

Natura Impact Statement

Piggery Extension at Joristown, Raharney,

Co. Westmeath

Planning Reference: - 11/2091

1. Introduction:

Mary Murphy of Gillardstown House, Castlepollard, Co. Westmeath has made a planning application to Westmeath County Council to extend her existing pig unit at Joristown Upper near Raharney. The extension comprises the construction of 4 fattening house for pigs which will accommodate all animals born in the existing Joristown unit to slaughter. This extension will end the practice of moving weaner pigs off site for finishing elsewhere.

Westmeath County Council is the planning authority in this case. The Council has requested certain further information including the provision of a Natura Impact Statement.

The Natura Impact Statement has been prepared by Andy Dunne of EAEC Ltd.

Andy Dunne holds a B.Agr.Sc (1986) and an M.Sc(Agr) (1993). Both degrees were awarded by UCD.

The primary degree provided grounding in botany and zoology. The master's degree was in Environmental Resource Management and contained modules on ecology, landscape management and environmental impact.

Andy Dunne has worked in the area of agriculture and its environmental impact since 1994.

2. Natura Impact Statement:

Certain areas of ecological importance in Ireland have been designated as Natura 2000 sites under the EU Habitats Directive and the earlier EU Birds Directive. The former directive requires that the impact of a plan or project on any Natura site be appropriately assessed prior to any approval being given to proceed with that development.

A key tool in the appropriate assessment process is the preparation of a Natura Impact Statement. A Natura Impact Statement is essentially a document which considers and presents the likely and possible direct and indirect impacts of a plan or project on a Natura site.

Detailed guidelines on appropriate assessment and the preparation of a Natura Impact Statement have been made available by the National Parks and Wildlife Service. The recommended format is that:

- The project or plan be outlined,
- The Natura site or sites concerned be described,
- Any appropriate mitigation measures be set out, and,
- A determination of significance and a concluding statement be presented.

This format is utilised in this document.

3. Description of the Project:

The location of the site is an existing pig unit the townland of Joristown Upper. The proposed site is 1.3 km west of Raharney and 2.2 km north east of Killucan. The proposed development will consist of the construction of four pig fattening houses set out in a unified structure.

The two proposed pig houses on the west will measure 79.4m x 13.9m and will have an internal floor area of 2,207.3m². The two proposed houses on the eastern side of site will be smaller with dimensions of 59.3m x 13.9m giving an internal floor area of 1,648.5 m². The four pig houses will be separated by 3 no. 1.5m wide passageways which will also be covered giving the appearance of a single building. The total footprint of the buildings including the passageways will be 4,153 m². The net internal floor area is 3886.6m².

Slurry storage tanks will be constructed directly underneath the new housing and the storage capacity excluding a 200mm freeboard will be approximately 5,752m³. Rainwater directed from the rooves will be stored in tanks underneath the 3 passage ways.

Eight cylindrical shaped steel feed storage silos will be erected in association with the proposed unit – four at each end. Livestock loading ramps will be placed one on each side of the unit. A service road of gravel construction will be placed around the proposed new and adjoining existing structures.

Drawings showing the location of the site and the proposed layout are included separately in the planning submission. These drawings show existing and proposed structures, structural components and finishes.

All works will be carried out by competent contractors and standards and materials used will comply with the Department of Agriculture's specifications for farm buildings. The principal specification is S101 and it is available in the farm buildings section of the Department of Agriculture website -

<http://www.agriculture.gov.ie/farmerschemespayments/farmbuildings/farmbuildingandstructures/specificationspdfformat/>

The proposed structures will be sited in a yard adjoining existing pig housing. A hayshed in poor repair will be removed and the remains of a derelict dwelling house will be demolished. A small portion of a grass field adjoining the farmyard will also be utilized for the extension.

The proposed location is c.440m from the nearest public road – the R156 Killucan to Raharney road. Access to the site from this road is by means of an existing private paved farm road.

The nearest occupied dwelling house is situated approximately 221m north east of the proposed development.

The construction period for the project is estimated to be 3-4 months. Local labour will be involved in most elements of this work and materials, where possible, will be obtained locally.

There are two elements of the proposed development which must be considered – the construction phase and the operation phase.

There are certain risks to the environment in both the construction and operation of the proposed development. These will be addressed later in this document.

4. Natura Sites:

Mapping and certain other details of Natura sites are available on the NPWS website (www.npws.ie). This website indicates that there are two Natura sites in the general locality. The details are set out in the table underneath:

Site Name	Site Code	Distance from Development - km
Mount Hevey Bog	SAC 2342	4.20
River Boyne & River Blackwater	SAC 2299 SPA 4232	1.20 1.20

The attached map sets out these sites relative to the location of the proposed development.

A brief summary of each site is set out below.

Mount Hevey Bog: This is a raised bog and is situated about 4.2 km south east of the proposed development. It is described in the NPWS site synopsis as being a good example of raised bog with many intact and regenerating elements of that habitat type.

Threats noted in the site synopsis include turf cutting, afforestation, land reclamation for agriculture, drainage and burning.

The separation distance of this SAC from the proposed development indicates that the pig unit development at Joristown will have no impact on the site.

River Boyne and River Blackwater: This Natura site is designated both as an SAC and an SPA. It comprises the River Boyne from the Boyne Aqueduct together with sections of tributary rivers including the Blackwater to the sea at Drogheda.

The grounds for SAC designation are the occurrence of Atlantic Salmon, River Lamprey and Otter. Designation is also based on the presence of alkaline fen and alluvial woodland habitats.

A breeding population of Kingfisher within the site is the basis for SPA designation.

The maintenance of water quality is fundamental to both SAC and SPA designations. Agricultural activity and inappropriate fertiliser and slurry usage is presented in the NPWS site synopsis as a threat to water quality.

The River Boyne is about 11.4 km from the proposed development site. However the River Deel, which is about 1.2 km east of the proposed development, is within the Natura designated area from Lough Adeel to the river's confluence with the River Boyne.

The proposed development presents a potential risk to the Natura site which needs to be further considered.

5. Risks and Mitigations:

One potential risk to the River Boyne and River Blackwater SAC/SPA has been identified. This risk is the threat to water quality.

There are two aspects to this potential risk which arise and these are set out below.

Risk to Water Quality during Construction:

During construction there is a potential risk of increased suspended solid loads in the drainage water from construction area. There is also a potential risk of concrete spillage and drainage water contamination. Both adversely affect the aquatic environment.

Mitigation factors here are the short construction period, the small footprint of development and the relatively flat drainage profile from the site which naturally slows water runoff rates and allows suspended particles to settle out. The flat site also allows easy containment of any significant concrete spillages. Standard procedure such as compliance with standard building site Health and Safety Regulations will also afford mitigation.

In addition to the above points any new clean water drainage systems discharging to existing watercourses should include appropriate silt trapping mechanisms. These should be in place before construction commences.

Areas of soil exposed by digging and grading should be reseeded as soon as possible after construction works are completed.

Risk to Water Quality during Operation:

The proposed new structures can reasonably be expected to have a life span of at least 25 years. In this time slurry generated in the unit will be landspread on agricultural land. Such landspreading can present a potential risk to water quality.

Before dealing with the specifics of the potential risk it is necessary to give some context.

The catchment of the Boyne Blackwater system is large and an estimated 2560 km² of it (i.e. 95%) is given over to agricultural activities (<http://www.erbd.ie/Reports/CR/Section5.pdf>). A slurry landspread area of about 3.6 km² (360 ha) which is 0.14% of the catchment area is what is proposed to be used in this case.

Agriculture is and has long been the main activity in the Boyne catchment. Farming in this part of Ireland is relatively intensive and is dependent on significant annual inputs of crop nutrients. These nutrients are absolutely required for crop production and are added to land periodically in the form of chemical fertiliser or animal manure.

Research has shown that farming has in the past contributed to the decline in water quality. Uncontrolled, excessive and poorly managed landspreading of farm wastes and chemical fertilisers has contributed to poorer overall water quality. Much research has however been carried out to understand pathways of these materials to water, crop requirements and to devise environmentally sound landspreading methods.

The science of nutrient management planning (NMP) is now employed to carefully match landuse history, soil type and crop need with the amount of nutrient supplementation required in any given year. The nutrient content of any animal slurry or manure applied to land is included in all calculations used in the process.

There are now a suite of nutrient management guidelines which are enshrined in statutory regulations that provide for the protection and improvement of water quality. These regulations are the European Communities (Good Agricultural Practice for Protection of Water) Regulations 2010 – S.I 610 of 2010. They are commonly known as the 'Nitrates Regulations'. All farmers are required to comply with these regulations and there is an inspection programme run by the Department of Agriculture and the local authorities.

The regulations set out requirements on landspreading periods, application rates, application methods and detail crop nutrient needs, set back distances from sensitive sites – watercourses, wells, domestic houses, public buildings and so on. In addition direction is given regarding landspreading on shallow and permeable soil types, slopes and suitable weather condition for landspreading.

In this case a detailed document (the Agri Environmental Report), having regard to the regulations and setting out the landbank available for slurry spreading and the spreading criteria, has been prepared and is part of the planning application. Compliance with the document and the regulations which underpin it will adequately protect water quality.

In addition the number of animals proposed to be accommodated in the entire unit will require that it be licensed by the EPA. The IPPC licensing process will again ensure that slurry collection and landspreading meets all the statutory requirements for the protection of water quality.

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6. Level of Significance and Statement:

In summary the proposal here is to extend an existing pig unit at Joristown Upper. The building proposal is technically sound and consistent with current practice in the sector.

Water quality is considered to be potentially compromised on foot of the proposal.

Slurry produced will be land spread on a defined area of agricultural land. This practice places water quality and specifically the River Boyne and Blackwater SAC/SPA at a potential risk.

Compliance with the principles of nutrient management planning as set out in the agri environment report submitted with the planning application and the licensing requirements of the EPA will satisfactorily mitigate the risk.

Any potential water quality risk arising from the construction phase of the proposed development can be addressed by the provision of silt trapping mechanisms and by compliance with existing building regulations.

No cumulative or indirect impact is anticipated arising from this development proposal.

It is therefore considered that the potential risk presented by this proposed development is readily manageable and that there is no threat to the Natura site.

Signed: Andy Dunne
Andy Dunne – EAEC Ltd

April 20th 2012

NOTES

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W. MURPHY

PIGGERY AT
JORISTOWN, KILUCAN
CO. WESTMEATH

NATURA IMPACT
STATEMENT
SITE LOCATION MAP

Date:	AO	Drawn:	TR
Scale:	1:25,000 A3	Sheet:	19/2/12

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