



An
Bord
Pleanála

Inspector's Report ABP-303466-18.

Development	On farm Anaerobic Digestion Plant.
Location	Rathcash, Dunbell, Co. Kilkenny.
Planning Authority	Kilkenny County Council.
Planning Authority Reg. Ref.	18/433.
Applicant(s)	Eamon & John Phelan.
Type of Application	Permission.
Planning Authority Decision	Grant.
Type of Appeal	Third Party
Appellant(s)	John Brennan.
Observer(s)	None.
Date of Site Inspection	22/10/2020.
Inspector	A. Considine.

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1.0 Site Location and Description

- 1.1. The subject site is located within the rural area of Co. Kilkenny where the predominant land use is agriculture. The site lies approximately 4.5km to the east of the development boundary of Kilkenny City and is accessed over the local road network, and the R712 (former N9). The south eastern corner of the subject site lies within approximately 200m of the M9, which runs to the south of the site.
- 1.2. The site itself, while accessed via an existing entrance onto the R712 to the north and comprises a small part of a larger landholding. The site is set back from the public road by approximately 600m and is accessed over an existing internal farm road. The established farmyard lies to the north of the site and is also accessed over the existing farm road.
- 1.3. The site has a stated area of 5.6ha and is currently under grass. The field is relatively flat and boundaries comprise a mix of trees and hedgerows. The wider area comprises agricultural land and is set at a distance from existing development.
- 1.4. In addition to the above, the Board will note that the applicants have identified an extensive landholding, extending to 148.22ha of grassland and 479.24ha of tillage as detailed in the submission to An Bord Pleanála received on the 14th of February 2019 for the purposes of land spreading.

2.0 Proposed Development

- 2.1.1. Permission is sought, for the development consists of an agricultural slurry and rotation crop based Anaerobic Digestion Plant for the production of Renewable Energy and Fertiliser will comprise of the following:

- 1 no. single storey Reception Building with welfare facilities,
- Staff and Visitor Car-parking,
- Truck delivery and pickup hardstanding area,
- 1 no. water storage tank,
- 1 no. wheel wash,
- 1 No. Weighbridge,
- 2 No. Digester Tanks,
- 2 No. Digestate Storage Tanks,
- 2 No. Slurry Storage Tanks,
- 4 No. Feed-stock Clamps
- 1 No. Biogas Flare,

- 1 No. Gas Boiler Container,
- 1 No. Pump and Control Room Container,
- 1 No. Biogas Cleaning & Upgrading Container,
- 1 No. Gas Compression Container,
- 2 No. Surface water Attenuation Tanks,
- 2 No. Surface water Interceptor Units,
- 2 No. Surface water Flow Limited Outfalls,
- 1 No. Foulwater Treatment Unit & Pump Sump,
- 1 No. ESB Substation,
- external perimeter stockproof fencing and gates,
- landscaping & tree screening

and associated site works, at Rathcash, Dunbell, Co. Kilkenny.

2.2. The application included supporting documents including as follows;

- Plans and particulars
- Completed planning application form
- Planning Statement Report
- Process Description Report
- Engineering Services Report
- Construction Waste Management Plan
- Appropriate Assessment Screening Report

2.3. The development, if permitted will convert the input of organic material into biomethane and organic fertiliser, or digestate. It proposes to process 19,800 tonnes of rotation, catch crops, triticale barley and excess grass and 10,000 tonnes of cattle slurry per annum. The development will result in the generation of 500m³/h of biogas with a runtime of 8,600 hours per annum, essentially a 24/7 operation with downtime associated with maintenance only. The application has been made to complement the existing farm practices and management of the farm and to expand the farming enterprise, become more competitive and sustainable and to future proof the farm by decarbonising current practices.

- 2.4. It is submitted that the purpose of the anaerobic digestion process is to capture the resultant odours from the feedstock, which is biogas for upgrading to Biomethane. The captured biogas is extracted from the primary and secondary digester via sealed pipes and directed to the biogas upgrading unit for further processing. This additional processing will reduce the moisture content and will prepare for separation to methane and CO₂. The upgraded biomethane will then enter approved sealed transportation container which will be collected from the AD plant at Dunbell and moved off site.
- 2.5. The application details two routes to market including injection into the national gas grid – where there are a number of above ground installations within 50km of the site that can serve as a Central Grid Injection facility, and supply to industrial users that are off grid. It is noted that the proposed plant will come under the monitoring of Gas Networks Ireland as the regulatory authority, under the Gas Act 1976, and Gas Networks Ireland being the regulated entity will oversee the standards and quality of the design and operation of the proposed plant.
- 2.6. Further information was sought by the PA in relation to the following:
- Requests that the applicant address third party concerns in terms of the requirement of an EIAR due to feedstock and slurry intake being in excess of 25,000 tonnes per annum.
 - Clarification in relation to a section 3.4.5 of the Planning Policy Statement in terms of sewerage sludge to be accepted, nature of solid waste and source of farm slurry.
 - Details of landholding
 - Operating procedures
 - Volume of moisture produced
 - Measures to control surface water management and siltation control
 - Issues with submitted Construction Waste Management Plan
 - Clarification on the area of the building
 - Photomontages
 - Staff numbers

- Proposals regarding the use of rainwater harvesting

2.7. Further information was submitted to the Planning Authority on the 27th of November 2018.

3.0 Planning Authority Decision

3.1. Decision

The Planning Authority decided to grant planning permission for the proposed development subject to 13 conditions, on the 20th day of December 2018.

3.2. Planning Authority Reports

3.2.1. Planning Reports

The initial Planning report, dated 9th of August 2018 and co-signed by the Senior Planner on the 20th of August 2018, considered the proposed development in the context of the details submitted with the application, internal technical reports, third party submission, planning history and the County Development Plan policies and objectives. The report also includes a Stage 1 Appropriate Assessment concluding that further information was required in relation to land drains and methodology in the Construction Management Plan. In addition, the report advised that further information was required in terms of the question as to the need for an EIAR. The report concludes that further information was required in accordance with the details presented above in section 2.6 of this report. The further information request issued on the 20th day of August 2018.

Following the submission of the response to the FI request, the PA report considered that the content of the FI response. The Planning Officer concluded that the proposed development was acceptable and would accord with the proper planning and sustainable development of the area. The final report, dated the 19th of December 2018, recommends that permission be granted for the proposed development subject to conditions. This Planning Report formed the basis of the Planning Authority's decision to grant planning permission.

3.2.2. Other Technical Reports

Environment Section: Further information required in relation to a number of issues including:

- Detail of main feed stocks to be used
- Calculations showing sufficient landholding to dispose of both liquid digestate and slurry
- An operating procedure document required to include parameters to nullify noise and odour concerns.
- Details of volume of moisture produced in the process, how as a waste product, it is treated and disposed of.

Following the submission of the response to the FI request, the Environment Section notes that the proposed development is subject to a Waste Permit / Licence in accordance with the Waste Management Act 1996 as amended. The report advises no objections to the proposed development subject to compliance with conditions.

Road Design Section: The Board will note that there is no formal report from the Road Design Section of Kilkenny County Council on the planning file. The Planning Report, however, refers to a conversation with someone in this section who expressed no objection in principle to the proposed development.

Following the submission of the response to the FI request, the Roads Section advised no objections to the proposed development by way of email.

Development Contribution: A Development Contribution Calculation Sheet is included on the planning file which indicates that a contribution of €45,494.50 is payable.

3.2.3. Prescribed Bodies

Department of Culture, Heritage and the Gaeltacht: The Department has submitted a report noting the site is bound on 3 sides by open drains which flow towards the River barrow and River Nore cSAC, Site Code

002162, approximately 7.2km downstream, and is therefore hydrologically connected with it. In order to complete AA, the Council must satisfy itself that it has sufficient information on specific measures for surface water management and siltation control during the construction phase of the project.

Following the submission of the response to the FI request, there is a memo on the planning file which indicates that the Planning Officer rang the Department – Wildlife Section – who advised satisfaction with the response to the further information request and that the development will not have a significant impact on the SAC. The Memo advises no objections to the proposed development.

3.2.4. Third Party Submissions

There was 1 no. third-party submission on the PA file from Mr. John Brennan. The issues raised are summarised as follows:

- Concern that the capacity of the waste facility has been specifically sized so as to avoid the need for an EPA 'Industrial Emissions' Licence.
- An Environment Impact Assessment should be prepared.
- The facility has potential to take in higher levels of waste than what is outlined in the planning application. There is no guarantee that the applicant will not source other means of waste to feed the facility. There is no guarantee that sufficient levels of waste will be provided from the sources identified in the application.
- The use of agricultural land to grow feedstock for use as waste will result in valuable agricultural land being taken out of production.
- The development will result in significant traffic impacts and the local road infrastructure is inadequate to serve the development. A full traffic impact assessment should be undertaken.
- Issues raised in relation to risk of pollution to the air and odours have not been fully considered.
- AA Screening Report has not been made available.

- The proposed development does not comply with the zoning and planning policy, which seeks to locate commercial bioenergy plants on brownfield sites adjacent to industrial areas or on lands reserved for industrial use.
- There are a number of protected monuments and structures in the vicinity of the site. The potential for impacts have not been assessed.
- No public consultation with the local community was undertaken.

It is requested that permission be refused for the proposed development and that the lands are retained in agricultural use and for agricultural production.

4.0 Planning History

The following is no relevant planning history pertaining to the subject site. There are however, a number of agriculture related applications within the existing farmyard which lies approximately 170m to the north east of the site. The following is of note:

PA ref 09/444: Permission granted for a Dairy Unit comprising a milking parlour with associated plant room, cow yard and holding pens, a silage slab and out wintering standoff pad and an earth lined slurry store and all associated ancillary site works. Following a request for further information, revised site notices were submitted to include 'changes to entrance'.

5.0 Policy and Context

5.1. The EU Water Framework Directive 2000 & Surface Waters Regulations 2009

This directive aims to improve water quality and applies to all water bodies. It requires a holistic approach to managing water and it applies to rivers, lakes, groundwater, estuaries and coastal waters. The Regulations give effect to the Directive. The Directive runs in six-year cycles and is currently in its second cycle 2016 to 2021. Member States are required to achieve 'good' status in all waters and must ensure that status does not deteriorate. The Directive has been given effect by the Surface Water and Groundwater Regulations.

5.2. EU Waste Framework Directive (2008/98/EC) & EC (Waste Directive) Regulations 2011

This Directive lays down measures to protect the environment and human health by preventing or reducing the adverse impacts of the generation and management of waste and by reducing overall impacts of resource use and improving the efficiency of such use. It defines key concepts such as waste, recovery and disposal and puts in place the essential requirements for the management of waste, notably an obligation for an establishment or undertaking carrying out waste management operations to have a permit or to be registered and an obligation for the Member States to draw up waste management plans. It also establishes major principles such as an obligation to handle waste in a way that does not have a negative impact on the environment or human health, an encouragement to apply the waste hierarchy and, in accordance with the polluter-pays principle, a requirement that the costs of disposing of waste must be borne by the holder of waste, by previous holders or by the producers of the product from which the waste came. The EC (Waste Directive) Regulations 2011 align Irish legislation with this Directive.

5.3. National Planning Framework – Project Ireland 2040, DoHP&LG 2018

The National Planning Framework sets out strategic goals in respect of transitioning to a low carbon and climate resilient society and sustainable management of waste resources. Strategic outcomes include delivering 40% of electricity needs from renewables and increased uptake of anaerobic digestion.

5.4. Climate Action Plan 2019, DECC

The Climate Action Plan sets out a framework to guide the country towards decarbonisation, with sectoral strategies for electricity and agriculture. These include to increase reliance on renewable energy sources, support micro-generation and selling into the national grid and the production of bioenergy from agriculture.

5.5. Regional Spatial and Economic Strategy (Southern Regional Assembly) 2020-2032

The RSES provides a long-term, strategic development framework for the future physical, economic and social development of the Southern Region and includes Metropolitan Area Strategic Plans (MASPs) to guide the future development of the Region's three main cities and metropolitan areas – Cork, Limerick-Shannon and Waterford. The strategy updates the South East Regional Authority, Regional Planning Guidelines 2010-2022 and supports the transition towards a low carbon economy and climate resilient society across all sectors. The RSES also supports the implementation of the Regional Waste Management Plan for the Southern Region 2015-2021.

5.6. Regional Waste Management Plan for the Southern Region 2015-2021

The Waste Management Plan sets out a framework for the minimisation and management of waste in the region. The strategic vision of the plan is to rethink the approach to waste, by viewing waste streams as valuable material resources. The Plan sets out to prioritise waste prevention, followed by re-use, recycling and recovery – where diversion of food waste is moved towards more productive uses such as the production of compost and the generation of electricity through anaerobic digestion.

5.7. Kilkenny County Development Plan 2014 – 2020

5.7.1. The Kilkenny County Development Plan 2014 – 2020 is the relevant policy document pertaining to the subject site, which lies approximately 4.6km to the east of the zoned area of Kilkenny City.

5.7.2. Chapter 4 of the Plan deals with Economic Development and Section 4.2 relates to the Green Economy, noting that a central plank of Ireland's economic recovery will centre on the development of a green economy that recognises:

- the opportunities for investment and employment creation in emerging sectors such as renewable energy, energy efficiency and waste and water management, and

- that this sustainable approach to economic development complements the core strength of the economy in the use of natural resources in the agriculture, forestry, fisheries, tourism and energy sectors.

5.7.3. Chapter 6 of the Plan deals with Rural Development and Section 6.2.3 supports farm diversification and notes that the Council will support the development of agriculturally related industries which are environmentally sustainable and considered a suitable use, subject to the protection of heritage and amenity. Section 6.2.4 of the Plan sets out the Development Management Standards for agriculture.

5.8. Natural Heritage Designations

The site is not located within any designated site. The closest Natura 2000 site is the River Barrow and River Nore SAC (Site Code 002162), and the River Nore SPA (Site Code 004233) which are located approximately 3.6km west of the site.

The site is bound on three sides by open drains which flow towards the River Barrow and River Nore cSAC and is therefore hydrologically connected to the designated site.

The Board will note that a Natura Impact Statement was requested by the Board following the submission of the appeal. It was determined that, based on the documentation submitted, the likelihood of a significant effect on a European Site as a consequence of the proposed development either individually or in combination with other plans and projects could not be screened out as the development included works which constitute mitigation measures during the construction phase. Such mitigation measures cannot be taken into account at the screening stage of AA. Accordingly, the Board sought the submission of the NIS to facilitate Stage 2 AA of the proposed development.

5.9. EIA Screening

5.9.1. The requirement for EIA of certain types of developments is transposed into Irish legislation under the Planning and Development Act 2000, as amended and the Planning and Development Regulations 2001 as amended. Schedule 5, Part 1 of the Regulations provides a list of projects which are subject to mandatory EIA based on, *inter alia*, their scale, nature, location and context. Part 2 of Schedule 5 includes a

list of projects that require EIA where specific thresholds are breached or where it is determined that there is potential for significant environmental impact.

5.9.2. The proposed development is not listed as a Schedule 5 Part 1 project and a EIAR is not mandatory under this Schedule.

5.9.3. Schedule 5 Part 2 is considered relevant in terms of the following class of development:

Class 11: Other projects

(b) Installations for the disposal of waste with an annual intake greater than 25,000 tonnes not included in Part 1 of this Schedule.

5.9.4. In the context of the subject proposal, I would note the content of the Waste Framework Directive 2008/98/EC. Article 2 sets out 'Exclusions from the scope' and 2(1)(f) states that the following shall be excluded from the scope of this Directive:

Faecal matter, if not covered by paragraph 2(b), straw and other natural non-hazardous agricultural or forestry material used in farming, forestry or for the production of energy from such biomass through processes or methods which do not harm the environment or endanger human health.

Article 2(2)(b) states that 'the following shall be excluded from the scope of this Directive to the extent that they are covered by other Community legislation:

animal by-products including processed products covered by Regulation (EC) No 1774/2002, except those which are destined for incineration, landfilling or use in a biogas or composting plant.

5.9.5. In light of the above, I would consider that silage – including rotation, catch crops, triticale barley and excess grass - does not fall within the scope of the Waste Framework Directive and as such, does not constitute a waste product. In addition, I am satisfied that cattle slurry is an animal by-product which is destined for use in a biogas plant and therefore, is included within the scope of the Waste Directive.

5.9.6. The development proposes to process 19,800 tonnes of rotation, catch crops, triticale barley and excess grass (not considered waste) and 10,000 tonnes of cattle slurry per annum. The development will result in the generation of 500m³/h of biogas with a runtime of 8,600 hours per annum. The development, if permitted will convert the input of organic material into biomethane and organic fertiliser, or digestate. The

Biomethane is to be transported from the site once a day. The proposed development therefore falls below the thresholds for mandatory EIA. In terms of the requirement for EIA, I would accept that the proposed development can be considered as falling within the Class 11: Other projects - (b) Installations for the disposal of waste with an annual intake greater than 25,000 tonnes not included in Part 1 of this Schedule.

5.9.7. Schedule 7 of the Planning and Development Regulations 2001 (as amended) sets out criteria for determining whether a sub-threshold development should be subject to EIA. These include the characteristics of the proposed development, its location and the type and characteristics of potential impacts. While I would acknowledge that the proposed development could be considered large, I would accept that given the context of the site, it would not be out of character with the existing farm yard which lies to the north. The site is not located within any designated site, and it is at a remove from the populated area of Kilkenny City. Having regard to nature and scale of the development, together with the nature of the site, there is no real likelihood of significant effects on the environment arising from the proposed development. The need for EIA can, therefore, be excluded after a preliminary examination under Article 109(2)(b) of the Planning and Development Regulations 2001, as amended and a screening determination is not required.

5.9.8. The Board will note that the 3 of the site boundaries comprise open drains which flow toward the River Barrow and River Nore cSAC Site Code 002162. Following a request from An Bord Pleanála, the applicant submitted a Natura Impact Statement. Environmental effects associated with the proposed development can potentially arise primarily due to noise, odour and traffic generated by the development and the application of digestate to agricultural land. I propose to address these issues further in my assessment below in Section 7 of this report.

6.0 The Appeal

6.1. Grounds of Appeal

This is a third-party appeal against the decision of the Planning Authority to grant planning permission for the proposed development. The issues raised are similar to those raised during the PAs assessment of the proposed development and are summarised as follows:

- The proposed development includes the construction of a temporary protective berm around the construction area which will contain all surface water run-off. The run-off can then be controlled and treated for silt and oil removal prior to discharge to the open drain. These measures are mitigation measures.
- The *People Over Wind & anor. V Coillte* (Case C-323-17) concerns the proposed underground 38kV connection along a 15km route between windfarms and relied on 'protective measures' when making a screening determination that AA was not required.
- A Stage 2 AA should have been carried out to consider the mitigation measures proposed by the applicant and a NIS should be submitted.
- The capacity of the waste facility as well as the stated amounts of feedstock and slurry to be processed would appear to have been specifically sized so as to avoid the need for an application to the EPA for an Industrial Emissions Licence.
- Waste disposal and recovery activities in Ireland are required to hold an authorisation in accordance with the Waste Management Act 1996. The application makes no reference to this.
- A facility proposing to accept an annual tonnage of biowaste above 10,000 tonnes must apply to the EPA for a licence. Policing of tonnage intake is unclear especially if the applicant is using internal farm roadways for delivery.
- As the application does not include the need for a licence in the notices, the application should be deemed invalid.

- An EIA should be prepared for the development as the facility proposes to accept 29,800 tonnes, including 10,000 tonnes of categorised EWC waste and 19,800 tonnes of feedstock, which is essentially waste or being used as waste.
- The Anaerobic Digester is oversized in relation to the landholding specified in the application to adequately deal with the digestate proposed to be generated.
- The development constitutes a misuse of agricultural land and it will take viable agricultural land out of production and will significantly deplete available stock levels for both human and animal consumption. This conflicts with national policy published by the Department of Agriculture in 2010 and 2015.
- The proposed waste facility if permitted would result in a very significant traffic increase on the local road network which would have a severe negative impact and would represent a severe traffic hazard in the local area. A detailed traffic assessment has not been undertaken.
- Risk of pollution to the air and fumes from gas emissions and the knock-on effect this will have on public health in the area has not been fully considered.
- Health and safety concerns relating to the production of gas and the potential for a gas explosion and leaks have not been adequately addressed.
- The proposed development does not accord with the zoning and policy of the planning authority as it proposes to locate a commercial bioenergy plant on greenfield agricultural land which will be taken out of production.

It is requested that permission be refused.

6.2. First Party Response to Third Party Appeal

6.2.1. The first party submitted a response to the third-party appeal and requests that the Board support the decision of Kilkenny County Council and grant permission for the proposed anaerobic digestion plant as described in the public notices. The response includes an overview of the development including a planning policy statement. It is submitted that the applicants are looking to future proof their farm by decarbonising current farm practices and improve current farm management, utilise

their resources and become smart farmers, potentially becoming an organic farm in time.

6.2.2. The submission responds to the grounds of appeal as follows:

- The screening report submitted with the original application determined that a Natura Impact Statement (Stage 2 AA) was not required on the basis that good building practices had been proposed which themselves would sufficiently protect the integrity of the downstream Natura 2000 sites.
- The proposed AD is designed to utilise on farm resources of slurry from existing practices. It is not a waste recovery or disposal facility. The cattle slurry is utilised to fertilise the land and the proposed AD plant will be utilising the slurry to produce biofertilizer, improving the nutrient value and absorption into the soil, removing and capturing the GHGs during the digestion process.
- EIA is required for installations for the disposal of waste with an annual intake greater than 25,000 tonnes. The proposal will not manage any waste as defined in the Waste Management Act 1996.
- In terms of the indication that the plant is oversized, it is submitted that the applicants have recently agreed terms for the shar farming of another block of land comprising approximately 170ha. The applicants have adequate land for spreading.
- The applicants have sizeable beef fattening units and replacement heifer units with strong potential for a significant dairy unit in the near future. The proposed AD is intended to be complimentary to current farm practices and in utilising the biofertilizer on pasture and tillage lands could potentially increase crop growth and production by as much as 40%. The spreading of digestate will displace artificial fertilisers and spreading of raw slurry will significantly improve air and water quality.
- The suggestion that the proposed AD is a misuse of agricultural lands is misguided and ill informed.
- The development will give rise to an additional 10 traffic movements in and out of the existing entrance per day. This will not impact on the daily traffic of the R712.

- The response sets out the operations procedures for the AD.
- The proposed development complies with the County Development Plan and the Kilkenny City & County Council Renewable Energy Strategy, Regional Planning policy and national policy as it relates to renewable energy and the circular economy.

The response includes a number of appendices.

6.3. Planning Authority Response

The Planning Authority responded to the third-party appeal advising no further comments.

6.4. Observations

None.

6.5. Other Responses

Following the submission of the Natura Impact Statement to the Board, the Planning Authority submitted a response advising no further comments.

7.0 Assessment

Having undertaken a site visit and having regard to the relevant policies pertaining to the subject site, the nature of existing uses on and in the vicinity of the site, the nature and scale of the proposed development and the nature of existing and permitted development in the immediate vicinity of the site, I consider that the main issues pertaining to the proposed development can be assessed under the following headings:

1. Principle of development & Compliance with Policy
2. Waste Management Acts & Regulations
3. Visual Impact & Residential Amenity
4. Water Services
5. Roads & Traffic
5. Other Issues
6. Appropriate Assessment

7.1. Principle of development & Compliance with policy

7.1.1. The proposed development site is located within a rural area outside of Kilkenny City. The proposed development seeks permission for an on agricultural AD and upgrading plant at Rathcash, Dunbell, Co. Kilkenny. The development, if permitted will convert the input of organic material into biomethane and organic fertiliser, or digestate. It proposes to process 19,800 tonnes of rotation, catch crops, triticale barley and excess grass and 10,000 tonnes of cattle slurry (liquid fraction) per annum. The feedstock as described will be sourced from existing on farm beef fattening units and replacement heifer units. It is submitted that this quantum of feedstock equates to approximately 83 tonnes per day.

7.1.2. The development will result in the generation of 500m³/h of biogas with a runtime of 8,600 hours per annum, essentially a 24/7 operation with downtime associated with maintenance only. The application has been made to complement the existing farm practices and management of the farm and to expand the farming enterprise, become more competitive and sustainable and to future proof the farm by

decarbonising current practices. The proposed development comprises a development which will produce a source of renewable energy and fertiliser. The proposed AD plant will be utilising the slurry to produce biofertilizer, improving the nutrient value and absorption into the soil, removing and capturing the GHGs during the digestion process.

7.1.3. The subject site lies outside the development boundary of any settlement, approximately 4.6km from the boundary of Kilkenny City, adjacent to the M9 and in a rural area. Access to the site is via the existing local road network and over existing farm access roads. The access from the Regional Road was gated and locked on the date of my site inspection and the Board will note that there is a large farmyard existing within the wider landholding, also accessed via the described entrance and farm road.

7.1.4. In terms of national, regional and local policy, the National Planning Framework – Project Ireland 2040, DoHP&LG 2018, sets out strategic goals in respect of transitioning to a low carbon and climate resilient society and sustainable management of waste resources. The NPF seeks the delivery of 40% of electricity needs from renewables and identifies increased uptake of anaerobic digesters.

7.1.5. The RSES (Southern Regional Assembly) 2020-2032 supports the NPF Policy with regard to the transition towards a low carbon economy and climate resilient society across all sectors. The RSES also supports the implementation of the Regional Waste Management Plan for the region, 2015-2021. The strategic vision of the plan is to rethink the approach to waste, by viewing waste streams as valuable material resources. The Plan sets out to prioritise waste prevention, followed by re-use, recycling and recovery – where diversion of food waste is moved towards more productive uses such as the production of compost and the generation of electricity through anaerobic digestion.

7.1.6. The current Kilkenny County Development Plan, chapter 4 which deals with Economic Development, supports the concept of a Green Economy including opportunity for investment in the renewable energy sector which complements the core strength of the economy in the use of natural resources in the agriculture, and other, sectors. In addition, Chapter 6, section 6.2.3 of the CDP supports farm diversification noting that the Council will support the development of agriculturally

related industries which are environmentally sustainable and considered a suitable use, subject to the protection of heritage and amenity.

7.1.7. In terms of the above, I am satisfied that the proposed development is acceptable in principle and would be compatible with national, regional and local policies as they relate to waste management.

7.2. Waste Management Acts & Regulations

7.2.1. At the outset, I would note that the applicant has not sought permission for, and the development was not advertised as requiring, a Waste Licence. As such, a positive decision in relation to this development cannot relate to such a development. The Board will note that I have addressed EIA matters above in section 5.9 of this report. I would note that the subject application does not appear to have been referred to the EPA for comment in terms of the requirement to apply for a waste licence under the Waste Management Act 1996. I do note that the Environment Section of Kilkenny County Council has advised that the proposed development will require a 'waste permit / licence' in accordance with the Act and requires that prior to the commencement of any waste activity on the site, the development shall have applied for, and be in possession of said permit / licence.

7.2.2. Section 42(1G)(b) of the Waste Management Act 1996, as amended and S.173B(5) of the Planning and Development Acts 2000, as amended (refer to the EU (EIA)(Waste) Regulations 2012 (S.I. No.283 of 2012)), states that a Planning Authority is obliged under the Planning and Development Acts to make a determination on whether an EIA is required for a development or proposed development, the Planning Authority shall request the EPA to provide observations to assist its deliberations, if the development comprises or is for the purposes of an activity that requires a Waste Licence.

7.2.3. As noted above, it is unclear whether or not the activity is licensable under the EPA Act 1992, as amended or the Waste Management Act 2007, as amended, or whether or not it requires a waste facility permit from the local authority. The Board will note that the applicant has indicated on the planning application form that the proposed development does not relate to a development which comprises or is for the purpose of an activity requiring a waste licence and there is no information

submitted in relation to the type of licence or permit the applicant may intend to apply for.

7.2.4. Authorisation for waste activities / facilities / licences is considered as follows:

- Certificate of registration (for activities listed in Part II of the Third Schedule) and granted by the local authority.
- Waste facility permit (for activities listed in Part I of the Third Schedule) and granted by the local authority.
- Waste licence (all other activities not listed in Parts I and II of the Third Schedule) and granted by the EPA.

7.2.5. Part I of the Third Schedule of Waste Management Regulations 2007 sets out the classes of activity subject to waste facility permit application to a local authority and Class 8 states:

The reception, storage and composting of bio-waste at a facility where –

- (a) The maximum amount of compost and bio-waste held at the facility does not exceed 6,000 cubic metres at any time, and
- (b) The annual intake shall not exceed 10,000 tonnes.

The proposed facility would have an annual input of 10,000 tonnes of waste – ie cattle slurry - which appears to just comply with the thresholds set out above.

7.2.6. According to EPA guidelines a Waste Licence is normally required for:

The reception, storage and composting of bio-waste at a facility where:

- (a) The annual intake exceeds 10,000 tonnes, OR
- (b) The maximum amount of compost and bio-waste held at the facility exceeds 6,000 cubic metres at any time.

7.2.7. Article 11 of the Waste Management (Facility Permit and Registration) Regulations, S.I. No.821 of 2007 (as amended in 2008 by S.I. No. 86 of 2008), falls under the heading “Declarations on waste licences, waste permits or certificates of registration” and sub-section (1) states:

If an applicant has doubts concerning whether a proposed activity or activities shall be regarded as a licensable activity under section 39(1) of the Act or as

requiring a waste facility permit or certificate of registration under these Regulations, or as none of these, the applicant shall make a request to the Agency to determine the question in advance of the submission of an application for a waste facility permit or a certificate of registration under these Regulations.

7.2.8. In the context of the subject proposed development, the Board will note that the proposed primary and secondary digester tanks will each have a capacity of 3,731m³ and the liquid digestate is to be stored in two storage tanks that are indicated as having a capacity of 4,926m³. In this regard, there is potential for the facility to hold more than 6,000m³ of bio-waste and digestate at any one time. In this case, it is possible that the proposed facility will require a waste licence. I note that the applicant has not made reference to this issue.

7.2.9. Article 11 requests can only be made by an applicant who is proposing a waste related activity or a Planning Authority that has received an application for a waste authorisation. As such, the Board may consider it appropriate to seek such a declaration from the EPA, or seek that the applicant seek such a request or make an application for a Waste Licence to the EPA, prior to considering this appeal further. In addition, and while I would accept that the scale of the development is sub-threshold, it is open to the Board to seek observations from the EPA in terms of determining whether an EIAR is required or not, should a Waste Licence be deemed necessary. I would restate that a grant of planning permission in this instance cannot be for a development that requires a Waste Licence.

7.2.10. Should it be considered that a Waste Facility Permit is required to be sought from the local authority, details of the waste process to be carried out on site, likely emissions, monitoring, housekeeping, procedures for accident and emergency, environmental monitoring and environmental management systems would be required to accompany any such application. Any permit granted will likely include conditions relating to the operation of the facility, including in respect of type and amount of waste which may be accepted, record keeping, measures to control emissions and monitoring in accordance with the EPA Amended Guidance Manual Waste Facility Permit and Registration Regulations 2008, as amended in 2012.

7.3. Visual Impact & Residential Amenity

7.3.1. The subject site is located in a rural landscape and adjacent to the M9 motorway. The surrounding land comprises agricultural fields with agricultural buildings, including the farm complex associated with the applicants farm located to the north of the proposed development site. The site is below the level of the M9 and is set back from the Regional Road – proposed access road – to the north. The site is generally level. It is indicated that up to recently, it was planted with trees and it retains boundaries comprising trees and hedgerows. I note the intention to supplement these boundaries with additional trees to further screen the site from both the motorway to the south and the lands to the north.

7.3.2. In terms of the Landscape Character Assessment in the Kilkenny County Development Plan, the subject site lies within the B1 - Castlecomer Southern Transition Zone. The southern area is a larger land parcel, which is located within the environs of Ballyfoyle to Paulstown, following the low lying slopes of the Castlecomer Hills, until reaching the Kilkenny Basin and the Nore Valley (north) at Mohil. These transitional areas are not perceived as having special landscape or scenic amenity values and are considered suitable for development

7.3.3. The proposed development comprises a significant development in terms of its scale in this landscape, but I would also note the presence of large agricultural buildings in the wider area. In addition, the Board will note that to the south west of the site there is an existing waste management facility. The proposed structures will include 2 no. digester tanks and 2 no. digestate storage tanks, all of which will rise to a total height of 12.75m. All other structures within the development will rise to between approximately 2.6m and 4m in height.

7.3.4. In support of the proposed development and following a request for further information from the planning authority, the applicant prepared photomontages to depict the proposed development in the landscape. Having regard to the design of the tanks, with domed roofs, overall, I am satisfied that the proposed development is acceptable at this location, and subject to the implementation of the landscaping plan as proposed, there will be minimal impact on the visual amenity of this landscape.

7.3.5. In terms of residential amenity, the Board will note that the site is set at a distance from the regional road, the R712, which includes a number of houses. The

closest house to the boundary of the proposed site is approximately 410m. With regard to potential impacts on residential amenity, I would suggest that noise and odour would be the most prominent emissions which may impact on existing residential amenity in the area. In response to the PAs further information request, the applicant submitted details on the operations procedures associated with the anaerobic digester and identifies the elements of the development which will give rise to noise and odours.

Noise:

7.3.6. The response to the FI request identifies that noise will arise from traffic and vehicle movements including the bringing of feedstock from the storage clamp to the hopper, and plant equipment such as pumps and motors. Traffic will arise from the approximately 10 staff members while the loading of the hopper will use a Manitu or alternative loading shovel with a diesel engine capacity of 137hp and an environmental noise level of 103dB. In addition, the pumps and motors will be housed in a plant room and the upgrading equipment and compressor will be housed in a weatherproof roof and acoustic container which will have a 75dB output at 3m.

7.3.7. In addition to the above, the application notes that there will be daily collections of the upgraded biomethane, whereby the sealed transportation container unit will be collected, and an empty container dropped off. Full details of the HGVs used in this part of the development have not been clearly detailed in terms of noise. Neither have the vehicles proposed to deliver raw slurry to be fed into the digester. That said, I would note that the slurry is proposed to arrive from within the applicants landholding, as detailed in the submitted documentation, and will arrive to the site in a sealed tanker pulled by a tractor and will use internal farm roads.

7.3.8. Having regard to the information available, I would suggest that no real noise impact assessment was undertaken. I note that following the submission of the FI response that the Environment Section of Kilkenny County Council had no further concerns in relation to noise with the Planning Officer noting that the nearest noise sensitive receptor is in excess of 150m. I would also note the location of the site adjacent to the M9 motorway which may impact on the baseline noise measurement in this rural area. In this regard, and having regard to the standard of the local road network in the vicinity of the site, overall, I am generally satisfied that the proposed

development is acceptable and is unlikely to have any significant impact on existing residential amenity with regard to noise.

Odours

- 7.3.9. The primary source of odours arising from the proposed development include the transportation of feedstock and raw slurry to the site. In addition, the spreading of slurry and the capturing of the biogas following the digester process, have the potential to generate odours.
- 7.3.10. It is noted that once the feedstock will be delivered from the existing farm processes, it will be stored in a hopper which will be opened and closed after each load. Once filled, the hopper will be closed to protect the feedstock and to reduce the potential for odours escaping. Odour from feedstock is also controlled using a membrane for silage clamps. Once the feedstock enters the hopper, it is within a closed sealed system. The captured biogas is captured in the roof of the digesters which are sealed using a membrane dome which prevents odour emissions.
- 7.3.11. Slurry will be transported over existing farm roads via sealed slurry tanks and will be delivered to a slurry holding tank. The transfer will happen via a sealed hose and pipe into the tank. The transfer of the slurry into the digester is via sealed pipes which will minimise the potential for odour breakout.
- 7.3.12. The movement of digestate through the digester system to the storage tank is via a sealed pipe, again, containing any potential odour emissions. Digestate is to be stored in the storage tanks for up to 6 months and during the open season, the digestate is taken from the storage tanks. The AD process is said to reduce the concentration of odour compounds present in untreated slurry, and this is accepted by the EPA. As such, the digestate used in land spreading is significantly less odorous than untreated slurry. In addition, the AD process has been found to mitigate up to 100% of green house gas emissions.

Conclusion

- 7.3.13. I am generally satisfied that the proposed development, if permitted is not likely to have any significant impact on either noise or odour emissions. Given the rural nature of the site, together with the separation distances between the site and the nearest sensitive receptors, I am satisfied that the proposed development would

have no significant impact on the existing residential amenity of properties in the area.

7.4. Water Services

7.4.1. The Board will note that the proposed development is to connect to an existing private well which currently serves the farm. The submitted Engineering Services Report sets out the watermain layout and notes that the envisaged daily usage is expected to be <400 litres per day. The looped watermain is to be fed from an above ground storage tank located at the northwest corner of the site and this tank will contain 288,000 litres of water. This tank will serve general washing and for emergency fire-fighting purposes.

7.4.2. The Board will note that the Environment Section of Kilkenny County Council raises no objections to the proposed water supply to service the proposed development.

7.4.3. In terms of wastewater services, the applicant proposes to install a Sepcon P6 wastewater treatment unit to serve the proposed reception building. The only source of foul water to be generated on the site will be from this building which will serve both staff and visitors welfare facilities. All foul water drainage will be collected through a gravity network from the reception building to the proposed WWTP which will be located to the north of the proposed car park. connect to the existing public sewer. The Board will note that a site characterisation report was not prepared for this element of the overall development as it is intended that the final effluent arising in the WWTP, which is anticipated as having a total annual volume of c130m³, will be pumped into the main anaerobic digester plant to go through the full AD process with other liquids.

7.4.4. I again note that the Environment Section of Kilkenny County Council raised no objection to the proposed development in this regard. Therefore, I am satisfied that the principle of the development in terms of water services, is acceptable.

7.4.5. The Engineering Services Report includes details on the storm water drainage proposals for the site. The site is divided into three areas of run-off risk ranging from high risk from the feedstock clamps, to moderate risk from the main digester area and normal risk from the reception area and car-park. I note that the design of the

clamps area includes a collection storage tank and that the run-off and leachate from this area is to be collected and pumped through the AD process for treatment. No waters from this area of the site will be discharged to the open drain system. The other two areas will include collection systems and treatment through Class 1 full retention and bypass interceptors before final discharge to the open drain. In order to mitigate against accidental discharges to the open drains from the AD plant, a bund system is proposed.

7.4.6. The Engineering Services Report presents full technical assessments, as well as specifications and detailed design for all elements of the water services. The wheel wash, to be located at the entrance to the development, will include a wash area silt trap and separator. The collected liquid from the wheel wash will also be pumped back into the AD process for treatment and will not be discharged to the open drain.

7.4.7. I note no objection from the Environment Section of Kilkenny County Council in relation to water services and as such, I am satisfied that the proposed development is acceptable in this regard.

7.5. Roads & Traffic:

7.5.1. Access to the subject site is proposed over the existing road network in the vicinity, and ultimately, off the Regional Road R712, which was the former N10 connecting Kilkenny City and Paulstown. The speed limit at the entrance to the site off the R712 is 100kph. The existing entrance serves the existing farmyard which is set back from the public road and there are extensive sight distances available in both directions. It is proposed that the existing entrance, and internal farm roads, will serve the proposed anaerobic digester.

7.5.2. The Board will note the concerns raised in the third-part appeal relating to roads. It is submitted that the proposed development will result in a very significant traffic increase on the local road network which would have a severe negative impact and would represent a severe traffic hazard in the local area. It is also noted that a detailed traffic assessment was not undertaken to consider impacts during the construction or operational phases of the development. I would agree that the information submitted in support of the proposed development is somewhat lacking

and unclear. The application notes that the development will give rise to 10 vehicle movements per day but the nature of these movements is not clear.

- 7.5.3. In response to the third-party concerns, the applicant has noted that the proposed development is for an on farm anaerobic digester which will be utilising existing and on-site resources. The majority of the landholding is located adjacent to the proposed plant. In addition, the beef fattening and replacement heifer units, where the slurry to be used in the AD is sourced, are located within the boundaries of the landholding and will be transported over internal farm roads. As such, the impact on the public roads is considered to be insignificant.
- 7.5.4. I note that the existing access to the farm was constructed under the grant of planning permission, PA ref 09/444 refers. This was an application for a Dairy Unit comprising a milking parlour with associated plant room, cow yard and holding pens, a silage slab and out wintering standoff pad and an earth lined slurry store and all associated ancillary site works. Concern was raised in terms of the intensification of traffic using an existing entrance onto the N10, national primary road at the time (now the R712).
- 7.5.5. A revised site notice was submitted which included a change to the entrance. The amended entrance, as constructed, provides for 215m sight distances in both directions. In addition, the volume of traffic using the entrance was indicated at the time to include 200 lorries per year during the harvest, 2-3 tractors per week and 2-3 cars per week. With the grant of permission as described, the additional traffic would amount to 2 employees cars, milk lorry 3 times per week, occasional tractors or lorries 2-3 times a week and occasional visitors 2-3 times a week.
- 7.5.6. In the context of the proposed additional traffic using the existing entrance as submitted, together with the fact that most of the feedstock used in the proposed anaerobic digester will be sourced, and moved within the existing landholding which lies adjacent to the subject site and will use internal farm roads, I am generally satisfied that the proposed development will not give rise to any significant traffic hazard or impact to the existing road users in the area. I also note that the Roads and Transportation Section of Kildare County Council raised no objections subject to compliance with conditions. I am satisfied that the proposed development is acceptable in terms of roads and traffic issues.

7.6. Other Issues

7.6.1. Ecology & the Water Environment

The subject site is bound on three sides by an open drain which is hydrologically linked to the River Barrow and River Nore cSAC. I will address matters relating to AA further below in section 8 of this report. The Board will note that I have addressed water service issues above in section 7.4 and I note the proposed drainage strategy for each area of the site, depending on the risk level assigned for each element. I am satisfied that discharges to waters in the vicinity of the site have been adequately addressed.

In addition to the above, the Board will note that the proposed development seeks to construct an on farm anaerobic digester which will use the existing resources of the farm to produce digestate for use on the extensive landholding, extending to 148.22ha of grassland and 479.24ha of tillage as detailed in the submission to An Bord Pleanála received on the 14th of February 2019. It is accepted that the digestate serves as an excellent biofertilizer and allows farms to reduce the need for artificial or mineral fertiliser applications. Digestate also reduces weed dispersal on land, reducing the need for use of herbicides. It is further accepted that the use of digestate has improved water and air quality environmental benefits as it reduces the potential and risk of organic pollution and is significantly less odorous than traditional untreated slurry used in land spreading. Therefore, there is no real risk arising to the quality of waters.

Overall, I am satisfied that the proposed development and the application of digestate on the lands as indicated is consistent with current best practice in the industry. In addition, it is noted that the application of digestate to lands will be site specific and subject to additional controls set out in the European Union (Good Agricultural Practice for Protection of Waters) Regulations 2017, which include minimum distances from watercourses, circumstances under which organic fertiliser cannot be applied (e.g. land that is likely to flood, on steeply sloping ground) and record keeping. Compliance with the Regulations is a matter for local authorities who are responsible for monitoring surface water bodies and the inspection of farm holdings etc.

In light of the above, I am satisfied that the proposed development is not likely to have an adverse effect on water quality either individually or cumulatively with other development. Matters relating to AA are discussed further below in Section 8 of this report.

7.6.2. Use of Agricultural Land

The Board will note the comments of the third-party appellant in relation to what he considers the misuse of agricultural land, contrary to the requirements of national policy as it relates to the agri-food sector. It is submitted that the use of agricultural land to grow feedstock for use as a waste will result in agricultural land being taken out of production for food crops to fuel an industrial project. In response, I note that the first party submission on the existing farming practices, and the indication that the subject application is based on reducing the carbon footprint of the farm. It is submitted that the anaerobic digester is intended to be complimentary to current farm practices and that the proposed digestate has the potential to increase crop growth and production by as much as 40%.

In addition, it is noted that the farm currently has sizeable beef fattening units and replacement heifer units with potential for dairy units. The feedstock to serve the AD will come from the tillage operations of the existing farm, which is loss making, uncompetitive and not sustainable. It is proposed to use the tillage operation to improve the competitiveness and sustainability of the beef fattening, heifer replacement and future dairy units, and reduce the carbon footprint of the farm produce.

I note the reference to the Food Harvest 2020 report, and I am generally satisfied that the proposed development accords with the principles contained therein. I have no objection to the proposed development in this regard.

7.6.3. Export of Gas to Grid

The Board will note that the development proposes the upgrading of the biogas to reduce the moisture content and to separate the biogas to methane and CO₂. The upgraded biomethane is then proposed to enter approved sealed transportation container and once full, the transportation unit will be collected. It is anticipated that there will be a drop (of the transportation container) and collection every 24 hours.

The application details two routes to market including injection into the national gas grid – where there are a number of above ground installations within 50km of the site that can serve as a Central Grid Injection facility, and supply to industrial users that are off grid.

While I would acknowledge that there is a lack of clarity in relation to how and where the renewable energy generated in the AD process will be used, I am overall satisfied that the principle of the development adequately complies with the national and local policy as it relates to renewable energy projects. In addition, I note that the proposed plant will come under the monitoring of Gas Networks Ireland as the regulatory authority, under the Gas Act 1976, and Gas Networks Ireland being the regulated entity will oversee the standards and quality of the design and operation of the proposed plant.

7.6.4. Archaeology & Architectural Heritage

The Board will note that the subject site is located within an area which is of Archaeological Potential and includes 7 National Monuments within 430m of the subject site. The closest monument to the site is a Fulacht Fia, ref KK020-075, which is located approximately 80m to the south east of the site. The remaining monuments are located more than 200m from the site boundary. The proposed development does not impact upon any of these monuments and having regard to the landscaping proposals associated with the proposed development, there will be no visual impacts arising.

In terms of architectural heritage, the Board will note that there are three buildings identified on the National Inventory of Architectural Heritage (NIAH) located between 625m and 680m to the west of the site. These buildings include as follows:

- Clifden House, Farmyard Complex NIAH ref 12402015– Regional Rating. Category of Special Interest - Architectural. Date 1740-1760.
- Clifden House, Country House NIAH ref 12402004– Regional Rating. Category of Special Interest - Architectural. Date 1740-1760.
- Saint Colman's Catholic Church, NIAH ref 12402003– Regional Rating. Category of Special Interest - Architectural Artistic Historical Social. Date 1875-1880.

Having regard to the separation distances between the above buildings and the subject site, I am satisfied that the proposed development does not impact upon any of these NIAH structures and having regard to the landscaping proposals associated with the proposed development, there will be no visual impacts arising.

7.6.5. Consultation

The Board will note that the current appellant noted in his submission to the Planning Authority that no consultation was undertaken with the local community in relation to the proposed development. I would note that the applicant is not obliged to carry out public consultations over and above the requirements for statutory notices. These notices resulted in the submission of the third-party comments on the proposed development. All issues raised in these third-party comments have been considered in this report.

7.6.6. Health & Safety

The appellant raises concerns in terms of health and safety with regard to the production of gas and the potential for gas explosions. The upgraded biomethane arising from the final stage of the proposed processes, will enter approved sealed transportation container which will be collected from the AD plant at Dunbell and moved off site. There is no proposal to store quantities of gas on site, with proposals to transfer the gas every 24 hours.

It is also noted that the proposed plant will come under the monitoring of Gas Networks Ireland as the regulatory authority, under the Gas Act 1976, and Gas Networks Ireland being the regulated entity will oversee the standards and quality of the design and operation of the proposed plant. I am satisfied that matters relating to Health & Safety will be addressed as part of a waste permit / facility licence.

7.6.7. Development Contribution

The subject development is liable to pay development contribution, a condition to this effect should be included in any grant of planning permission.

8.0 Appropriate Assessment

Introduction:

- 8.1.1. The site is not located within any designated site. The closest Natura 2000 site is the River Barrow and River Nore SAC (Site Code 002162), and the River Nore SPA (Site Code 004233) which are located approximately 3.6km west of the site. The site is bound on three sides by open drains which flow towards the River Barrow and River Nore cSAC and is therefore hydrologically connected to the designated site.
- 8.1.2. It is noted that a Natura Impact Statement was requested by the Board following the submission of the third-party appeal. It was determined, based on the documentation submitted, that the likelihood of a significant effect on a European Site as a consequence of the proposed development either individually or in combination with other plans and projects could not be screened out, on the basis that the proposed works included measures during the construction phase to protect the River Barrow and River Nore SAC and River Nore SPA. These works could be determined to amount to mitigation measures. Accordingly, the Board sought the submission of the NIS to facilitate Stage 2 AA of the proposed development and to address the likely or possible significant effects, if any, arising from the proposed development on any European site.
- 8.1.3. The Natura Impact Statement (NIS, dated October 2019) scientifically examined the potential impacts of the proposed development on the following European Sites:
- River Barrow and River Nore SAC (Site Code: 002162)
 - River Nore SPA (Site Code: 004124)

This NIS was readvertised in accordance with Section 132 of the Planning and Development Act 2000, as amended and Articles 244 and 112 of the Planning and Development Regulations 2001, as amended. The Board will note that the Planning Authority submitted a response to the Section 131 notice to all parties advising of the submission of the NIS, advising no further comments. No third party responses were received.

Stage 2 Appropriate Assessment

8.1.4. It is reasonable to conclude, on the basis of the information on the file, that the proposed development has the potential to have a significant effect on the River Barrow and River Nore SAC (Site Code 002162) and River Nore SPA (Site Code 004233), in view of the sites' conservation Objectives due to the hydrological connection between the designated sites and the subject appeal site and in the absence of mitigation measures. In this regard, it is determined that a Stage 2 Appropriate Assessment is required in respect of these sites.

European Site	Qualifying Interests
River Barrow and River Nore SAC (Site Code: 002162)	1016 Desmoulin's whorl snail <i>Vertigo moulinsiana</i> 1029 Freshwater pearl mussel <i>Margaritifera margaritifera</i> 1092 White-clawed crayfish <i>Austropotamobius pallipes</i> 1095 Sea lamprey <i>Petromyzon marinus</i> 1096 Brook lamprey <i>Lampetra planeri</i> 1099 River lamprey <i>Lampetra fluviatilis</i> 1103 Twaite shad <i>Alosa fallax</i> 1106 Atlantic salmon (<i>Salmo salar</i>) (only in fresh water) 1130 Estuaries 1140 Mudflats and sandflats not covered by seawater at low tide 1310 <i>Salicornia</i> and other annuals colonizing mud and sand 1330 Atlantic salt meadows (<i>Glauco Puccinellietalia maritima</i>) 1355 Otter <i>Lutra lutra</i> 1410 Mediterranean salt meadows (<i>Juncetalia maritimi</i>) 1421 Killarney fern <i>Trichomanes speciosum</i> 1990 Nore freshwater pearl mussel <i>Margaritifera durrovensis</i> 3260 Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation 4030 European dry heaths

	<p>6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels</p> <p>7220 * Petrifying springs with tufa formation (<i>Cratoneurion</i>)</p> <p>91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles</p> <p>91E0 * Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>)</p>
<p>River Nore SPA (Site Code: 004233)</p>	<p>A229 Kingfisher (<i>Alcedo atthis</i>)</p>

- 8.1.5. The River Barrow and River Nore SAC and the River Nore SPA are located approximately 3.6km to the west of the subject site, and is hydrologically connected 7.5km downstream, and extends through a number of counties including Carlow, Kildare, Kilkenny, Laois, Offaly, Tipperary, Waterford and Wexford. The SAC supports a large number of species and habitats, including priority habitats. The submitted NIS notes that none of the qualifying interests occur within the proposed development site.
- 8.1.6. Specific Conservation Objectives for the River Barrow and River Nore SAC (Site Code 002162) have been prepared and seek to maintain or restore the favourable conservation condition for each of the Annex I habitat(s) and the Annex II species for which the SAC has been selected.
- 8.1.7. No part of the proposed development encroaches into the SAC site and as such, the development will not result in the loss, fragmentation or interference with any habitats for which the SAC is designated. The development will not result in the disturbance of any species for which the SAC is designated and as no instream works are proposed, there will be no impacts through disturbance of sensitive aquatic species.
- 8.1.8. Specific Conservation Objectives for the River Nore SPA (Site Code 004233) have been prepared and seek to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA. No part of the proposed development encroaches into the SPA site and as such, the

development will not result in the disturbance of the species for which the SPA is designated.

8.1.9. In accordance with the precautionary principle, however, it is concluded that there is potential that the proposed development, either on its own or in combination with other developments, may have a significant effect on the SAC and SPA, and in particular, on water quality. This is due to the fact that the site is hydrologically connected to the SAC through the existing open drains which bound the site and flow towards the River Barrow and River Nore SAC and River Nore SPA. The works would have the potential, in the absence of mitigation, to increase pollution events of surface waters through the release of sediment during groundworks and storm water discharge to the open drains particularly during the construction phase, which could result in temporary effects on the species/habitats for which the SAC site is designated and on the Kingfisher Kingfisher (*Alcedo atthis*) for which the SPA site is designated.

Construction Phase Risks:

8.1.10. During the construction phase, there is a risk that material could be drawn from the site into the adjacent stream, particularly during periods of heavy rainfall. While the separation distance between the site and the SAC/SPA is acknowledged, there remains uncertainty with regard to the magnitude of contamination entering the watercourse and the extent of dilution that would take place as material travelled downstream. It is also noted that the consequences of surface water contamination may or may not be significant. It is considered that the consequence would be significant and in light of recent case law, best practice construction measures are assumed to be mitigation measures for the purposes of AA.

8.1.11. The NIS concludes that the likelihood of significant effects to the River Barrow and River Nore SAC and River Nore SPA cannot be ruled out given the potential effects to water quality, due to surface water run-off from the site and potential sediment pollution, during the construction phase.

Post Construction Risks:

8.1.12. Assuming the plant is managed correctly, the operation of an anaerobic digester is not considered to be disruptive and is by its nature, quiet, resource efficient and overall, considered to be environmentally friendly. The site is

considered to be too far removed from the SAC/SPA for the increased activity associated with the AD on the existing farm, to have an impact in terms of noise.

8.1.13. Harvesting of feedstock and spreading of digestate will not deviate from existing practices on the farm with the main difference being that digestate will be spread on the land rather than raw slurry. The potential for air borne pollutants is also negated by the use of a 'trailing shoe' system which will inject the digestate directly into the soil.

8.1.14. In terms of the operational phase, there is potential for contamination of the watercourse to occur in terms of:

- Effluent from the feedstock clamps
- Effluent from the digester
- Raw sewage from the toilet facilities
- Surface water run-off from the reception area and car park
- Run-off from the wheel wash.

8.1.15. These risks would result in water with a high organic content and high nutrient load which would have the potential to impact on the Biochemical Oxygen Demand (BOD), nitrates and phosphates levels. The impacts of such increases to the BOD would result in a reduction of dissolved oxygen which would result in fish kills and would reduce available food for otters and kingfishers. Impacts to the Nore pearl mussel would also be expected. Other impacts relating to high nutrient levels could lead to eutrophication, high turbidity, dense macrophyte growth, a reduction in species diversity and smell nuisances.

Mitigation Measures

8.1.16. Mitigation measures, in the form of the implementation of Best Management Practices with regard to soil stabilisation, run-off control and sediment control are proposed as part of the proposed development. In addition, the construction phase of the development will adhere to a Construction Waste Management Plan which will ensure the appropriate treatment of materials on site.

8.1.17. Post construction measures have been designed into the scheme and include the provision of an underground storage tank in the feedstock clamps whereby the

surface water run-off and leachate from the clamps will be pumped through the AD process and treated. It will not discharge to the open drains. Surface water run-off from the digester area and car park area will be collected and treated through a Class 1 full retention interceptor and Class 1 bypass interceptor respectively, before final discharge to the open drain. Accidental discharges to the open drain are to be prevented by a bund system.

8.1.18. Foul water generated at the facility – from staff and visitor facilities – will be treated in a three-stage wastewater treatment unit. The final effluent will be directed to the AD process for further treatment. There will be no discharge to the open drain or to ground. Water used in the wheel wash will also be collected and pumped to the AD plant for treatment.

8.1.19. As such, all contaminated water which could potentially impact on an SAC/SPA will be redirected into the anaerobic digester. Subject to the implementation of these measures, I would accept that there is little potential for significant impacts on the qualifying interests for which the sites are selected, and therefore, on the integrity of the sites. Residual impacts are also unlikely.

In Combination Effects

8.1.20. Cumulative impacts from plans and projects in the area which may result in potential in-combination effects are not specifically considered in the submitted NIS. However, the Board will also note that the nature of the proposed process on the site does not include any significant discharge to surface waters. I am also satisfied that controls associated with land spreading and other farming activities are controlled by separate legislation which the applicant will require to comply with.

8.1.21. I conclude that subject to mitigation measures on the proposed development, no cumulative impacts on the local surface water environment will occur.

Conclusion

8.1.22. I have read the submitted Natura Impact Statement in its entirety, together with all other environmental reports submitted with the planning application in support of the proposed development, and I am satisfied that it assesses the likely significant impacts arising from the proposed development on the integrity of the River Barrow and River Nore SAC (Site Code: 002162) and the River Nore SPA (Site Code 004233).

8.1.23. I have had full regard to the information as set out in the NIS. I am satisfied that it has adequately identified and assessed the key characteristics of the potential impacts arising as a result of the proposed development which could undermine the stated conservation objectives of the Natura 2000 site. I am satisfied that the mitigation measures identified for both the construction and the operational phases of the development are appropriate and acceptable.

8.1.24. Having regard to the nature of the subject development site, the nature of the proposed development and its location at a remove from existing Natura 2000 sites, together with the details presented in the Natura Impact Statement, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, I consider it reasonable to conclude on the basis of the information on the file, that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the River Barrow and River Nore SAC (Site Code: 002162), the River Nore SPA (Site Code 004233), or any other European site, in view of the site's Conservation Objectives.

9.0 Recommendation

I recommend that planning permission be granted for the proposed development for the following stated reason and subject to the stated conditions.

10.0 Reasons and Considerations

Having regard to the pattern of permitted development in the area, to the provisions of the Kilkenny County Development Plan 2014-2020, and to the layout and design as submitted, the Board considered that, subject to compliance with the conditions set out below, the proposed development would not seriously injure the general or visual amenities of the area or property in the vicinity, would not be prejudicial to public health or the water environment and would be acceptable in terms of traffic safety and convenience. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

11.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars submitted to An Bord Pleanála on the 10th day of February 2020, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

2. Water supply and drainage arrangements, including the disposal of surface water shall comply with the requirements of the planning authority for such works and services.

Reason: In the interest of public health and to ensure a proper standard of development.

3. All water from potentially contaminated areas shall be collected separately and shall be discharged into the anaerobic digestion tanks as indicated in the plans and particulars submitted with the application.

Reason: In the interest of public health.

4. Digestate generated by the proposed development shall be disposed of by spreading on land, agreed in writing with the planning authority. The location, rate and timing of spreading together with any buffer zones required shall be in accordance with the requirements of the European Communities (Good Agricultural Practices for the Protection of Water) Regulations, 2014.

Reason: To ensure the satisfactory disposal of waste material, in the interest of amenity, public health and to prevent pollution of watercourses.

5. All trees and hedgerows shown shall be retained on the site and shall be adequately protected during the period of construction in accordance with BS: 5837. Such measures shall include a protection fence which shall be erected beyond the branch spread, and no construction work or storage shall be carried out within the protective barrier.

Reason: In the interest of visual amenity and of protecting the residential amenities of adjoining properties.

6. The site shall be landscaped in accordance with a comprehensive scheme of landscaping, details of which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This scheme shall include the following:

- A plan to scale of not less than 1:500 showing the species, variety, number, size and locations of all proposed trees and hedgerows (which shall comprise predominantly native species such as mountain ash, birch, willow, sycamore, pine, oak, hawthorn, holly, hazel, beech or alder).

- Specifications for mounding, levelling, cultivation and other operations associated with grass establishment.
- A timescale for implementation.

All planting shall be adequately protected from damage until established. Any plants which die, are removed or become seriously damaged or diseased, within a period of five years from the completion of the development, shall be replaced within the next planting season with others of similar size and species, unless otherwise agreed in writing with the planning authority.

Reason: In the interest of visual amenity.

7. Prior to the commencement of development details of the materials, colours and textures of all external finishes to the proposed buildings and other plant associated with the development shall be submitted to the planning authority for written agreement.

Reason: In the interest of orderly development and the visual amenities of the area.

8. Prior to the commencement of development, a Construction Management Plan shall be submitted to the planning authority for written agreement. This plan shall provide details of the intended construction practice for the development, including hours of working, and measures for any off-site disposal of overburden/construction/demolition waste.

Reason: In the interest of public safety and residential amenity.

9. Details of all loading and unloading of waste on site shall be agreed in writing with the planning authority prior to the commencement of development.

Reason: In the interests of amenity.

10. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or

on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

A. Considine

Planning Inspector

25th November 2020