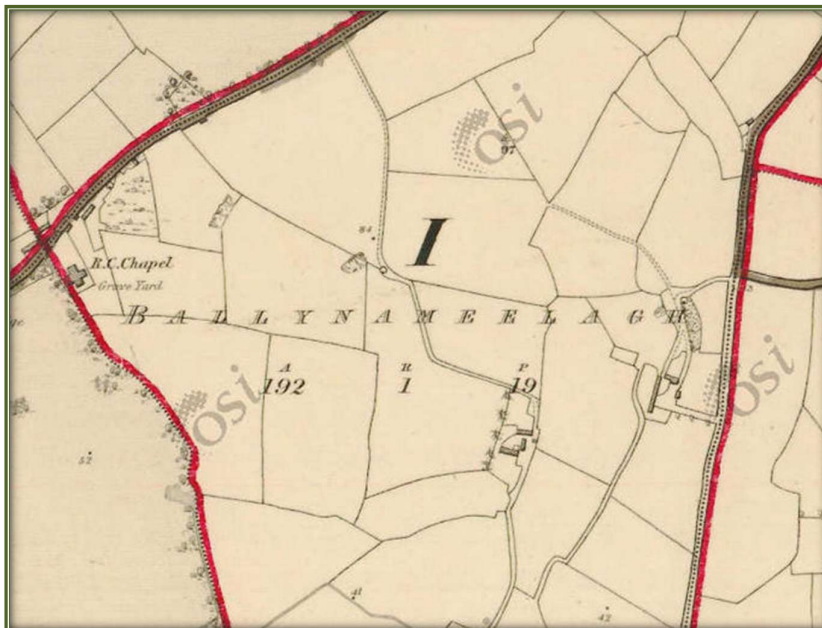


**Noreen McLoughlin, MSc**

Environmental Consultant

Whitehill  
Edgeworthstown  
Co. Longford  
☎ (087) 4127248 / (043) 6672775  
✉ noreen.mcloughlin@gmail.com

**NATURA IMPACT STATEMENT OF AN APPLICATION FOR A  
LICENCE AT BALLINAMEELA, CAPPAGH, CO WATERFORD  
(EPA LICENSE NO. P0447-02)**



*Ashleigh Farms Ltd  
c/o Paraic Fay  
C.L.W. Environmental Planners Ltd  
The Mews  
23 Farnham Street*

*November 2022*

## TABLE OF CONTENTS

<b>1</b>	<b>INTRODUCTION</b>	<b>3</b>
1.1	<i>Requirement for an Appropriate Assessment</i>	3
1.2	<i>The Aim of This Report</i>	3
1.3	<i>Regulatory Context</i>	4
<b>2</b>	<b>METHODOLOGY</b>	<b>8</b>
2.1	<i>Appropriate Assessment</i>	8
2.2	<i>Statement of Competency</i>	10
2.3	<i>Desk Studies &amp; Consultation</i>	10
2.4	<i>Assessment Methodology</i>	10
<b>3</b>	<b>DESCRIPTION OF THE PROPOSED PROJECT</b>	<b>12</b>
3.1	<i>Project Description</i>	12
3.2	<i>Site Location and Surrounding Environment</i>	16
<b>4</b>	<b>NATURA 2000 SITES IDENTIFIED</b>	<b>19</b>
<b>5</b>	<b>IDENTIFICATION AND ASSESSMENT OF POTENTIAL IMPACTS</b>	<b>23</b>
5.1	<i>Introduction</i>	23
5.2	<i>Potential Significant Effects</i>	23
<b>6</b>	<b>MITIGATION MEASURES</b>	<b>26</b>
<b>7</b>	<b>NIS CONCLUSIONS</b>	<b>27</b>

# **1 INTRODUCTION**

## **1.1 REQUIREMENT FOR AN APPROPRIATE ASSESSMENT**

This Natura Impact Assessment was prepared to accompany an EPA License Review (Reg No. Po447-01) for an existing pig farm at Ballynameelagh, Cappagh, Co. Waterford. It followed on from an Appropriate Assessment Screening Determination made by the EPA in February 2022 regarding this License application.

Having regard to the location of the application site and its proximity to certain sites designated under the Natura 2000 network, an Appropriate Assessment of the proposed development was prepared in accordance with Article 6 of the Habitats Directive.

The purpose of the assessment is to determine the appropriateness of the proposed project, in the context of the conservation status of the site or sites. In Ireland, an Appropriate Assessment takes the form of a Natura Impact Statement (NIS), which is a statement of the likely impacts of the plan or project on a Natura 2000 site. The NIS comprises a comprehensive ecological impact assessment of the plan or project and it examines the direct and indirect impacts that the plan or project might have on its own or in combination with other plans or projects on one or more Natura 2000 sites in view of the sites' conservation objectives.

## **1.2 THE AIM OF THIS REPORT**

This Natura Impact Statement (NIS) has been prepared in accordance with the current guidance (DoEHLG, 2009, Revised February 2010), and it provides an assessment of the potential impacts of the atmospheric emissions from a poultry farm at Cappagh, Dungarvan, Co. Waterford on designated European sites.

An NIS should provide the information required in order to establish whether or not a proposed development is likely to have a significant impact on certain Natura sites in the context of their conservation objectives and specifically on the habitats and species for which the Natura 2000 conservation sites have been designated.

Accordingly, a comprehensive assessment of the ecological impacts of this application was carried out in November 2022 by Noreen McLoughlin, MSc, MCIEEM of Whitehill Environmental. This assessment allowed areas of potential ecological value and potential ecological constraints associated with this proposed development to be identified and it also enabled potential ecological impacts associated with the proposed development to be assessed and mitigated for.

## 1.3 REGULATORY CONTEXT

### RELEVANT LEGISLATION

The Birds Directive (Council Directive 2009/147/EC) recognises that certain species of birds should be subject to special conservation measures concerning their habitats. The Directive requires that Member States take measures to classify the most suitable areas as Special Protection Areas (SPAs) for the conservation of bird species listed in Annex 1 of the Directive. SPAs are selected for bird species (listed in Annex I of the Birds Directive), that are regularly occurring populations of migratory bird species and the SPA areas are of international importance for these migratory birds.

The EU Habitats Directive (92/43/EEC) requires that Member States designate and ensure that particular protection is given to sites (Special Areas of Conservation) which are made up of or support particular habitats and species listed in annexes to this Directive.

Articles 6(3) and 6(4) of this Directive also call for the undertaking of an Appropriate Assessment for plans and projects not directly connected with or necessary to the management of, but which are likely to have a significant effect on any European designated sites (i.e. SACs and SPAs).

The Water Framework Directive (WFD) (2000/60/EC), which came into force in December 2000, establishes a framework for community action in the field of water policy. The WFD was transposed into Irish law by the European Communities (Water Policy) Regulations 2003 (S.I. 722 of 2003). The WFD rationalises and updates existing legislation and provides for water management on the basis of River Basin Districts (RBDs). RBDs are essentially administrative areas for coordinated water management and are comprised of multiple river basins (or catchments), with cross-border basins (i.e. those covering the territory of more than one Member State) assigned to an international RBD. The aim of the WFD is to ensure that waters achieve at least good status by 2027 and that status does not deteriorate in any waters.

### Appropriate Assessment and the Habitats Directive

Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora – the 'Habitats Directive' - provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats and species of European Community interest, at a favourable conservation status. Articles 3 - 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as

*Natura 2000.* Natura 2000 sites are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/EEC).

Articles 6(3) and 6(4) of the Habitats Directive sets out the decision-making tests for plans or projects affecting Natura 2000 sites. Article 6(3) establishes the requirement for Appropriate Assessment:

“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”

Article 6(4) deals with the steps that should be taken when it is determined, as a result of appropriate assessment, that a plan/project will adversely affect a European site. Issues dealing with alternative solutions, imperative reasons of overriding public interest and compensatory measures need to be addressed in this case.

Article 6(4) states:

“If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.”

### The Appropriate Assessment Process

The aim of Appropriate Assessment is to assess the implications of a proposal in respect of a designated site's conservation objectives.

The 'Appropriate Assessment' itself is an assessment which must be carried out by the competent authority which confirms whether the plan or project in combination with other plans and projects will have an adverse impact on the integrity of a European site.

Screening for Appropriate Assessment shall be carried out by the competent authority as set out in Section 177U(1) and (2) of the Planning and Development Act 2000 (as amended) as follows:

(1) A screening for appropriate assessment of a draft Land use plan or application for consent for proposed development shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that Land use plan or proposed development, individually or in combination with another plan or project is likely to have a significant effect on the European site.

(2) A competent authority shall carry out a screening for appropriate assessment under subsection (1) before—

(a) a Land use plan is made including, where appropriate, before a decision on appeal in relation to a draft strategic development zone is made, or

(b) consent for a proposed development is given.'

The competent authority shall determine that an Appropriate Assessment is not required if it can be excluded, that the proposed development, individually or in combination with other plans or project will have a significant effect on a European site.

Where the competent authority cannot exclude the potential for a significant effect on a European site, an Appropriate Assessment shall be deemed required.

Where an Appropriate Assessment is required, the conclusions of the Appropriate Assessment Report (Natura Impact Statement (NIS)) should enable the competent authority to ascertain whether the plan or proposed development would adversely affect the integrity of the European site. If adverse impacts on the integrity of a European site cannot be avoided, then mitigation measures should be applied during the appropriate assessment process to the point where no adverse impacts on the site remain. Under the terms of the

Habitats Directive consent can only be granted for a project if, as a result of the appropriate assessment either (a) it is concluded that the integrity of any European sites will not be adversely affected, or (b) after mitigation, where adverse impacts cannot be excluded, there is shown to be an absence of alternative solutions, and there exists imperative reasons of overriding public interest for the project should go ahead.

Section 177(V) of the Planning and Development Act 2000 (as amended) outlines that the competent authority shall carry out the Appropriate Assessment, taking into account the Natura Impact Statement (amongst any other additional or supplemental information). A determination shall then be made by the competent authority in line with the requirements of Article 6(3) of the Habitats Directive as to whether the plan or proposed development would adversely affect the integrity of a European site, prior to consent being given.

## 2 METHODOLOGY

### 2.1 APPROPRIATE ASSESSMENT

This NIS has been prepared with reference to the following:

- European Commission (2018). Managing Natura 2000 Sites: The Provisions of Article 6 of the 'Habitats' Directive 92/43/EEC.
- European Commission (2021). Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC.
- European Commission (2006). Nature and Biodiversity Cases: Ruling of the European Court of Justice.
- European Commission (2007). Clarification of the Concepts of: Alternative Solution, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence, Opinion of the Commission.
- Department of Environment, Heritage and Local Government (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities.

The EC Guidance sets out a number of principles as to how to approach decision making during the process. The primary one is 'the precautionary principle' which requires that the conservation objectives of Natura 2000 should prevail where there is uncertainty.

When considering the precautionary principle, the emphasis for assessment should be on objectively demonstrating with supporting evidence that:

- There will be no significant effects on a Natura 2000 site;
- There will be no adverse effects on the integrity of a Natura 2000 site;
- There is an absence of alternatives to the project or plan that is likely to have an adverse effect to the integrity of a Natura 2000 site; and
- There are compensation measures that maintain or enhance the overall coherence of Natura 2000.

This translates into a four stage process to assess the impacts, on a designated site or species, of a policy or proposal.

The EC Guidance states that "each stage determines whether a further stage in the process is required". Consequently, the Council may not need to proceed through all four stages in undertaking the Appropriate Assessment.



The four-stage process is:

**Stage 1: Screening** – The process which identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans, and considers whether or not these impacts are likely to be significant;

**Stage 2: Appropriate Assessment** – The consideration of the impact on the integrity of the Natura 2000 site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts;

**Stage 3: Assessment of Alternative Solutions** – The process which examines alternative ways of achieving objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site;

**Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain** – An assessment of the compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

In complying with the obligations set out in Articles 6(3) and following the guidelines described above, this screening statement has been structured as a stage by stage approach as follows:

- Description of the proposed project;
- Identification of the Natura 2000 sites close to the proposed development;
- Identification and description of any individual and cumulative impacts on the Natura 2000 sites likely to result from the project;
- Assessment of the significance of the impacts identified above on site integrity. Exclusion of sites where it can be objectively concluded that there will be no significant effects;
- Description of proven mitigation measures.

## **2.2 STATEMENT OF COMPETENCY**

This NIS report was carried out by Noreen McLoughlin, BA, MSc, MCIEEM. Noreen has an honours degree in Zoology and an MSc in Freshwater Ecology from Trinity College, Dublin and she has been a full member of the Chartered Institute of Ecology and Environmental Management for over fifteen years. Noreen has over 17 years' experience as a professional ecologist in Ireland.

## **2.3 DESK STUDIES & CONSULTATION**

Information on the site and the area of the proposed development was studied prior to the completion of this statement. The following data sources were accessed in order to complete a thorough examination of potential impacts:

- National Parks and Wildlife Service - Aerial photographs and maps of designated sites, information on habitats and species within these sites and information on protected plant or animal species, conservation objectives, site synopses and standard data forms for relevant designated sites.
- Environmental Protection Agency (EPA)- Information pertaining to water quality, geology and licensed facilities within the area, correspondence from the EPA regarding this License application;
- Myplan.ie – Mapped based information;
- National Biodiversity Data Centre (NBDC) – Information pertaining to protected plant and animal species within the study area;
- CLW Environmental Planners – Site plans, development description and information on potential emissions.
- Waterford County Council – Information on planning history in the area for the assessment of cumulative impacts.

## **2.4 ASSESSMENT METHODOLOGY**

The proposed development was assessed to identify its potential ecological impacts and from this, the Zone of Influence (Zoi) of the proposed development was defined. Based on the potential impacts and their Zoi, the Natura 2000 sites potentially at risk from direct, indirect or in-combination impacts were identified. The assessment considered all potential impact sources and pathways connecting the proposed development to Natura 2000 sites, in view of the conservation objectives supporting the favourable conservation condition of the site's Qualifying Interests (QIs) or Special Conservation Interests (SCIs).

The conservation objectives relating to each Natura 2000 site and its QIs/SCIs are cited generally for SACs as “to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or Annex II species for which the SAC has been selected”, and for SPAs “to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA”.

As defined in the Habitat’s Directive, the favourable conservation status of a habitat is achieved when:

- Its natural range and area it covers within that range is stable or increasing;
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future;

The favourable conservation status of a species is achieved when:

- The population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future;
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Where site-specific conservation objectives (SSCOs) have been prepared for a European site, these include a series of specific attributes and targets against which effects on conservation condition, or integrity, can be measured. Where potential significant effects are identified, then these SSCO should be considered in detail.

### 3 DESCRIPTION OF THE PROPOSED PROJECT

#### 3.1 PROJECT DESCRIPTION

##### OVERVIEW

Ashleigh Farms have applied to the EPA for a review of their existing licence for an intensive pig farm at Ballinameela, Cappagh, Co. Waterford (Po447-01). This license review has been requested in order to accommodate the following:

1. Amend the site boundary to account for a dry sow house, developed onsite in 2007 that was only recently recognised to be located marginally outside the licenced activity boundary.
2. Addition of a new Activity Class to regularise an Anaerobic Digester (AD) operating onsite.
3. Achieve regulatory approval for the planned installation of a fallen animal incineration unit onsite.

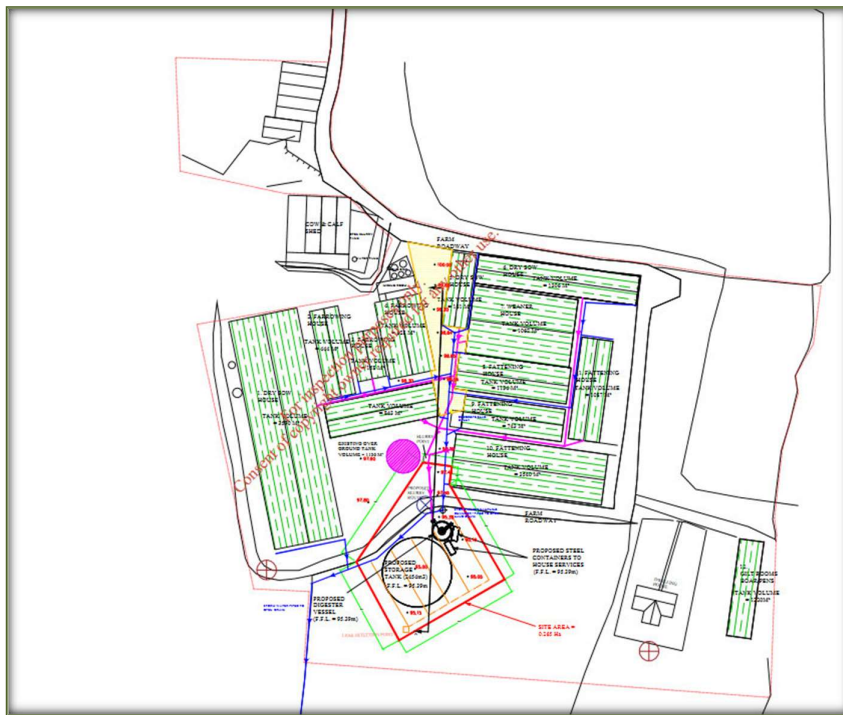


Figure 1 – Proposed Site Plan (as prepared by David Leonard)

The main activities carried out at this facility involve the rearing and feeding of pigs, and it operates as a fully integrated pig farm. The installation currently consists of animal houses, ancillary structures and all equipment necessary for the accommodation, management and husbandry of the animals, along with the administration of the enterprise. This farm has been operational for many years.

The main emissions from the pig farm include pig manure, clean surface water, soiled water and atmospheric emissions. The pig manure produced on site will be utilised as a fertiliser on local farms for the purposes of efficient grass / crop production in accordance with S.I. 113 of 2022. Records for the movement of all manure will be kept on site.

The operation of the farm will be done in accordance with its existing license and any additional conditions generated following the license review. The operation of the farm will be done in accordance with S.I. 113 of 2022.

### **S.I. 113 OF 2022**

The European Union (Good Agricultural Practice for Protection of Waters) Regulations 2022 provides a basic set of measures to ensure the protection of waters, including drinking water sources, against pollution caused by nitrogen and phosphorus from agricultural sources, with the primary emphasis being on the management of livestock manures and other fertilisers. This directive outlines measures that must be followed during the land-spreading of manure. These measures are summarised in the points below.

- Livestock manure or slurry containing more than 170kg per hectare in a year must not be spread.
- The spreading of any organic fertiliser during certain times of the year is prohibited (The prohibited spreading period, generally between Mid-October and Mid-January).
- Farmers must keep within the overall maximum fertilisation rates for nitrogen and phosphorus.
- Farmers must have sufficient storage capacity to meet the minimum requirements of the regulations.
- All storage facilities must be kept leak proof and structurally sound.
- Records for the movement of fertilisers
- Chemical fertilisers, livestock manure and other organic fertilisers, effluents and soiled water must be spread as accurately and as evenly as possible.
- An upward-facing splash plate or sludge irrigator on a tanker or umbilical system must not be used for the spreading of organic fertiliser or soiled water.
- Chemical fertilisers, livestock manure, soiled water or other organic fertilisers must not be spread when:
  - The land is waterlogged;
  - The land is flooded, or it is likely to flood;
  - The land is frozen, or covered with snow;
  - Heavy rain is forecast within 48 hours;

- The ground slopes steeply and there is a risk of water pollution, when factors such as surface run-off pathways, the presence of land drains, the absence of hedgerows to mitigate surface flow, soil condition and ground cover are taken into account.
- Chemical fertilisers must not be spread on land within 2 metres of a surface watercourse.

Table 1 shows the buffer zones for various water bodies (lakes, rivers, wells etc.). Soiled water, effluents, farmyard manures or other organic fertilisers must not be spread inside these buffer zones.

Water Feature	Buffer Zone
Any water supply source providing 100m <sup>3</sup> or more of water per day, or serving 500 or more people	200m (or as little as 30m where a local authority allow)
Any water supply source providing 10m <sup>3</sup> or more of water per day, or serving 50 people or more	100m (or as little as 30m where a local authority allows)
Any other water supply for human consumption	25m (or as little as 15m where a local authority allows)
Lake shoreline or turlough likely to flood	20m
Exposed cavernous or karstified limestones features	15m
Any surface watercourse where the slope towards the watercourse exceeds 10%	10m
Any other surface waters	5m

**Table 1 – Requirements for the Application of Fertilisers and Soiled Water as set out in S.I. 113 of 2022.**

Prior to its approval, a Natura Impact Statement was prepared for the Nitrates Action Programme (NAP) by RPS (2022). This Natura Impact Statement considered the potential of the measures proposed within the NAP to give rise to adverse effects on the integrity of European Sites, with regard to their qualifying interests, associated conservation status and the overall site integrity, alone and in combination with other relevant plans and programmes.

The NIS concluded that the adoption of the NAP will not adversely affect the integrity of any European Site either alone or in combination with other relevant plans or programmes and subject to securing the mitigation measures prescribed in the NIS.

The applicant is fully aware of his obligations under S.I. 113 of 2022 and he will meet all the requirements under this Directive with the proposed application.

### 3.2 SITE LOCATION AND SURROUNDING ENVIRONMENT

The site in question is approximately 4.6 hectares and it located in a rural area, in the townland of Ballynameelagh. Access to the site is provided by an existing entrance into the farm and this is located just off a local, third-class road. The site is 7.2km south-east of Cappoquin and 9.8km west of Dungarvan.

The dominant land-use surrounding the application site is intensive agriculture and improved agricultural grassland and tillage lands are the dominant habitats locally. Other natural habitats represented locally include areas of semi-improved and wet grasslands, hedgerows, treelines and watercourses. Site location maps can be seen in Figures 2 and 3 whilst an aerial photograph of the site and its surrounding habitats can be seen in Figure 4.

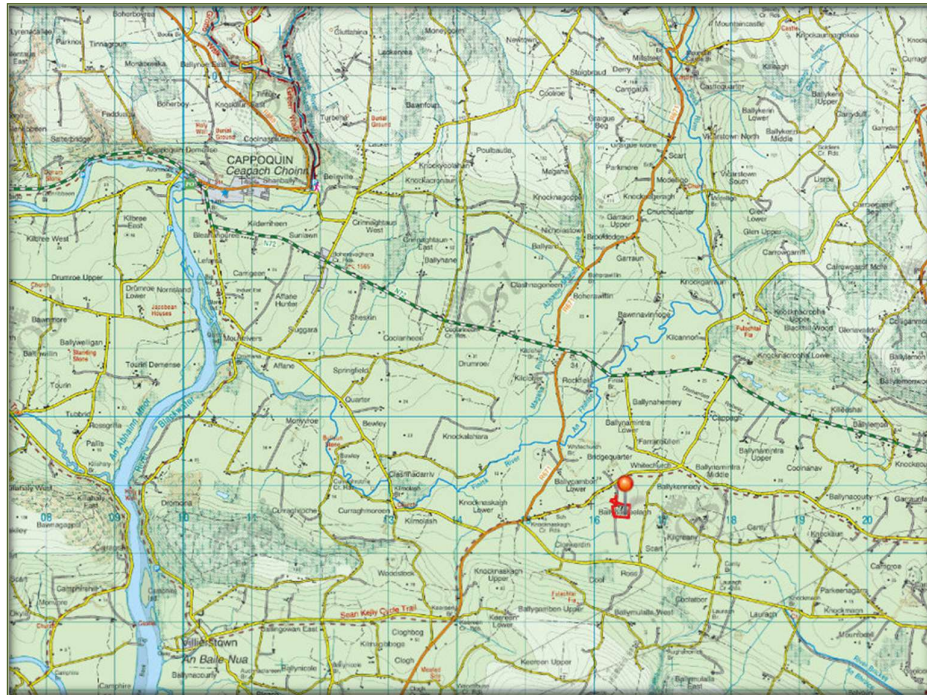


Figure 2 – Map showing the Location of the Proposed Development Site (Pinned)



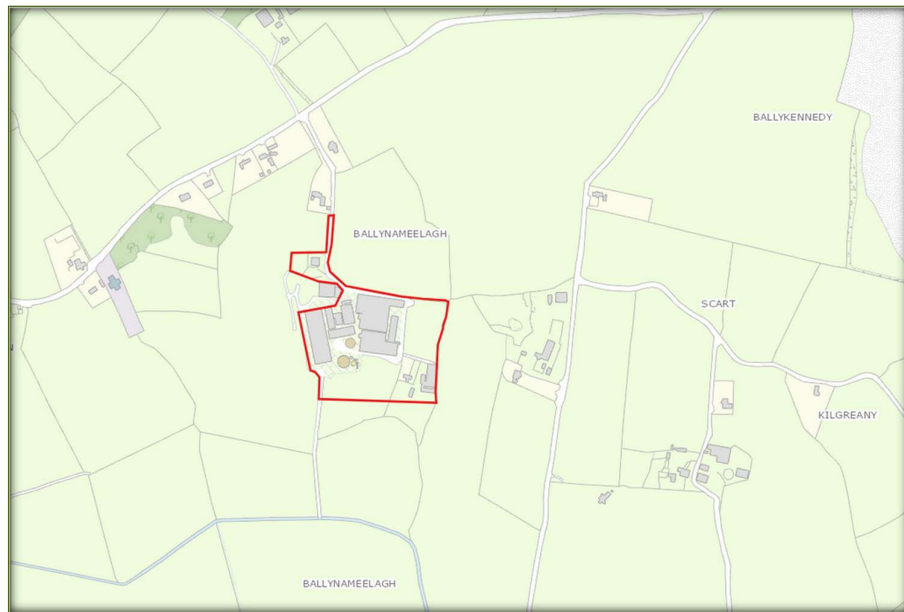


Figure 3 – Map showing the Location of the Proposed Development Site (Outlined in Red)

#### **HABITATS WITHIN THE SITE**

The application site does not lie within or immediately adjacent to any site that has been designated for nature conservation purposes. The dominant habitat within the application site currently is buildings and artificial surfaces, i.e., the existing pig houses, associated structures and access roads. There is an existing area of agricultural grassland in the eastern and southern sections of the site. Where present, the natural site boundaries consist of hedgerows.

## WATER FEATURES AND QUALITY

The application site lies within the Colligan-Mahon Hydrometric Area (17) and Catchment (17), the Colligan Sub-Catchment (010) and the Brickey Sub-Basin (010). There are no watercourses within or immediately adjacent to the site boundary. The Brickey River flows 207m south of the site and surface water from the site is being discharged via land drain into this river. The Brickey River flows in a south-easterly direction until it discharges into Dungarvan Harbour at a point approximately 9km south-east of the application site.

The EPA have defined the ecological status of the Brickey River at points close to the application site as poor. Further downstream, status improves slightly to moderate. The Brickey Estuary is noted to be of poor ecological status. Under the requirements of the Water Framework Directive in Ireland, this is unsatisfactory and all watercourses are obliged to meet achieve good ecological status within a specified time frame (2021).



Figure 4 – Aerial Photograph of the Site (Outlined in Red) and its Surrounding Habitats.

## 4 NATURA 2000 SITES IDENTIFIED

In accordance with the guidelines issued by the Department of the Environment and Local Government, a list of Natura 2000 sites within 15km of the proposed development have been identified and described according to their site synopses, qualifying interests and conservation objectives. In addition, any other sites further than this, but potentially within its zone of interest were also considered. The zone of impact may be determined by an assessment of the connectivity between the application site and the designated areas by virtue of hydrological connectivity, atmospheric emissions, flight paths, ecological corridors etc.

For significant effects to arise, there must be a potential impact facilitated by having a *source*, i.e., the proposed development and activities arising out of its construction or operation, a *receptor*, i.e., the European site and its qualifying interests and a subsequent *pathway* or *connectivity* between the source and receptor, e.g., a water course. The likelihood for significant effects on the European site will largely depend on the characteristics of the source (e.g., nature and scale of the construction works), the characteristics of the existing pathway and the characteristics of the receptor, e.g., the sensitivities of the Qualifying Interests (habitats or species) to changes in water quality.

There are eight Natura 2000 designated sites within 15km of the application site. These designated areas and their closest points to the proposed development site are summarised in Table 1 and a map and aerial photograph showing their locations relative to the application site are shown in Figures 5 and 6. A full description of these sites can be read on the website of the National Parks and Wildlife Service (npws.ie).

Site Name & Code	Distance	Qualifying Interests	Potential Impacts
Blackwater River (Cork/Waterford) SAC 002170	800m north	<ul style="list-style-type: none"> <li>• Estuaries</li> <li>• Mudflats and sandflats not covered by seawater at low tide</li> <li>• Perennial vegetation of stony banks</li> <li>• Salicornia and other annuals colonising mud and sand</li> <li>• Atlantic salt meadows (Glauco-Puccinellietalia maritimae)</li> <li>• Mediterranean salt meadows (<i>Juncetalia 19argarit</i>)</li> </ul>	<p>No hydrological connectivity as the site is in the Colligan-Mahon Hydrometric Area therefore significant effects upon this site arising from emissions to water will not arise.</p> <p>Significant effects arising from emissions to air will be considered further.</p>

		<ul style="list-style-type: none"> <li>• Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and Callitricho-Batrachion vegetation</li> <li>• Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles</li> <li>• Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae)</li> <li>• <i>Margaritifera zoargaritifera</i> (Freshwater Pearl Mussel)</li> <li>• <i>Austropotamobius pallipes</i> (White-clawed Crayfish)</li> <li>• <i>Petromyzon marinus</i> (Sea Lamprey)</li> <li>• <i>Lampetra planeri</i> (Brook Lamprey)</li> <li>• <i>Lampetra fluviatilis</i> (River Lamprey)</li> <li>• <i>Alosa fallax fallax</i> (Twaite Shad)</li> <li>• <i>Salmo salar</i> (Salmon)</li> <li>• <i>Lutra lutra</i> (Otter)</li> <li>• <i>Trichomanes speciosum</i> (Killarney Fern)</li> </ul>	
Dungarvan Harbour SPA 004032	8km east  8.8km downstream	<ul style="list-style-type: none"> <li>• Dunlin (<i>Calidris alpina</i>)</li> <li>• Knot (<i>Calidris canutus</i>)</li> <li>• Lapwing (<i>Vanellus vanellus</i>)</li> <li>• Light-bellied Brent Goose (<i>Branta bernicla hrota</i>)</li> <li>• Golden Plover (<i>Pluvialis apricaria</i>)</li> <li>• Black-tailed Godwit (<i>Limosa limosa</i>)</li> <li>• Shelduck (<i>Tadorna tadorna</i>)</li> <li>• Red-breasted Merganser (<i>Mergus serrator</i>)</li> <li>• Bar-tailed Godwit (<i>Limosa lapponica</i>)</li> <li>• Oystercatcher (<i>Haematopus ostralegus</i>)</li> <li>• Redshank (<i>Tringa totanus</i>)</li> <li>• Curlew (<i>Numenius arquata</i>)</li> <li>• Turnstone (<i>Arenaria</i>)</li> </ul>	<p>Surface water from the site connects to the Brickey River, therefore significant effects upon the QIs of this site arising from operational impacts cannot be ruled out in the absence of mitigation.</p> <p>Significant effects arising from emissions to air will be considered further.</p>

		<p><i>interpres</i>)</p> <ul style="list-style-type: none"> <li>• Grey Plover (<i>Pluvialis squatarola</i>)</li> <li>• Great Crested Grebe (<i>Podiceps cristatus</i>)</li> </ul>	
Glendine Wood SAC 002324	11.6km east	<ul style="list-style-type: none"> <li>• <i>Trichomanes speciosum</i> (Killarney Fern)</li> </ul>	No hydrological connectivity. Significant effects arising from emissions to air will be considered further.
Blackwater Estuary SPA 004028	11.6km south-west	<ul style="list-style-type: none"> <li>• Curlew (<i>Numenius arquata</i>)</li> <li>• Lapwing (<i>Vanellus vanellus</i>)</li> <li>• Black-tailed Godwit (<i>Limosa limosa</i>)</li> <li>• Golden Plover (<i>Pluvialis apricaria</i>)</li> <li>• Bar-tailed Godwit (<i>Limosa lapponica</i>)</li> <li>• Dunlin (<i>Calidris alpina</i>)</li> <li>• Wigeon (<i>Anas penelope</i>)</li> <li>• Redshank (<i>Tringa totanus</i>)</li> </ul>	No hydrological connectivity. Significant effects arising from emissions to air will be considered further.
Comeragh Mountains SAC 001952	12.4km north-east	<ul style="list-style-type: none"> <li>• Slender Green Feather-moss (<i>Hamatocaulis vernicosus</i>)</li> <li>• Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>)</li> <li>• Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation</li> <li>• Northern Atlantic wet heaths with <i>Erica tetralix</i></li> <li>• European dry heaths</li> <li>• Alpine and Boreal heaths</li> <li>• Blanket bogs (* if active bog)</li> <li>• Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>)</li> <li>• Calcareous rocky slopes with chasmophytic vegetation</li> <li>• Siliceous rocky slopes with chasmophytic vegetation</li> </ul>	No hydrological connectivity. Significant effects arising from emissions to air will be considered further.

Blackwater Callows SPA 004094	12.7km north-west	<ul style="list-style-type: none"> <li>• Whooper Swan (<i>Cygnus cygnus</i>)</li> <li>• Wigeon (<i>Anas penelope</i>)</li> <li>• Teal (<i>Anas crecca</i>)</li> <li>• Black-tailed Godwit (<i>Limosa limosa</i>)</li> <li>• Wetland and Waterbirds</li> </ul>	No hydrological connectivity. Significant effects arising from emissions to air will be considered further.
Helvick Head to Ballyquin SPA 004192	14.6km south	<ul style="list-style-type: none"> <li>• Chough (<i>Pyrrhocorax pyrrhocorax</i>)</li> <li>• Cormorant (<i>Phalacrocorax carbo</i>)</li> <li>• Kittiwake (<i>Rissa tridactyla</i>)</li> <li>• Peregrine (<i>Falco peregrinus</i>)</li> <li>• Herring Gull (<i>Larus argentatus</i>)</li> </ul>	No hydrological connectivity. Significant effects arising from emissions to air will be considered further.
Helvick Head SAC 000665	14.8km south-east	<ul style="list-style-type: none"> <li>• Vegetated sea cliffs of the Atlantic and Baltic coasts</li> <li>• European dry heath</li> </ul>	No hydrological connectivity. Significant effects arising from emissions to air will be considered further.

Table 2 – Natura 2000 Sites within 15km of Application Site

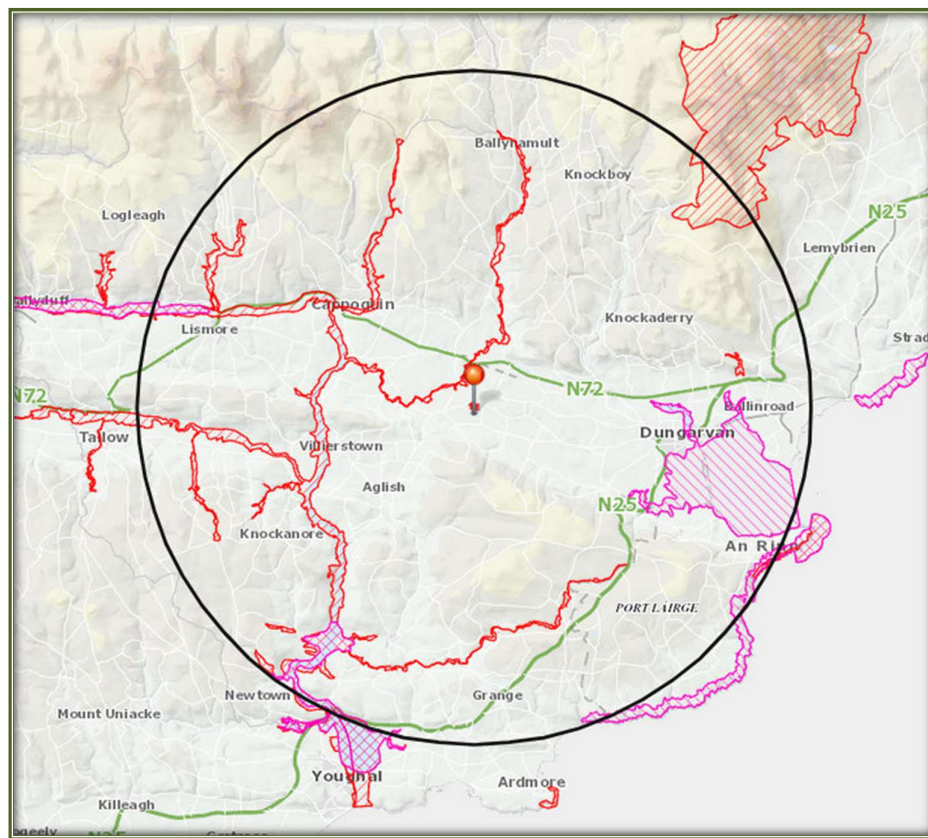


Figure 5 – The Application Site (Red Dot) in relation to the Natura 2000 sites. SACs – Red Hatching, Hatching, SPAs – Pink Hatching

## 5 IDENTIFICATION AND ASSESSMENT OF POTENTIAL IMPACTS

### 5.1 INTRODUCTION

An Appropriate Assessment Screening undertaken by the EPA (2/2/2022) identified the following potential impacts:

- *Air emissions from the installation have the potential for adverse impact on sensitive receptors due to elevated ammonia levels and / or nitrogen deposits at European sites.*
- *There are potential surface water pathways connecting the installation to European sites, therefore, there is potential for adverse impact of emissions to water and their consequential potential impact on sensitive receptors cannot be ruled out at European sites.*

In general, the identification of potential impacts and the assessment of their significance typically requires the identification of the type and magnitude of the impacts. For example, will the impacts be short term or long term, direct, indirect or cumulative and will they occur during construction or operation. This section will establish whether the impacts of the proposed development at Ashleigh Farms that were identified by the EPA in their screening report are likely to occur and whether or not they are significant. These potential impacts will be examined with respect to the conservation objectives of the Natura 2000 site identified.

### 5.2 POTENTIAL SIGNIFICANT EFFECTS

#### **Significant Effects on Natura 2000 sites arising from Atmospheric Emissions**

The EPA have recently produced guidance documents for the assessment of impacts of emissions on Natura 2000 sites (*Assessment of the Impact of Ammonia and Nitrogen on Natura 2000 sites from Intensive Agriculture Installations, EPA 2021*). This document contains a step-by-step assessment process which allows the applicant to ascertain the level of assessment and information needed when determining potential effects from emissions on Natura 2000 sites. Step 6c of the flow chart (Figure 6) makes a provision for applicants to demonstrate that the emissions from the new installations will result in an overall reduction in emissions from the baseline numbers.

The proposed development consists of an EPA License review to incorporate changes in site boundary along with the inclusion of an Anaerobic Digester that was built in 2017. The stock consists of 200 farrowing pigs, 2,200 weaners, 700 dry sows, 2,200 growers and 3,300 finishers. These are now being fed on low protein which has resulted in an overall reduction

in ammonia emissions of 30%, i.e., from 13,662 kg/ammonia/annum to 9,563.4 kg/ammonia/annum.

Going forward, the open storage tanks for manure will also be covered.

As the final emissions from the farm going forward are lower than the current baseline levels, detailed atmospheric modelling is not required in this instance. It can be concluded that the proposed application will have no significant effects upon any European site by virtue of emissions to the atmosphere.

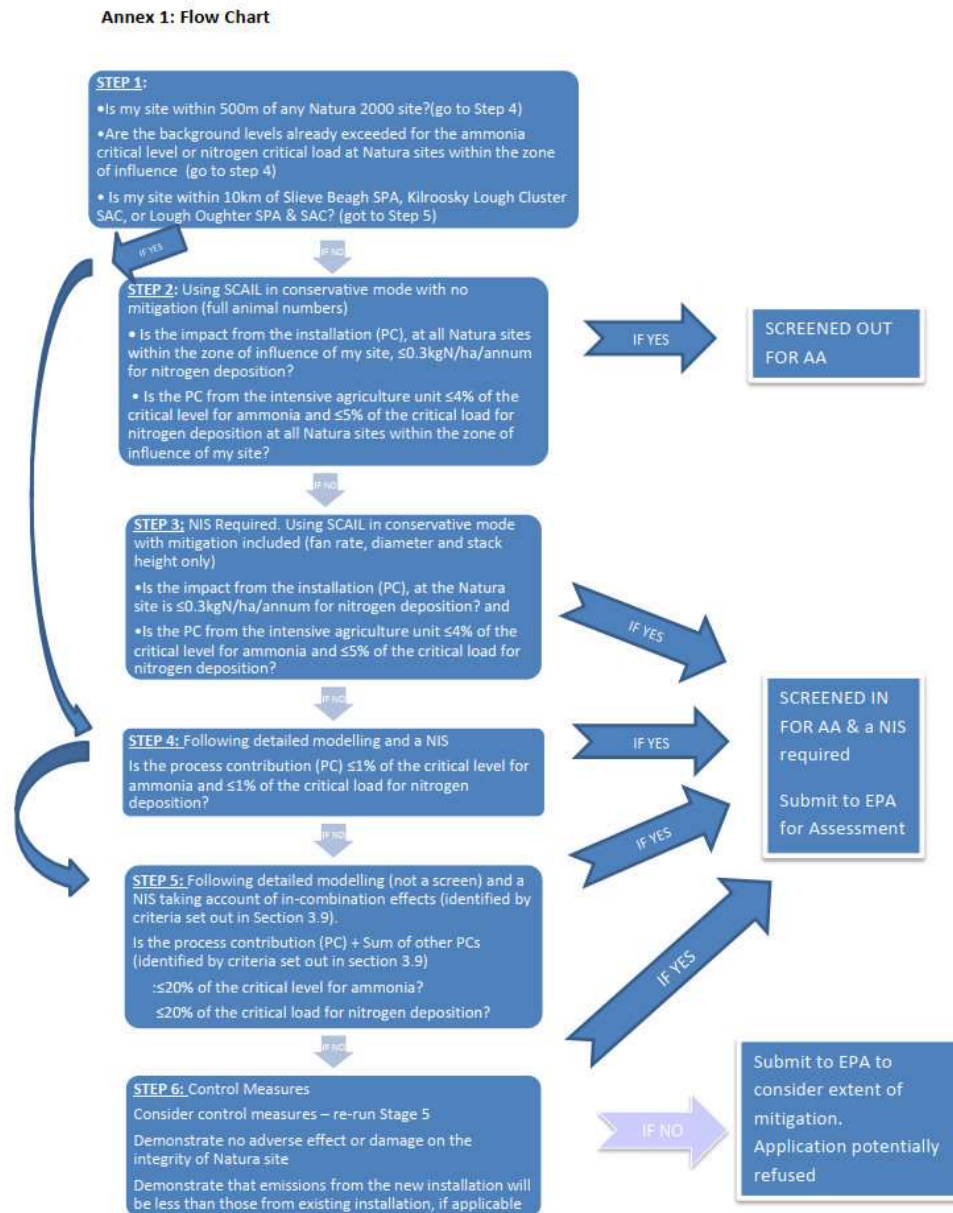


Figure 6 – EPA Flow Chart, Taken from Annex I of the Assessment of the Impact of Ammonia and Nitrogen on Natura 2000 sites from Intensive Agriculture Installations, EPA 2021



**Significant Effects on Natura 2000 sites arising from Emissions to Water**

Surface water from the site is being directed to the Bricky River and emissions are approximately 8km upstream of the Dungarvan Bay SPA. Any deterioration in water quality in the Bricky River arising from operational emissions from the farm could lead to eutrophication of this River and subsequent significant negative effects upon the Dungarvan SPA and its qualifying interests. Therefore, mitigation must be undertaken during the future operation of the farm to ensure that pollution of the Bricky River does not arise.

**Cumulative Impacts**

There are other agricultural activities ongoing close to the current application site, therefore cumulative impacts arising from the operation of these farms together were considered. All farms, regardless of whether licensed by the EPA or not, are required to operate within the legalisation defined in S.I. 113 of 2022 regarding manure storage, minimisation of soiled water and general good agricultural practice, etc. Therefore, cumulative impacts arising from the combined operation of these activities with the proposed operation of the poultry farm at Cappagh will be negligible.

The land-spreading of the pig manure produced at the proposed facility has also been considered as part of this process. Records for the distribution and movement of all the manure produced will be kept on site and presented to the Department of Agriculture, Food and Marine if necessary. All organic fertiliser will replace the use of chemical fertiliser; therefore there will be no overall increase in the amount of nutrients spread.

All farmers that receive the manure from the proposed farm will do so under the European Union (Good Agricultural Practice for the Protection of Waters) Regulations 2022 (S.I. 113 of 2022). Upon the receipt of the manure, they will be informed of their obligation under this legalisation. Compliance with these regulations will minimise cumulative impacts as well as any impacts

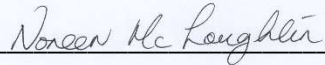
## 6 MITIGATION MEASURES

In order to further minimise emissions from the poultry facility at Cappagh, a number of mitigation measures should be implemented and followed.

- Further techniques for the reduction of emissions from the pig houses should be considered for the farm. These are outlined in the document *Best Available Techniques Reference Document for the Intensive Rearing of Poultry or Poultry* ([http://eippcb.jrc.ec.europa.eu/reference/BREF/IRPP/JRC107189\\_IRPP\\_Bref\\_2017\\_publiched.pdf](http://eippcb.jrc.ec.europa.eu/reference/BREF/IRPP/JRC107189_IRPP_Bref_2017_publiched.pdf)).
- The applicant must follow the guidelines set out in the Department of Agriculture's *Explanatory Handbook for Good Agricultural Practice Regulations*.
- It is vital that there is no deterioration in surface or groundwater quality in the water courses that are close to the site. To protect groundwater quality, all manure storage tanks must be structurally sound and leak proof. To protect water quality, all soiled surface water should be directed to storage tanks and only clean surface water should be emitted to surface waters. This will protect both habitats and species that are sensitive to pollution.
- Regular monitoring of the surface water emissions from the farm should be undertaken. Pollution sources must be identified and eliminated as soon as they are identified.
- The operation of the farm and the use of all manure should be done in accordance with S.I. 113 of 2022.

## 7 NIS CONCLUSIONS

This Natura Impact Statement has concluded that with the mitigation measures outlined in this document that the continued operation of the pig farm at Cappagh will not lead to any significant impacts upon the designated sites identified. Atmospheric emissions from the farm will reduce by 30% and mitigation measures to ensure protection of water quality in the River Brickey have been included.



*Noreen McLoughlin*

Noreen McLoughlin, MSc, MCIEEM.  
Ecologist.

(PI Insurance details available on request)