



An
Bord
Pleanála

Inspector's Report

ABP-316132-23

Development	Two anaerobic digesters with storage dome with associated and ancillary site development works. A Natura Impact Statement (NIS) will accompany this application
Location	Ballyconra , Ballyragget , Co Kilkenny
Planning Authority	Kilkenny County Council
Planning Authority Reg. Ref.	22687
Applicant(s)	Tirlán Limited (formally Glanbia Ireland).
Type of Application	Permission.
Planning Authority Decision	Grant with Conditions
Type of Appeal	Third Party
Appellant(s)	Wild Ireland Defence CLG North Allihies Beara
Observer(s)	None..

Date of Site Inspection

19/09/2024.

Inspector

Alan Di Lucia

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Appendix 1 – Form 1: EIA Pre-Screening

Form 3: EIA Screening Determination

Stage 1 Appropriate Assessment Screening

Stage 2 Appropriate Assessment

1.0 Site Location and Description

- 1.1. The site is located in the rural area of Ballyconra, North of Ballyragget, Co Kilkenny. The development site is located along the National Road N77 and forms part of the existing Tirlán Limited (formally Glanbia Ireland) facility. The proposed development is located opposite the main facility between the N77 and the River Nore on lands where the existing Wastewater Treatment Plant (WWTP) serving the factory is located. The site is below the level of the N77 and falls to the East towards the River Nore.
- 1.2. The proposed site is 6.86Ha which is associated with the overall facility which has a stated operational area of 122Ha. The existing Wastewater Treatment Plant discharges to the Nore River. The facility, according to documentation submitted, is the largest multipurpose integrated dairy plant in Europe processing up to 1 billion litres of milk to produce 900 million litres of whey and 180,000 tonnes of dairy ingredients annually.

2.0 Proposed Development

- 2.1. The proposed project is for the development of an Anaerobic Digestion Plant consisting of the following:
 - Construction of two anaerobic digesters, one equalization tank, to include concrete base, lined earth embankment and associated works.
 - Construction of a 500m³ biogas storage dome on new concrete base with gas flare, gas sump and desulfurization unit.
 - Construct Membrane and Control unit building with yard slab and link road.
 - Construction of wastewater lifting stations.
 - Construction of a ferric chloride tank
 - Re-alignment of the existing access track to facilitate vehicles movements,

- Drainage and associated site works including landscaping and removal of existing post and rail fence.
- Dismantling and removal of redundant existing sludge mixing tank and concrete base (bio tower).
- Construction of temporary contractor's compound with associated temporary access track including the removal of existing scrub
- Related pipe, pump and ancillary works
- Works to facilitate the uses of the biogas on site involves the installation of a new gas pipeline for the purpose of conveying gas to the existing Tirlán (Glanbia) facility to the east of the N77. This will consist of both underground and overground portions.
- A Natura Impact Statement (NIS) was submitted with the planning application.

2.2. The proposed development on average will process 31% of the total wastewater flow from the existing facility. The treated effluent from the Anaerobic Digester (AD) system will be sent to the anaerobic tanks at the existing Wastewater Treatment Plant (WWTP) for further treatment, which discharges to the River Nore subject to EPA licensing. In the event the excess biogas production or the production plants cannot accept biogas, then the excess biogas will be flared. It is expected that the flare will only operate in emergency situations which should occur rarely or when essential maintenance works are required. Flares are a safety requirement for all biogas production facilities. The maximum thermal output of the boiler which is proposed to use biogas as a fuel will be 17.6MW.

3.0 Planning Authority Decision

3.1. Further Information

3.1.1. The Planning Authority Requested Further Information regarding the proposed development relating to:

- Clarification in relation to depth of cover provided to the existing service ducts within the road boundary of the N77, required by a submission from Transport Infrastructure Ireland (TII).
- Clarification in relation to the management of digestate from the proposed development in relation to land spread in accordance with the facility's nutrient management plan and if the proposed facility will be used exclusively from the wastewater on site and not from other sources such as imported animal waste or feedstock. This clarification was sought by Inland Fisheries Ireland (IFI).
- Submit an updated site layout plan showing the drainage layout for the entire development.
- Submit a site layout plan showing locations of temporary stockpiles and silt fencing in order to protect the River Nore SAC from soil run-off.
- Submit details as to how the containment area relating to the proposed tanks will be constructed and what measures shall be put in place for the ongoing integrity testing and maintenance of the impermeable membrane in future.
- Submit detailed landscaping proposals for the new northern site boundary.

3.1.2. All information was submitted to the Planning Authority. Additional site surveys were carried out in relation to the service ducting proposed, TII have no further observations to make in response to the further information. No nutrient rich liquid digestate will be produced and the resultant wastewater will be recirculated back into the WWTP for further processing. Sludge management is in accordance with the facility's IE License, the proposed development will result in a decrease in sludge production and will not result in any increase to land spreading operations, which will continue to operate under the facility's nutrient management plan. The facility's nutrient management plan is subject to annual reviews. No other sources of materials will be received from any third-party. The WWTP storm drainage was inspected and surveyed, updated drawings submitted to the satisfaction of the Planning Authority. Revised details relating to stockpiles, silt fencing, the

containment area and landscaping submitted to the satisfaction of the Planning Authority.

3.2. Decision

Following receipt and assessment of the further information received the Planning Authority issued a notification of decision to grant planning subject to 14 conditions.

Conditions of note include:

- Cond 2. Development Contribution of €37,690 in accordance with the Development Contribution Scheme.
- Cond 3. To agree all works in relation to the bio-gas pipe installation within the vicinity of the N77 to be agreed with Kilkenny County Council.
- Cond. 4 Emissions to comply with the facilities industrial Emissions (IE) License P0359-03 and that all mitigation measures in the Environmental Report and Natura Impact Statement are implemented in full.
- Cond. 7 To ensure that all proposals and recommendations in the Construction Environmental Management Plan are implemented.
- Cond. 8 Proposed plant is not permitted to accept or process any waste from external sites.
- Cond.13. An Ecological Clerk of Works to be appointed.

3.3. Planning Authority Reports

3.3.1. Planning Reports

The Planners Report had regard to the following planning issues:

- The Environmental Report submitted with the application which included a preliminary Construction Environmental Management Plan concluded that there would be no significant impacts on water quality, Soils, geology,

biodiversity, noise, air quality, cultural heritage, landscape and visual impacts likely subject to implementation of mitigation measures.

- The Planners report concluded an adverse effect on that the integrity if the River Barrow and River Nore SAC and River Nore SPA could not be ruled out and therefore Stage 2 Natura Impact Assessment was required. Following examination of the NIS submitted with the application, The Planning Authority agreed that the proposed development alone or in combination with other projects on site, will not significantly impact the integrity, and conservation status of any of the qualifying interests of the River Barrow and River Nore SAC and the River Nore SPA or any other Natura 2000 sites in the vicinity.
- The Planning Authority did not consider that an Environmental Impact Assessment was required.

3.3.2. Other Technical Reports

- Environment Section: No objection subject to conditions
- Roads Section: No objection subject to conditions
- Parks: Detailed landscaping Plan required.

3.4. Prescribed Bodies

- TII Requested Further Information and no objection following receipt of further information.
- IFI Requested Further Information and no objection following receipt of further information.
- Department (DAU) No objection subject to conditions relating to archaeology.

3.5. Third Party Observations

One third party submission received by the Planning Authority related to the following issues:

- Planning Authority must assess application in accordance with the Planning and Development Act 2000, as amended.
- Planning Authority must screen the application in relation to Environmental Impact Assessment Report (EIAR)
- Planning Authority must undertake Appropriate Assessment Stage 1 (Screening), and Stage 2 (Natura Impact Assessment) is required.
- Planning Authority must ensure compliance with Water Framework Directive.

4.0 Planning History

The planning history on the site dates back to the 1990s with twenty planning permissions sought at this location. The Ballyragget facility operates in strict accordance with Industrial Emissions (IE) License (P0359-03) which is regulated by the Environmental Protection Agency (EPA)

The following planning history is considered the most relevant:

PA Ref 21/519

Permission granted for an extension to the existing Bio Solids De-watering Building for the installation of new equipment and material storage along with a new external silo and associated concrete bund: a new concrete yard to access the building extension and all associated effluent and storm drainage networks: new security fencing and sliding gate and modifications to the existing entrance: replacement of existing Dissolved Air Flotation (DAF) system with a new DAF System; landscaping and all associated site works. This facility holds an industrial emissions licence issued by the Environmental Protection Agency. The application was be accompanied by a Natura Impact Statement (NIS).

PA Ref 17/817

Permission for development at their Milk Processing Plant comprising: - A process building to accommodate 14 process tanks and associated equipment, associated plant and equipment rooms and roof mounted air handling equipment. - Links to the

existing Whey Factory and Workshop. - Associated site works including earthworks, retaining wall, drainage and road diversions, pipe and service bridges and the removal of existing external process tanks. - Electrical plant rooms to be located on top of an existing factory building to replace an existing electrical room inside the building. The new process building will provide a controlled and hygienic environment for existing product storage. The new electrical plant rooms are required to relocate an existing internal electrical room which is substandard and no longer acceptable. The milk processing plant site holds on industrial emissions licence issued by the Environmental Protection Agency

5.0 Policy Context

5.1. National, Energy and Climate Policy

5.1.1. Climate Action and Low Carbon Development Act 2015 (as amended)

Introduces a legally binding path to net zero emissions no later than 2050, and to a 51% reduction in emissions by the end of the decade.

5.1.2. Climate Action Plan 2024

Climate Action Plan 2024 is the third annual update to Ireland's Climate Action Plan 2019 and the second to be prepared under the Climate Action and Low Carbon Development (Amendment) Act 2021. It builds on the introduction of carbon budgets and sectoral emissions ceilings in the Climate Action Plan 2023 and sets a course for Ireland's targets to halve emissions by 2030 and reach net-zero no later than 2050. These national targets align with Ireland's obligations under EU and international treaties, most notably the Paris Agreement (2015) and the European Green Deal (2020).

5.1.3. National Planning Framework Project Ireland 2040

It is a goal of the National Planning Framework (NPF) to refocus planning to tackle Ireland's higher than average carbon-intensity per capita and enable a national transition to a competitive low carbon, climate resilient and environmentally

sustainable economy by 2050, through harnessing our country's prodigious renewable energy potential, including, inter alia onshore and offshore wind energy.

The overarching goals are expressed as National Strategic Outcomes (NSO's), the following of which have particular relevance to the proposed development.

NSO 8 Transition to a Low Carbon and Climate Resilient Society

NSO 9 Sustainable Management of Water and Other Environmental Resources

5.1.4. National Biodiversity Plan 2023-2040

The NBAP includes five strategic objectives aimed at addressing existing challenges and new and emerging issues associated with biodiversity loss. Section 59B(1) of the Wildlife (Amendment) Act 2000 (as amended) requires the Board, as a public body, to have regard to the objectives and targets of the NBAP in the performance of its functions, to the extent that they may affect or relate to the functions of the Board. The impact of development on biodiversity, including species and habitats, can be assessed at a European, National and Local level and is taken into account in our decision-making having regard to the Habitats and Birds Directives, Environmental Impact Assessment Directive, Water Framework Directive and Marine Strategy Framework Directive, and other relevant legislation, strategy and policy where applicable.

5.2. Development Plan

The Kilkenny City and County Development Plan 2021-2027 (KCCDP) is the relevant statutory development plan for the area. The site is located within the rural area on lands that are not zoned.

A Strategic Aim of the KCCDP is *“To provide a policy framework with objectives and actions in this City and County Development Plan to facilitate the transition to a low carbon and climate resilient County with an emphasis on reduction in energy demand and greenhouse gas emissions, through a combination of effective mitigation and adaptation responses to climate change.”*

Strategic object 2C states that it is an objective ‘ *To promote, support and direct effective climate action policies and objectives that seek to improve climate outcomes across the settlement areas and communities of County Kilkenny helping to successfully contribute and deliver on the obligations of the State to transition to low carbon and climate resilient society.*’

Section 9 of the KCCDP classifies the landscape character of the environs of the site as “Lowland” and states “*To continue to permit development that can utilise existing structures and settlement areas whilst taking account of the local visual absorption opportunities provided by existing topography and prevailing vegetation and to direct new development whenever possible towards the vicinity of existing structures and mature vegetation in the Lowland Areas, River Valleys and Transitional Areas.*”

Table 11.5 of the KCCDP outlines the consideration regarding applications for planning applications for Bioenergy Plants as follows:

Issue	Potential Impact
<i>Visual</i>	<i>Scale of the proposed development Visual impact of the digester, plant building(s) and chimney stack/flue on landscape, including protected views</i>
<i>Hydrology</i>	<i>Potential for pollution from operational procedures, e.g. spillages and from digestate and potential for contaminants to enter soil, groundwater and streams Potential ecological impacts of nitrogen deposition</i>
<i>Noise</i>	<i>During construction and during operation from plant operation and deliveries</i>
<i>Air quality</i>	<i>Odour from storage of wastes and feedstock, digestion process, transport, and disposal of digestate, dust and emissions may impact on proximate residential amenity. May require an assessment of their impacts and a model of emissions dispersion.</i>

<i>Light pollution</i>	<i>If operation is proposed on 24/7 basis</i>
<i>Traffic and transport</i>	<i>Increase in vehicle movements to and from the property; use of rail freight or shipping could be considered.</i>
<i>Architectural heritage</i>	<i>Impact on character of setting of protected building</i>

5.3. Natural Heritage Designations

The following European Sites are located within the zone of influence of the appeal site.

River Barrow and River Nore SAC (002162) within site boundary

River Noire SPA (004233) within a distance 60m east of site boundary

5.4. Environmental Impact Assessment (EIA)

5.4.1. EIA Screening

I have carried out a Pre-Screening assessment of the proposed development (See Form 1 appended to this report). The screening report considers the requirement for EIA against the legislative basis set out in Planning and Development 2000 Act, as amended and the Planning and Development Regulations 2001, as amended.

I considered that the proposed development is a class under Part 2 of Schedule 5 of the Planning and Development Regulations 2001, as amended namely: Class 3(b), Class 11(c) and Class 13(a). (Refer to Form 1 appended to this report). I consider that the proposed development is a sub-threshold development. The applicants have submitted the information required under Schedule 7A of the Planning and Development Regulations 2001, (as amended) in order that an EIA Screening Determination can be made and I therefore proceeded to undertake a screening determination.

5.4.2. EIA Screening Determination

I have carried out an EIA Screening Determination (See Form 3 appended to this report) in accordance with the provisions of Schedule 7 of the Planning and Development Regulations 2001, as amended and concluded that the proposed development would not be likely to have significant effects on the environment, and that an Environmental Impact Assessment Report is not required.

In making this conclusion, I had regard to:

1. the criteria set out in Schedule 7, in particular
 - (a) The Characteristics of the Proposed Development
 - (b) The Location of the Proposed Development
 - (c) The Types and Characteristics of Potential Impacts
2. the results of other relevant assessments of the effects on the environment submitted by the applicant including an Environmental Report and Natura Impact Statement.
3. the features and measures proposed by applicant envisaged to avoid or prevent what might otherwise have been significant effects on the environment, and in particular the proposal to prepare a final Construction Environmental Management Report which contains all relevant construction standards and embedded mitigation measures.

6.0 The Appeal

6.1. Grounds of Appeal

States that An Bord Pleanála has three distinct legal tasks in dealing with an application such as this one.

- The Planning Acts
- The Environmental Impact Assessment

- The Assessment under the Habitats Directive

6.1.1. The Planning Acts

- The Board must examine the application and ascertain if the contents of the application comply with the Planning Regulations, in particular Articles 22 and 23 of the 2001 regulations.
- The Board must assess the planning merits of the application in accordance with the Planning and Development Act 2000, (as amended) to ensure that the proposed development is in accordance with the proper planning and sustainable development of the area.

6.1.2. The Environmental Impact Assessment Directive

- The Board must examine the EIAR to ascertain full compliance, with particular relevance to the information referred to in Article 4(4) of the directive.
- The Board Is required to form and record a view as to the environmental impacts of the development, considering the EIAR furnished by the applicant, the views of the public concerned and applying its own expertise or if no EIAR is submitted to screen the development for EIA.

6.1.3. Assessment under the Habitats Directive

The Board as the competent authority have responsibility to:

- Screen the development under Article 6.3
- Make a decision as required under 6.3.

The submission outlines legal cases in relation to screening for appropriate assessment, the requirement to carry out an Appropriate Assessment and assessments cannot have lacunae and must contain complete, precise and definite findings and conclusions.

6.1.4. Additional Grounds

Notes that the Planning Authority carried out an Appropriate Assessment screening but highlights that there is no Appropriate Assessment of the proposed

development.. Also notes the submission by the IFI and the response to further information and states that this information was not made available to the public.

6.2. Applicant Response

- They have complied with the requirements of the Planning Regulations.
- Notes that the Board will conduct a screening for EIA, and the applicants have submitted a screening report and that all details comply with the requirements of the Environmental Impact Assessment Directive.
- Notes that the Board will undertake screening for appropriate assessment and if it determines that significant effects cannot be ruled out that it is obliged to undertake an appropriate assessment.
- Satisfied that the information provided contains complete, precise and definitive findings and conclusions to enable the Board carry out an Appropriate Assessment. Notes that the appellant has not shown otherwise.
- Comments on the further information submitted with respect of the IFI submission.

6.3. Planning Authority Response

No response from the Planning Authority

6.4. Environmental Protection Agency (EPA)

- 6.4.1. The appeal details were circulated to the EPA to ascertain if it was their view that a review of a licence is required in respect of the proposed development. The response from the EPA states that the overall facility is licensed under the EPA Act and should the Board determine that an EIAR is required and should a license review application be received, that the associated EIAR be submitted in support of the licence review application. I have carried out an EIA Screening Determination (See Form 3 appended to this report) in accordance with the provisions of Schedule 7 of the Planning and Development Regulations 2001, as amended and concluded

that the proposed development would not be likely to have significant effects on the environment, and that an Environmental Impact Assessment Report is not required.

7.0 Assessment

Having examined the application details and all documentation on file and inspected the site and having regard to national and local policy and guidelines, I consider that the main issues in the planning assessment relate to the following matters:

- Principle of Development and National Policy
- Validity of the Planning Application.
- Environmental Impact Assessment
- Appropriate Assessment
- Environmental Considerations
- Principle of Development and Local Policy
- Other Matters

7.1. Principle of Development and National Policy

- 7.1.1. The information submitted with the Planning Application states that the existing facility uses approximately 400,000 tonnes of steam and 465GWh of natural gas. The biogas from the proposed development is a renewable fuel and will offset approximately 19.8GWh of natural gas usage per year. By incorporating the process into the existing wastewater treatment system, the proposed development will result in approximately 10,000 tonnes less sludge to be disposed of per year. It is estimated that the proposed development will result in an aggregate saving of 3923 tonnes of CO₂ per year. The proposed system has been specifically designed for dairy wastewater and it is estimated that it will reduce the demand for natural gas by 11,000m³/day. I am satisfied that the proposed development resulting in the aggregate savings in 3923 CO₂ emissions each year is consistent with and contributes to the national targets as set out in the Climate Action and Low Carbon Development Act 2015, as amended and the Climate Action Plan 2024 in achieving

50% reduction in emissions by the end of the decade and net zero emissions by 2050. I am satisfied that the proposed development is also consistent with NSO 8 of the NPF in achieving a low carbon and Climate resilient society.

- 7.1.2. The proposed development is designed to treat up to 31% of the total wastewater from the existing facility, producing a renewable fuel and a more stable soil improver, digestate, thereby, in my opinion closing the circular economy loop in the processing of dairy products. I am satisfied that the proposed development is also consistent with NSO 9 of the NPF as it contributes to the sustainable management of water and other environmental resources and to the sustainable management of waste in the food sector.

7.2. Validity of the Planning Application

- 7.2.1. Articles 22 and 23 of the Planning and Development Regulations 2001, as amended set out the contents required for making a planning application. The planning application was validated by the Planning Authority. There is no clear basis set out in the 3rd party appeal relating to the validity of the planning application and it is not evident that there are any clear breaches of the requirements under Articles 22 and 23 of the Planning and Development Regulations 2001, as amended. Therefore, I consider that the Board can proceed to determine the appeal.

7.3. Environmental Impact Assessment

- 7.3.1. The applicants and the Planning Authority have screened out the need for an Environmental Impact Assessment Report. I have carried out an EIA Screening Assessment (See Form 1 appended to this report and Section 5.4.1 of this report). The screening assessment concluded that the proposed development is considered sub-threshold and should be further examined in accordance with Schedule 7 of the Planning and Development Regulations 2001, (as amended). With the information provided by the applicant under schedule 7A of the Planning and Development Regulations 2001, as amended, I have carried out an EIAR Screening Determination (See Form 3 appended to this report and Section 5.4.2 of this report). In undertaking this screening determination, I had regard to:

1. the criteria set out in Schedule 7 of the Planning and Development Regulations 2001, as amended, in particular
 - (a) The Characteristics of the Proposed Development
 - (b) The Location of the Proposed Development
 - (c) The Types and Characteristics of Potential Impacts
2. the results of other relevant assessments of the effects on the environment submitted by the applicant including an Environmental Report and Natura Impact Statement.
3. the features and measures proposed by applicant envisaged to avoid or prevent what might otherwise have been significant effects on the environment, and in particular the proposal to prepare a final Construction Environmental Management Report which contains all relevant construction standards and embedded mitigation measures.

and concluded that the proposed development would not be likely to have significant effects on the environment, and that an Environmental Impact Assessment Report is not required.

7.4. Appropriate Assessment

- 7.4.1. The applicant has carried out an Appropriate Assessment Screening and submitted a Natura Impact Statement. The Planning Authority have also carried out an Appropriate Assessment Screening and concluded that an NIS is required. It is not clear from the documents submitted with the application, if the Planning Authority carried out a Stage 2 Appropriate Assessment. However, the planning application is under appeal and An Bord Pleanála are the Competent Authority in this regard.
- 7.4.2. I have carried out an Appropriate Assessment Stage 1 Screening Assessment in accordance with Article 6(3) of the Habitats Directive (See AA Screening appended to this report and Section 8.1 of this report). I have concluded that the proposed development could result in significant effects on the River Barrow and River Nore SAC and River Nore SPA in view of the conservation objectives of a number of

qualifying interest features of those sites and concluded that a Stage 2 Appropriate Assessment is required.

7.4.3. I have carried out a Stage 2 Appropriate Assessment in accordance with Article 6(3) of the Habitats Directive. (See Appropriate Assessment appended to this report and Section 8.2 of this report). I considered that it was reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans and projects would not adversely affect the integrity of the River Barrow and River Nore SAC (002162) and River Nore SPA (004233) or any other European site, in view of the site's Conservation Objectives.

7.4.4. I am satisfied that the information submitted with the planning application contains complete and best scientific information in order to reach complete, precise and definitive findings and conclusions capable of removing all scientific doubt as to the effects of the proposed development on the European Sites identified.

7.5. Environmental Report

Whilst it has been determined that the proposed development will not require an Environmental Impact Assessment (Refer to Section 5.4.2 of this Report and EIAR Form 3 appended to this report), the applicant has provided a detailed Environmental Report (ER), that examines the proposed development in relation to Biodiversity, Water, Soils and Geology, Noise, Air Quality, Cultural Heritage and Landscape and Visual.

7.5.1. Industrial Emissions Licence.

The overall industrial facility of which the appeal site forms part currently operates in strict accordance with Industrial Emissions (IE) Licence (P0259-03) regulated by the Environmental Protection Agency (EPA). The conditions attached to the IE Licence relate to the process effluent, emissions to air, odour management and monitoring requirements. These conditions ensure that the facility operates within the regulatory limits set by the EPA to minimise environmental impact. Details of the appeal were circulated to the EPA, who responded by stating that if a review

application licence is received and the Board determines that an EIAR is required that the EIAR be submitted with the with the review of the licence.

7.5.2. **Biodiversity**

Biodiversity is examined in Chapter 5 of the ER report and sets out the methodology used, which includes baseline data, receiving environments, likely impacts, mitigation measures, monitoring and residual impacts. I consider the main issues relating to biodiversity as detailed in the ER are:

Receiving Environment

- The desk top study identified Nine Natura 2000 sites within the catchment area of the proposed development. There were no Natural Heritage Areas identified but one proposed Natural Heritage Area is within the catchment area.
- The following protected or notable species were recorded within 2km of the site boundary. (Pygmy Shrew, Otter, Badger, Black Headed Gull, Black Backed Gull, Little Egret, Northern Lapwing, Spire Snail, Bank Vole and Greater White Toothed Shrew).
- Seven Habitats were also identified (Buildings and Artificial Surfaces, Improved Agricultural grassland, Amenity Grassland, Spoil and Bare Ground, Scattered Trees and Parkland, Immature Woodland, Hedgerow / Treeline)
- No amphibian species were recorded within 2km of the Site. No badgers or bats were recorded during the field surveys, but they may use the site for foraging and commuting. All buildings on site were examined and deemed unsuitable for roosting bats. No kingfishers were identified within site boundary; however, one was recorded during the field surveys flying up and down the River Nore. The field surveys recorded evidence of otters along the River Nore but did not identify any suitable locations for habitat or holt construction.
- No Invasive Species were identified within the site.

Likely Impacts

- The proposed development has been sited and designed to avoid the riparian zone adjacent to the River Nore, and no construction works will impact on the riparian zone.
- Stage 2 Appropriate Assessment (see Section 8.2 of this report and appendix 1 appended to this report) concluded that the proposed development would not cause any effects on any Natura 2000 site subject to the implementation of mitigation. No effects on the proposed Natural Heritage Area resulting from implementation of mitigation measures contained within the Stage 2 Appropriate Assessment.
- In relation to habitats, Potential impacts have been identified in relation to Hedge/ Treelines, Scattered Trees and Parklands, Immature woodlands mainly due to construction activities.
- In relation to Flora and Fauna, whilst no habitats were identified during the field surveys, the location is considered suitable for some habitats, therefore measures required to prevent or minimise any potential impacts are required. The River Nore is 50m from the site and otter activity was noted during field surveys and there is potential for disturbance during construction, therefore mitigation measures are required. Kingfisher was recorded flying along the river during field surveys and there is potential for disturbance, therefore requiring appropriate mitigation measures. No invasive species recorded during field surveys, but mitigation is required to ensure none are introduced to the site.

Mitigation Measures

Mitigation measures are proposed for construction and operational phases of to ensure no impact on the identified flora and fauna of the area, to ensure no invasive species are introduced to site and for the protection of retained trees and hedgerows. The main mitigation proposed relates to the presence of an Ecological Clerk of Works who will supervise all construction activity and ensure mitigation measures are implemented.

Assessment

I am satisfied, based on the information provided in the ER which includes a robust desk top analysis and detailed field surveys, that there are no gaps in the information provided and that mitigation measures proposed and implemented will ensure that the residual ecological impact is not significant and that the proposed development would have minimal impact on biodiversity in the area.

7.5.3. Water Quality

Water Quality is examined in Chapter 6 of the ER report and sets out the methodology used, receiving environments, likely impacts, mitigation measures, monitoring and residual impacts. I consider the main issues relating to water quality as detailed in the ER are:

Receiving Environment

- The facility is hydrologically connected to the River Nore via the existing WWTP which discharges to the River Nore. The discharge is regulated by the EPA under Licence. Surface water from the facility is collected and discharged to the River Nore at the same location.
- In relation to Hydrogeology, the primary aquifer beneath the site is karstified bedrock which is classified as regionally important. The Nore Gravels Group are mapped as underlying the majority of the site and also classified as regionally important aquifers. Ground water vulnerability beneath the site is rated high.
- Thirty wells have been identified within 2km of the site which are mainly used for residential properties and agricultural activities. Groundwater monitoring has indicated that ground water in the aquifers flows from west to east toward the River Nore.
- The primary potential contamination sources to surface water and groundwater are suspended solids, concrete, leaks, spillages, accidental discharges of potential pollutants and exceedance of wastewater discharge which could potentially cause deterioration of water quality.

- The primary pathways to surface water would result from discharges from the WWTP to the River Nore. The primary receptors are identified as the River Nore and local Aquifers.

Likely Impacts

- During construction and demolition phases the impacts are likely to arise from silt runoff, earthmoving activities, excavation works and potential accidental spillages. These are considered localised, moderate and short term if unmitigated.
- During operational phase, there is no change to the quality or quantity of process effluent discharged to the River Nore. Surface water will be collected and recirculated back into the WWTP. Clean rainwater will be directed to a soak pit. Contamination of groundwater is minimised by incorporating design measures into the proposed development; however mitigation measures are proposed to further reduce the risk of any contamination.
- Sludge management is in accordance with the facility's IE License, the proposed development will result in a decrease in sludge production and will not result in any increase to land spreading operations, which will continue to operate under the facility's nutrient management plan.

Mitigation Measures

- Construction and demolition mitigation measures include general mitigation relating to compliance with guidelines, provide adequate spill kits, works will not take place within 50m of the River Nore. Mitigation is proposed for soil management / stock piling; storage and refuelling of construction vehicles and cement handling.
- Operational mitigation will be managed and monitored within the parameters of the facility's IE License.

Assessment

I am satisfied that based on the information provided in the ER as detailed, with the implementation of the mitigation measures proposed, that there will be no pathways to ground water from the site to nearby surface water bodies and there will be no changes to discharges to surface waters which will reduce the risk of contamination to the Water Quality in the River Nore and local aquifers.

7.5.4. Soils and Geology

Soils and Geology is examined in Chapter 7 of the ER report and sets out the methodology used, receiving environments, likely impacts, mitigation measures, monitoring and residual impacts. I consider the main issues relating to Soils and Geology as detailed in the ER are:

Receiving Environment

- The site is located between the N77 National Road and River Nore, the topography can be categorised as a gentle slope in a southeast direction towards the River Nore. The underlying bedrock is mainly a karstified limestone of the Ballyadams Formation. GSI mapping also indicated the site is overlain by shallow well-drained mineral soils. Subsoils comprise mainly of limestone sand and gravel. Site investigations show no visual evidence of contamination.
- Potential contamination sources include spillages, the loss of bund integrity and accidental discharge. Pathways would be by direct accidental spillages, with the bedrock aquifer as the primary receptor.

Likely Impacts

- During construction and demolition, silt run off and incorrect handling of materials and accidental spillages can potentially impact on soils and geology. There is also a risk any damaged infrastructure could leak. These impacts are considered localised, moderate and short term if unmitigated.
- The proposal is to replace older infrastructure which will result in a reduction of approximately 10,000 tonnes of sludge on site which will further reduce the risk of contamination from sludge.

Mitigation Measures

During construction, excavation of topsoil will be stockpiled for future reuse on site and will be dampened to minimise dust emissions. During operation, the proposed development will be managed within the parameters of the facility's IE License.

Assessment

I am satisfied that based on the information provided in the ER as detailed, with the implementation of the mitigation measures proposed that no significant impact on the overall soil and geological profile characteristics of the area will occur as a result of the proposed development.

7.5.5. Noise

Noise is examined in Chapter 8 of the ER report and sets out the methodology used, receiving environments, likely impacts, mitigation measures, monitoring and residual impacts. I consider the main issues relating to Noise as detailed in the ER are:

Receiving Environment

- Five Noise Sensitive Locations (NSL) Identified where identified, the locations are details as follows:
 - NSL01 242 metres northwest, five residential properties adjacent to local road L58333
 - NSL02 107 metres northwest one residential property located adjacent National Road N77
 - NSL04 347 east one residential property located adjacent to regional road R432.
 - NSL05 1.5km south, residential estate in Ballyregget
 - River Nore East located beside river.

Appropriate Noise monitoring equipment were established at these locations and background noise surveys undertaken.

Likely Impacts

- Noise levels during construction phase will be temporary and will occur within a finite period (Approximately 15-month construction period). Noise levels are predicted to be compliant, based on the modelling used, during construction phase at all NSLs.
- Noise levels during demolition phase will be temporary as the duration of works is estimated 3 to 5 weeks. Noise levels are predicted to be compliant, based on the modelling used, during demolition phase at all NSLs.
- Noise levels during operation phase will consist of noise generated from equipment and pumps. Levels predicted to be a maximum of 31dB at closest NSL. This is below the ambient noise levels recorded, as the proposal is within an existing operational industrial facility.
- No cumulative impacts are predicted as the operation phase of proposed development is predicted to have no significant change in ambient noise conditions as the proposal is within an existing operational industrial facility.

Mitigation Measures

Mitigation for construction and demolition consist of specified construction hours, powering off of equipment, provide hoarding and barriers, appointment of a project liaison officer and a complaints procedure. Mitigation when operating include maintaining all plant in good working order, throttle down and switch off plant when not in use and to establish a complaints protocol. All noise limits are required to comply with the conditions of the facilities IE License, which requires a comprehensive monitoring regime.

Assessment

I am satisfied that based on the information provided in the ER as detailed, with the implementation of the mitigation measures proposed, the ambient noise levels recorded are based on the existing operational industrial facility, that the proposed development will not exceed the existing noise levels recorded at this location.

Therefore, the proposed development is expected to have a long-term imperceptible impact in relation to Noise.

7.5.6. **Air Quality**

Air Quality is examined in Chapter 9 of the ER report and sets out the methodology used, receiving environments, likely impacts, mitigation measures, monitoring and residual impacts. I consider the main issues relating to Air Quality as detailed in the ER are:

Receiving Environment

- Notable sources of potential emissions to air quality within the vicinity of the Site include, residential properties, agricultural activities and the existing industrial facility. It is noted that no other IE Licensed sites are located within the vicinity of the site.
- Air quality standards are set out in European Legislation and mainly based on human health, but other factors such as vegetation and ecosystems are also considered.
- Weather conditions such as wind and precipitation can significantly impact air quality in relation to dust and odour.
- Twenty-one air sensitive receptors were identified mainly residential properties within a 900m radius of the development site.
- It is noted, within the report, that occasional unpleasant odours occur particularly during warm weather from the existing WWTP.

Likely Impacts

- During construction and demolition, the likely impacts will result from dust generation. The potential risk to non-ecological receptors resulting from dust generated is considered a low risk and for ecological receptors the risk is within the range from low to medium risk.
- Operational boiler emissions have potential to impact on sensitive receptors. Using air dispersion modelling, the likely impact on sensitive receptors was

considered negligible and for vulnerable ecological species the likely impact was determined as imperceptible.

- The most significant odour on site is from the existing bio-tower which will be demolished within one year from the commissioning of the proposed development. The proposed development is a closed system which traps gases and is not a source of odour.
- The only element of the proposed development that could generate odour is from the filling of the equalisation tanks. Wastewater at this point will not yet be anaerobic therefore the offensiveness will be closer to neutral, this odour is closer to a dairy odour rather than a wastewater odour.

Mitigation Measures

- A dust management plan to be prepared for the construction and demolition phase of the proposed development.
- Operational Boiler Emissions will be operated and maintained and monitored in accordance with the requirements of the IE License
- Decommissioning the bio tower will reduce odour emissions from the WWTP. It is proposed that effluent from the equalisation tanks will pass through a passive carbon filter to ensure no significant odours are emitted. Odours will be managed through the requirements of the EI License.

Assessment

I am satisfied that based on the information provided in the ER as detailed, with the implementation of the mitigation measures proposed, the air quality during construction, will have temporary imperceptible impact and during operational phases will be monitored to ensure compliance with the requirements of the IE License.

7.5.7. Cultural Heritage

Cultural Heritage is examined in Chapter 9 of the ER report and sets out the methodology used, receiving environments, likely impacts, mitigation measures,

monitoring and residual impacts. I consider the main issues relating to Cultural Heritage as detailed in the ER are:

Receiving Environment

- The proposed development is part of the overall facility at this location, whilst it extends the existing WWTP it is located on a green field site.
- The former Ballyconra Mills are located to the South of the site. This site has historical significance.
- No archaeological monuments were recorded on or near the site.

Likely Impacts

- Potential impacts mainly from construction. As there are no heritage assets within the site boundary, the impact is considered minimal.
- Operation phase, potential impacts are visual, as there are no heritage assets within the site boundary, the impact is considered minimal.

Mitigation Measures

Archaeological monitoring proposed to mitigate the risk of inadvertent impact on unknown buried archaeological discoveries.

Assessment

I am satisfied that based on the information provided in the ER as detailed, due to lack of heritage assets within the vicinity of the proposed development which is an extension of the existing operation industrial facility and the incorporation of archaeological monitoring, that the proposed development will not have any significant impact on the cultural heritage of the area.

7.5.8. Landscape and Visual

Landscape and Visual is examined in Chapter 11 of the ER report and sets out the methodology used, receiving environments, likely impacts, mitigation measures, monitoring and residual impacts. I consider the main issues relating to Landscape and Visual as detailed in the ER are:

Receiving Environment

- A Zone of Theoretical Visibility was mapped and identified that the existing facility, population centres, residential properties public amenity facilities and the landscape setting adjacent to the River Nore has the potential to be impacted by the proposed development.

Likely Impact

- The impact during construction will be within the site and immediate environs, reducing to low and negligible over greater distances.

The impact during operation is considered medium to low, due to the size and scale of the proposed development within the existing overall industrial complex and the extensive screening from existing hedgerows/tress

Mitigation Measures

- A landscaping plan provides for additional screening to reduce the potential impact at this location.

Assessment

I am satisfied that, based on the information provided in the ER as detailed, an inspection of the site and surrounding area and the location within the larger industrial facility that the proposed development will be screened from existing trees and hedgerows on site, that landscaping plan will provide additional screening, that the proposed development will not have a negative impact on the landscape character of the area and will not be visually intrusive on the landscape at this location.

7.5.9. Summary and Conclusion

The Environmental Report submitted with the application considered the potential impacts of the proposed development on Biodiversity, Water Quality, Soils and Geology, Noise, Air Quality, Cultural Heritage and Landscape and Visual. The following is a summary of the findings.

Biodiversity

The proposed development will not result in any significant impact on any protected or notable species. The proposal is consistent with the provisions of the National Biodiversity Plan 2023-2040 in terms of species conservation and sustainable land management of the area around the environs of the proposed development.

Water Quality

There will be no change to the existing permitted wastewater emissions and that there will be no pathways to ground water from the site to nearby surface water bodies. Also, there will be no changes to discharges to surface waters which will reduce the risk of contamination to the Water Quality in the River Nore and local aquifers.

Soils and Geology

The proposed development will not result in any significant effects on land, soils and geology within or within the vicinity of the site.

Noise

There are no significant noise sources associated with the proposed development.

Air Quality

The residual air quality is considered to be overall moderately positive due to the predicted reduction in future odour emissions from the WWTP.

Cultural Heritage

The proposed development will not result in any significant impact on any protected monuments or features in the wider area.

Landscape and Visual

The scale of the proposed development is minor taken into consideration the overall existing industrial facility. The visual impact is considered medium within 400m metres of the proposed site; however the impact is further reduced by the existing landscape features the further away from the site.

I am satisfied that based on my assessment above and with the implementation of the mitigation measures proposed within the Environmental Report and with the preparation of a detailed and robust Construction Environmental Management Plan, the proposed development will not significantly impact on the environmental quality of the area within which it is situated.

7.6. Principle of Development and Local Policy

- 7.6.1. I consider that the proposed development aligns with the provisions of the Kilkenny City and County Development Plan 2021-2027 (KCCDP) as it will contribute to a transition to a low carbon and climate resilient County by reducing the existing facilities energy demand and greenhouse gas emissions. The proposed development will reduce energy related CO₂ emissions and to reduce greenhouse gas emissions in the delivery of the obligations of the state to transition to a low carbon and climate resilient society.
- 7.6.2. The proposed development is for the replacement of existing infrastructure within the existing waste water treatment plant. The proposal is part of the larger existing industrial facility at this location. I consider that based on my site inspection that the size and scale of the proposed development will have minimal impact on the landscape character of the area when assessed in terms of the overall industrial facility. Based on my site inspection, I consider that localised visual absorption is provided by the existing trees and hedgerows, thereby minimising any localised impact on the landscape character of the area.
- 7.6.3. The considerations outlined in table 11.5 of the KCCDP relating to applications for planning consents for Bioenergy Plants are assessed in detail in Section 7.5. However, for clarity I have included a brief assessment under each topic.

<i>Issue</i>	<i>Potential Impact</i>
<i>Visual</i>	<i>The scale of the proposed development is minor taken into consideration the overall existing industrial facility. The environmental report submitted with the application considers</i>

	<i>visual impact as medium within 400m metres of the proposed site but is reduced by the existing landscape the further away from the site.</i> <i>Following an inspection of the site and surrounding environment, I concur with the visual assessment carried out in the ER report. Therefore, I consider that the proposed development will not have a visual impact on the landscape character of the area.</i>
<i>Hydrology</i>	<i>The implementation of the mitigation measures proposed would ensure that there will be no pathways to ground water from the site to nearby surface water bodies and there is no change to the quality or quantity of process effluent discharged to the River Nore which will reduce the risk of contamination to the Water Quality in the River Nore and local aquifers.</i> <i>I consider that the proposed development will not have a significant impact on the Hydrology of the area subject to the implementation of mitigation measures proposed.</i>
<i>Noise</i>	<i>The information provided within the ER report has demonstrated that noise impacts will not arise to any nearby receptors.</i> <i>I consider that the proposed development will not have any significant Noise impacts on any nearby noise receptors</i>
<i>Air quality</i>	<i>The information provided has indicated that odours will slightly reduce from the overall existing facility when the proposed development becomes operational, and the existing Bio-tower is decommissioned and removed from the site. Mitigation measures proposed will reduce any potential impact from dust generation during construction.</i>

	<i>I consider that the proposed development will not have any significant impact on air quality.</i>
<i>Light pollution</i>	<i>The proposed development is an extension of the existing industrial facility, and any additional lighting will be absorbed into the overall facility.</i> <i>I consider that light pollution is not an issue in this instance</i>
<i>Traffic and transport</i>	<i>Traffic and transport will increase during construction, but this will be temporary. There will be no increase in traffic and transport during the operational phase and the proposed developed only utilises waste generated from the existing WWTP.</i>
<i>Architectural heritage</i>	<i>No cultural assets have been identified within the vicinity of the site</i>

7.6.4. Conclusion

I am satisfied, based on my assessment above that the proposed development complies with the principles and the specific requirements set out in table 11.5 of the Kilkenny County and City Development Plan 2021-2027. Therefore, I conclude that the proposed development is acceptable in principle at this location.

7.7. Other Matters

The additional grounds raised by the applicant in relation to the Planning Authority not carrying out an Appropriate Assessment is an issues for the Planning Authority. In relation to the further information and matters relating to the IFI submission. Further information was submitted by the applicant and the IFI responded accordingly stating that they had no further comments to make in relation to the planning application.

8.0 Appropriate Assessment

8.1. Appropriate Assessment Screening (Stage 1)

I carried out Appropriate Assessment Screening in accordance with Article 6(3) of the Habitats Directive. (Refer to AA Screening Report appended to this report) I examined the Water Framework Catchment area within which the proposed development is located to determine all Natura 2000 sites that are within or partially within the Water Framework Catchment Area. Nine Natura 2000 sites were identified. Utilising the source-pathway-receptor best practice approach I concluded that the River Barrow and River Nore SAC (002162) and River Nore SPA (004233) required further screening.

I examined the Qualifying Interests and conservation objectives of the Two European Sites and identified the potential significant effects on each qualifying interests. The screening exercise identified that two qualifying habitats and nine qualifying species must be considered further in the screening assessment.

Based on the information provided in the screening report, site visit, review of the conservation objectives and supporting documents, I consider that in the absence of mitigation measures beyond best practice construction methods, the proposed development has the potential to result in the following impacts:

- Potential loss of, or disturbance to designated habitats and species during construction / demolition.
- Potential noise disturbance to designated species during construction / demolition / operation.
- Potential impairment to air quality during construction / demolition / and operation
- Potential impairment of water quality during construction / demolition and operation.

In accordance with Section 177U of the Planning and Development Act 2000 (as amended) and on the basis of objective information provided by the applicant, I

concluded that the proposed development could result in significant effects on the River Barrow and River Nore SAC and River Nore SPA in view of the conservation objectives of a number of qualifying interest features of those sites and therefore determined that Appropriate Assessment (stage 2) [under Section 177V of the Planning and Development Act 2000] of the proposed development was required.

8.2. Appropriate Assessment (Stage 2)

I carried out Appropriate Assessment Stage 2 in accordance with Article 6(3) of the Habitats Directive (Refer to AA report appended to this report). Having identified that the proposed development has the potential to result in significant impacts on eleven of the qualifying interests of the River Barrow and River Nore SAC and River Nore SPA. I carried out a detailed summary of each qualifying interest in relation to their conservation objectives and examined each attribute, target and potential significant effect.

I concluded that in relation to potential habitat loss, the proposed development will not result in any direct or indirect loss of habitat, but due to the proximity to the European Sites, pre-cautionary mitigation is proposed to ensure no significant impacts. There is potential for disturbance related to noise, the proposal will comply with the overall facility's IE License, but mitigation is proposed to further reduce noise emissions. The potential impairment to air quality will be reduced to negligible with the implementation of the proposed mitigation measures and compliance with the facility's IE License. The potential impairment of water quality is unlikely, but due to the location of the proposed development it is crucial that water deterioration of the River Nore does not arise. A robust set of mitigation will ensure no deterioration to water quality.

8.3. Appropriate Assessment Conclusion

The proposed development has been considered under the assessment requirements of Section 177U and 177AE of the Planning and Development Act 2000 and having regard to:

- The scientific information in respect of the River Barrow and River Nore SAC (002162) and River Nore SPA (004233)
- The potential impacts and mitigation measures proposed.

I consider that it is reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans and projects would not adversely affect the integrity of the River Barrow and River Nore SAC (002162) and River Nore SPA (004233) or any other European site, in view of the site's Conservation Objectives.

9.0 Recommendation

Having regard to the foregoing, I recommend that permission is granted subject to conditions hereunder.

10.0 Reasons and Considerations

In coming to this recommendation, I had regard to the grounds of appeal, my site inspection and my assessment of the planning issues.

The recommendation has been made in a manner consistent with the:

- Climate Action and Low Carbon Development Act 2015, (as amended)
- Climate Action Plan 2024

and having regard to the following:

- National Planning Framework Project Ireland 2040
- National Biodiversity Action Plan 2023-2030
- Kilkenny City and County Development Plan 2021-2027

I considered that the proposed development is consistent with the documents listed above and is acceptable in respect of its likely effects on the environment and its

likely consequences for 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 to the Planning Authority on the 20th of October 2022 and as amended by the further plans and particulars received by the Planning Authority on the 1st February 2023, 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 interests of clarity.

2. The mitigation measures contained in the submitted Natura Impact Statement (NIS) shall be implemented.

Reason: To protect the integrity of European Sites.

3. The mitigation measures contained in the submitted Environmental Report shall be implemented.

Reason: To protect the Environment.

4. Prior to commencement of works, the developer shall submit to, and agree in writing with the planning authority, a Construction Environmental Management Plan, which shall be adhered to during construction. This plan shall provide details of intended construction practice for the development, including hours of working, noise and dust management measures and off-site disposal of construction/demolition waste, soils and ground water protection and any details relating to works in the vicinity of the N77.

Reason: In the interest of public safety and amenity.

5. The developer shall engage a suitably qualified archaeologist to monitor (licensed under the National Monuments Acts) all site clearance works, topsoil stripping, and groundworks associated with the development.
- The use of appropriate machinery to ensure the preservation and recording of any surviving archaeological remains shall be necessary.
 - Should archaeological remains be identified during the course of archaeological monitoring, all works shall cease in the area of archaeological interest pending a decision of the planning authority, in consultation with National Monuments Service regarding appropriate mitigation which may include preservation in-situ or full archaeological excavation.
 - The developer shall facilitate the archaeologist in recording any remains identified. Any further archaeological mitigation requirements specified by the planning authority, following consultation with the National Monuments Service, shall be complied with by the developer.
 - The Planning Authority and National Monuments Service of the Department shall be furnished with a final archaeological report describing the results of all archaeological monitoring and any archaeological investigative work/excavation required, following the completion of all archaeological work on site and any necessary post-excavation specialist analysis. All resulting and associated archaeological costs shall be borne by the development.

Reason: To ensure the continued preservation [either in situ or by record] of places, caves, sites, features or other objects of archaeological interest

5, 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.

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

Alan Di Lucia

Senior Planning Inspector

10th February 2025

Appendix 1

EIA Pre-Screening

An Bord Pleanála Case Reference	ABP-316132-23		
Proposed Development Summary	• Construction of two anaerobic digesters, one equalization tank, to include concrete base, lined earth embankment and associated works. • Construction of a 500m³ biogas storage dome on new concrete base with gas flare, gas sump and desulfurization unit. • Construct Membrane and Control unit building with yard slab and link road. • Construction of a wastewater lifting stations. • Construction of a ferric chloride tank • Re-alignment of the existing access track to facilitate vehicles movements, • Drainage and associated site works including landscaping and removal of existing post and rail fence. • Dismantling and removal of redundant existing sludge mixing tank and concrete base • Construction of temporary contractor's compound with associated temporary access track including the removal of existing scrub • Related pipe, pump, and ancillary works • Works to facilitate the uses of the biogas on site involves the installation of a new gas pipeline for the purpose of conveying gas to the existing Tirlán (Glanbia) facility to the east of the N77. This will consist of both underground and overground portions.		
Development Address	Ballyragget, Co Kilkenny,		
1. Does the proposed development come within the definition of a 'project' for the purposes of EIA? (that is involving construction works, demolition, or interventions in the natural surroundings)	Yes	√	
	No		

2. Is the proposed development of a CLASS specified in Part 1 or Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended)?			
Yes	✓	Part 2 3 (b) Industrial installations for carrying gas, steam and hot water with a potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables not included in Part 1 of this Schedule, where the voltage would be 200 kilovolts or more. 11 (c) Wastewater treatment plants with a capacity greater than 10,000 population equivalent as defined in Article 2, point (6), of Directive 91/271/EEC not included in Part 1 of this Schedule. 13 (a) Any change or extension of development already authorised, executed or in the process of being executed (not being a change or extension referred to in Part 1) which would:- (i) result in the development being of a class listed in Part 1 or paragraphs 1 to 12 of Part 2 of this Schedule, and (ii) result in an increase in size greater than – - 25 per cent, or - an amount equal to 50 per cent of the appropriate threshold, whichever is the greater.	Proceed to Q3
No			
3. Does the proposed development equal or exceed any relevant THRESHOLD set out in the relevant Class?			
Yes			
No	✓		Proceed to Q4

4. Is the proposed development below the relevant threshold for the Class of development [sub-threshold development]?			
Yes	✓	3 (b) Industrial installations for carrying gas, steam and hot water with a potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables not included in Part 1 of this Schedule, where the voltage would be 200 kilovolts or more. 11 (c) Wastewater treatment plants with a capacity greater than 10,000 population equivalent as defined in Article 2, point (6), of Directive 91/271/EEC not included in Part 1 of this Schedule. 13 (a) Any change or extension of development already authorised, executed or in the process of being executed (not being a change or extension referred to in Part 1) which would:- (i) result in the development being of a class listed in Part 1 or paragraphs 1 to 12 of Part 2 of this Schedule, and (ii) result in an increase in size greater than – - 25 per cent, or - an amount equal to 50 per cent of the appropriate threshold, whichever is the greater.	3(b) Output 17.6 MW 11(c) there is no increase in the capacity of the existing WWTP 13(a) Resultant increase in size is less than 25% The proposed development is considered sub-threshold

5. Has Schedule 7A information been submitted?		
No		Screening determination remains as above (Q1 to Q4)
Yes	✓	Screening Determination required

Inspector: _____

Date: _____

Form 3 - EIA Screening Determination

A. CASE DETAILS

An Bord Pleanála Case Reference	ABP-318677-23
Development Summary	• Construction of two anaerobic digesters, one equalization tank, to include concrete base, lined earth embankment and associated works. • Construction of a 500m³ biogas storage dome on new concrete base with gas flare, gas sump and desulfurization unit. • Construct Membrane and Control unit building with yard slab and link road. • Construction of a wastewater lifting stations. • Construction of a ferric chloride tank • Re-alignment of the existing access track to facilitate vehicles movements, • Drainage and associated site works including landscaping and removal of existing post and rail fence. • Dismantling and removal of redundant existing sludge mixing tank and concrete base • Construction of temporary contractor's compound with associated temporary access track including the removal of existing scrub • Related pipe, pump, and ancillary works • Works to facilitate the uses of the biogas on site involves the installation of a new gas pipeline for the purpose of conveying gas to the existing Tirlán (Glanbia) facility

	to the east of the N77. This will consist of both underground and overground portions.	
	Yes / No / N/A	Comment (if relevant)
1. Was a Screening Determination carried out by the PA?	Yes	EIAR not required
2. Has Schedule 7A information been submitted?	Yes	
3. Has an AA screening report or NIS been submitted?	Yes	AA Screening Assessment and Natura Impact Assessment Submitted with application
4. Is an IED/ IPC or Waste Licence (or review of licence) required from the EPA? If YES has the EPA commented on the need for an EIAR?	Yes	The EPA has not commented on the need for an EIAR.
5. Have any other relevant assessments of the effects on the environment which have a significant bearing on the project been carried out pursuant to other relevant Directives – for example SEA	YES	Environmental Report Submitted with the Application. SEA, AA and FRA were undertaken in respect of the Kilkenny County Development Plan 2021-2027

B. EXAMINATION	Yes/ No/ Uncertain	Briefly describe the nature and extent and Mitigation Measures (where relevant) (having regard to the probability, magnitude (including population size affected), complexity, duration, frequency, intensity, and reversibility of impact) Mitigation measures –Where relevant specify features or measures proposed by the applicant to avoid or prevent a significant effect.	Is this likely to result in significant effects on the environment? Yes/ No/ Uncertain
This screening examination should be read with, and in light of, the rest of the Inspector's Report attached herewith			
1. Characteristics of proposed development (including demolition, construction, operation, or decommissioning)			
1.1 Is the project significantly different in character or scale to the existing surrounding or environment?	No	the Proposed Development is part of the overall facility and considered an extension to the Wastewater Treatment	No
1.2 Will construction, operation, decommissioning or demolition works cause physical changes to the locality (topography, land use, waterbodies)?	No	It is part of the overall complex and demolition of the existing structures is replaced by the proposed development, overall neutral impact	No
1.3 Will construction or operation of the project use natural resources such as land, soil, water, materials/minerals or energy, especially resources which are non-renewable or in short supply?	No	Use on natural resources is modest, mainly excavation and shipping of topsoil	No

1.4 Will the project involve the use, storage, transport, handling or production of substance which would be harmful to human health or the environment?	Yes	The proposed development is not considered a Seveso site or located near such a site. All waste will be managed in accordance with regulations.	No
1.5 Will the project produce solid waste, release pollutants or any hazardous / toxic / noxious substances?	No	Any waste produced will be dealt with in a sustainable manner and in accordance with the Waste Management Act, 1996 and Waste Management Amendment Act 2001	No.
1.6 Will the project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?	Yes	Potential impacts include accidental spills and leaks of fuels and chemicals, construction standard mitigation will be included in the detailed Construction Environmental Management Plan	No
1.7 Will the project cause noise and vibration or release of light, heat, energy or electromagnetic radiation?	Yes	Noise and Ground Vibrations have potential to increase during constructions, noise will be generated in the vicinity during operational phases. Noise mitigation will comply with best practice guidance. Such measures will be incorporated into the Construction Environmental Management Plan.	No.
1.8 Will there be any risks to human health, for example due to water contamination or air pollution?	No	Mitigation proposed and compliance with IE License will regulate to development	No
1.9 Will there be any risk of major accidents that could affect human health or the environment?	No	The proposed development in itself is not considered a Seveso Site	No
1.10 Will the project affect the social environment (population, employment)	No	The development is situated in a rural area, removed from nearest sensitive receptors.	No

1.11 Is the project part of a wider large-scale change that could result in cumulative effects on the environment?	No	The proposal is to replace the Bio-tower therefore there no cumulative effects considered	No
2. Location of proposed development			
2.1 Is the proposed development located on, in, adjoining or have the potential to impact on any of the following: - European site (SAC/ SPA/ pSAC/ pSPA) - NHA/ pNHA - Designated Nature Reserve - Designated refuge for flora or fauna - Place, site or feature of ecological interest, the preservation/conservation/ protection of which is an objective of a development plan/ LAP/ draft plan or variation of a plan	Yes	AA Screening report and Natura Impact Statement concluded that proposed development, individually or in combination with other plans and projects would not adversely affect the integrity of the River Barrow and River Nore SAC (002162) and River Nore SPA (004233) or any other European site, in view of the site's Conservation Objectives.	No
2.2 Could any protected, important or sensitive species of flora or fauna which use areas on or around the site, for example: for breeding, nesting, foraging, resting, over-wintering, or migration, be affected by the project?	Yes	Comprehensive set of mitigation measures proposed in Environmental Report	No
2.3 Are there any other features of landscape, historic, archaeological, or cultural importance that could be affected?	No	No significant impacts on heritage assets; archaeological monitoring and mitigation measures will be implemented.	No

2.4 Are there any areas on/around the location which contain important, high quality or scarce resources which could be affected by the project, for example: forestry, agriculture, water/coastal, fisheries, minerals?	No	Proposal is an extension to the existing facility	No
2.5 Are there any water resources including surface waters, for example: rivers, lakes/ponds, coastal or groundwaters which could be affected by the project, particularly in terms of their volume and flood risk?	No	No impact considered due to size of proposed development	No
2.6 Is the location susceptible to subsidence, landslides or erosion?	No	None	No
2.7 Are there any key transport routes(e.g. National primary Roads) on or around the location which are susceptible to congestion, or which cause environmental problems, which could be affected by the project?	No	N77 adjoins site, no disruption foreseen as ducting in place.	No
2.8 Are there existing sensitive land uses or community facilities (such as hospitals, schools etc) which could be affected by the project?	No	None in the vicinity of the site.	No
3. Any other factors that should be considered which could lead to environmental impacts			
3.1 Cumulative Effects: Could this project together with existing and/or approved development result in cumulative effects during the construction/ operation phase?	No	The proposed development is location within an existing industrial facility as an extension to the WWTP. There cumulative impacts are not foreseen	No

3.2 Transboundary Effects: Is the project likely to lead to transboundary effects?	No	No transboundary impacts are expected.	
3.3 Are there any other relevant considerations?	No	No	

C. CONCLUSION

No real likelihood of significant effects on the environment.	YES	EIAR Not Required
Real likelihood of significant effects on the environment.	☐	EIAR Required

D. MAIN REASONS AND CONSIDERATIONS

Having regard to: -

1. the criteria set out in Schedule 7, in particular
 - (a) The Characteristics of the proposed development
 - (b) The Location of the Proposed Development
 - (c) The Types and Characteristics of Potential Impacts
2. the results of other relevant assessments of the effects on the environment submitted by the applicant including and Environmental Report and Appropriate Assessment Report.
3. the features and measures proposed by applicant envisaged to avoid or prevent what might otherwise have been significant effects on the environment, and in particular the proposal to prepare a final Construction Environmental Management Report which contains all relevant construction standards and embedded mitigation measures.

The Board concluded that the proposed development would not be likely to have significant effects on the environment, and that an environmental impact assessment report is not required.

Inspector _____

Date _____

Approved (DP/ADP) _____

Date _____

Appropriate Assessment: Screening Determination

(Stage 1, Article 6(3) of Habitats Directive)

I have considered the proposed Anaerobic Digestion Plant in light of the requirements of S177U of the Planning and Development Act 2000 as amended. A Screening report has been prepared by *MOR* on behalf of the applicant and the objective information presented in that report informs this screening determination.

1.1 Description of the proposed development

The proposed project is for the development of an Anaerobic Digestion Plant consisting of the following:

- Construction of two anaerobic digesters, one equalization tank, to include concrete base, lined earth embankment and associated works.
- Construction of a 500m³ biogas storage dome on new concrete base with gas flare, gas sump and desulfurization unit.
- Construct Membrane and Control unit building with yard slab and link road.
- Construction of a wastewater lifting stations.
- Construction of a ferric chloride tank
- Re-alignment of the existing access track to facilitate vehicles movements,
- Drainage and associated site works including landscaping and removal of existing post and rail fence.
- Dismantling and removal of redundant existing sludge mixing tank and concrete base
- Construction of temporary contractor's compound with associated temporary access track including the removal of existing scrub
- Related pipe, pump, and ancillary works
- Works to facilitate the uses of the biogas on site involves the installation of a new gas pipeline for the purpose of conveying gas to the existing Tirlán (Glanbia) facility to the east of the N77. This will consist of both underground and overground portions.

The proposed development on average will process 31% of the total wastewater flow from the existing facility. The treated effluent from the from the Anaerobic Digester (AD) system will be sent to the anaerobic tanks at the existing Wastewater Treatment Plant (WWTP) for further treatment, which discharges to the River Nore subject to EPA licensing. In the event the excess biogas production or the production plants cannot accept biogas, then the excess biogas will be flared. It is expected that the flare will only operate in emergency situations which should occur rarely or when

essential maintenance works are required. Flares are a safety requirement for all biogas production facilities.

1.2 European Sites

Using the methodology outlined in the OPR AA Screening Assessment and the EPA website, it was determined that 9 no. Natura 2000 sites are located within or partially within the catchment area. Using the source-pathway-receptor best practice approach. (See Table 1 below)

Table 1

AA Screening Identification of Relevant Natura 2000 Sites Using Source-Pathway-Receptor Model

Natura 2000 Sites Identification Matrix				
Natura 2000 Site	Site Code	Distance to Proposed Development (km)	Connections (Source-Pathway-Receptor)	Considered Further in Screening (Yes/No)
River Barrow and River Nore SAC	000831	Within	Given the close proximity to the Natura 2000 site, potential impacts to designated habitats and species requires further consideration	Yes
Lisbigney Bog SAC	000849	6.4 km North	Given the separation distance from the site and the lack of ecological/hydrological pathways, the site has been scoped out for further consideration.	No
Cullahill Mountain SAC	001858	9.1 km West	Given the separation distance from the site and the lack of ecological/hydrological pathways, the site has been scoped out for further consideration.	No

Spahill and Clomantagh Hill SAC	000407	10.5 km Southwest	Given the separation distance from the site and the lack of ecological/hydrological pathways, the site has been scoped out for further consideration.	No
Galmoy Fen SAC	004233	14.7 Km West	Given the separation distance from the site and the lack of ecological/hydrological pathways, the site has been scoped out for further consideration.	No
The Loughans SAC	000831	14.8 Southwest	Given the separation distance from the site and the lack of ecological/hydrological pathways, the site has been scoped out for further consideration.	No
Knockacoller Bog SAC	002333	19.6 Northwest	Given the separation distance from the site and the lack of ecological/hydrological pathways, the site has been scoped out for further consideration.	No
Coolrain Bog SAC	002332	22.6 Northwest	Given the separation distance from the site and the lack of ecological/hydrological pathways, the site has been scoped out for further consideration.	No
River Nore SPA	000849	0.060 East	Given the close proximity to the Natira 2000 site, potential impacts to designated	Yes

			species requires further consideration	
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Two European sites were identified as being located within a potential zone of influence of the proposed development. Are The River Barrow and River Nore SAC and River Nore SPA.

The qualifying interests and conservation objectives for the River Barrow and River Nore SAC and River Nore SPA are outlined in Table 2 below:

Table 2

Qualifying Interests and Conservation Objectives

River Barrow & River Nore SAC		
Qualifying Interests (Qis)	Code	Site Specific Conservation Objective.
Habitats		
Estuaries	1130	Maintain Favourable Conservation Condition
Mudflats and sandflats not covered by seawater at low tide	1140	Maintain Favourable Conservation Condition
Salicornia and other annuals colonising mud and sand	1310	Maintain Favourable Conservation Condition
Atlantic salt meadows	1330	Restore Favourable Conservation Condition
Mediterranean salt meadows	1410	Restore Favourable Conservation Condition
Water courses of plain to montane levels with the Ranunculus fluitantis and Callitriche-Batrachion vegetation	3260	Maintain Favourable Conservation Condition
European dry heath	4030	Maintain Favourable Conservation Condition
Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	6430	Maintain Favourable Conservation Condition
Petrifying springs with tufa formation	7220	Maintain Favourable Conservation Condition

Old sessile oak woods with Ilex and Blechnum in the British Isles	91A0	Restore Favourable Conservation Condition
Alluvial forests with Alnus glutinosa and Fraxinus excelsior	91E0	Restore Favourable Conservation Condition
Species		
Desmoulin's Whorl Snail	1016	Maintain Favourable Conservation Condition
Freshwater Pearl Mussel	1029	Under review
White-clawed Crayfish	1092	Maintain Favourable Conservation Condition
Sea Lamprey	1095	Restore Favourable Conservation Condition
Brook Lamprey	1096	Restore Favourable Conservation Condition
River Lamprey	1099	Restore Favourable Conservation Condition
Twaite Shad	1103	Restore Favourable Conservation Condition
Atlantic Salmon	1106	Restore Favourable Conservation Condition
Otter	1355	Restore Favourable Conservation Condition
Killarney Fern	1421	Maintain Favourable Conservation Condition
Nore Pearl Mussel	1990	Restore Favourable Conservation Condition
River Nore SPA		
Qualifying Interests (QIs)	Code	Site Specific Conservation Objective.
Species		
Kingfisher	A229	Maintain Favourable Conservation Condition

1.3 Potential significant effects on the European sites in view of the conservation objective.

Table 3 below assesses all Qualifying Interests for the European Sites in view of their conservations objective to determine potential significant effects.

Table 3

Identification of Potential Significant Effects

River Barrow & River Nore SAC		
Qualifying Interests (Qis)	Potential Significant Effects	Screening Conclusion. (In/Out)
Habitats		
Estuaries	Habitat located approximately 70km downstream, Unlikely due to separation distance	Out
Mudflats and sandflats not covered by seawater at low tide	Habitat located approximately 70km downstream, Unlikely due to separation distance	Out
Salicornia and other annuals colonising mud and sand	Habitat located approximately 80km downstream, Unlikely due to separation distance	Out
Atlantic salt meadows	Habitat located approximately 80km downstream, Unlikely due to separation distance	Out
Mediterranean salt meadows	Habitat located approximately 75km downstream, Unlikely due to separation distance	Out
Water courses of plain to montane levels with the Ranunculus fluitans and Callitriche-Batrachium vegetation	Full extent of Habitat location unknown, precautionary approach required	In
European dry heath	Habitat not mapped , but not present in Immediate location	Out
Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	Full extent of Habitat location unknown, precautionary approach required	In
Petrifying springs with tufa formation	Full extent of Habitat unknown, but know to occur at one location approximately 50km downstream	Out
Old sessile oak woods with Ilex and Blechnum in the British Isles	Habitat not present on site or in vicinity, 6.9 km Northwest	Out
Alluvial forests with Alnus glutinosa and Fraxinus excelsior	Habitat not present on site or in vicinity, 6.2 km Northwest approximately 50km downstream	Out
Species		
Desmoulin's Whorl Snail	Habitat present upstream, no pathway	Out

Freshwater Pearl Mussel	Conservation Objectives under review, habitat location unknown precautionary principle to apply	In
White-clawed Crayfish	Habitat known at this location. Precautionary principle to apply	In
Sea Lamprey	Habitat known at this location. Precautionary principle to apply	In
Brook Lamprey	Habitat known at this location. Precautionary principle to apply	In
River Lamprey	Habitat known at this location. Precautionary principle to apply	In
Twaite Shad	Absence within Nore Catchment	Out
Atlantic Salmon	Habitat known at this location. Precautionary principle to apply	In
Otter	Habitat with area	In
Killarney Fern	Habitat located approximately 50km downstream, Unlikely due to separation distance	Out
Nore Pearl Mussel	Habitat known at this location. Precautionary principle to apply	In
River Nore SPA		
Qualifying Interests (QIs)	Potential Significant Effects	Screening Conclusion (In/Out)
Species		
Kingfisher	Habitat within area	In

The Screening exercise has identified that the following qualifying habitats and species must be considered in the screening assessment.

- Water courses of plain to montane levels with the Ranunculus fluitans and Callitriche-Batrachium vegetation
- Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
- Freshwater Pearl Mussel
- White-clawed Crayfish
- Sea Lamprey
- Brook Lamprey
- River Lamprey
- Atlantic Salmon
- Otter
- Nore Pearl Mussel

- Kingfisher

Based on the information provided in the screening report, site visit, review of the conservation objectives and supporting documents, I consider that in the absence of mitigation measures beyond best practice construction methods, the proposed development has the potential to result in the following impacts:

- Potential loss of, or disturbance to designated habitats and species during construction / demolition.
- Potential noise disturbance to designated species during construction / demolition / operation.
- Potential impairment to air quality during construction / demolition / and operation
- Potential impairment of water quality during construction / demolition and operation.

1.4 Overall Conclusion Screening determination

In accordance with Section 177U of the Planning and Development Act 2000 (as amended) and on the basis of objective information provided by the applicant, I conclude that the proposed development could result in significant effects on the River Barrow and River Nore SAC and River Nore SPA in view of the conservation objectives of a number of qualifying interest features of those sites.

It is therefore determined that Appropriate Assessment (stage 2) [under Section 177V of the Planning and Development Act 2000] of the proposed development is required.

Appropriate Assessment

(Stage 2, Article 6(3) of Habitats Directive)

2.1 Appropriate Assessment

The requirements of Article 6(3) as related to appropriate assessment of a project under part XAB, sections 177U and 177V of the Planning and Development Act 2000 (as amended) are considered fully in this section. The areas addressed in this section are as follows:

- Compliance with Article 6(3) of the EU Habitats Directive
- Screening the need for appropriate assessment
- The Natura Impact Statement and associated documents
- Appropriate assessment of implications of the proposed development on the integrity each European site

2.2 Compliance with Article 6(3) of the EU Habitats Directive

The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site before consent can be given.

The proposed development is not directly connected to or necessary to the management of any European site and therefore is subject to the provisions of Article 6(3).

2.3 Screening the need for Appropriate Assessment

Refer to Appropriate Assessment Screening Determination. (Above)

2.4 Screening Determination

Following the screening process, it has been determined that Appropriate Assessment is required as it cannot be excluded on the basis of objective information that the proposed development of an Anaerobic Digestion Plant individually or in-combination with other plans or projects will have a significant effect on the following European sites (i.e. there is the *possibility* of significant effect):

- River Barrow and River Nore SAC (002162)
- River Nore SPA (004233)

The possibility of significant effects on other European sites) has been excluded on the basis of objective information. Measures intended to reduce or avoid significant effects have not been considered in the screening process.

2.5 The Natura Impact Statement (NIS)

The application included a NIS [Glanbia Ireland Proposed Anaerobic Digestion Plant at Ballyragget, Co. Kilkenny. Stage 2: Appropriate Assessment – Natura Impact Statement October 2022) which examines and assess potential adverse effects of the proposed development on the following European Sites.

- River Barrow and River Nore SAC (002162)
- River Nore SPA (004233)

The applicants NIS was prepared in line with current best practice and provides an assessment of the potential effects on site integrity. The potential significant effects and the qualifying interest to which these effects apply, are presented in the NIS alongside their respective Conservation Objectives and the targets set to achieve them.

The applicants NIS concluded *“the proposed development and all associated works, alone or in-combination with other projects, will not significantly impact on the integrity, and conservation status of any qualifying interests of the River Barrow and River Nore SAC and Nore SPA or any other Natura 2000 sites. Accordingly, the progression to Stage 3 of the Appropriate assessment Process (i.e. Assessment of Alternatives Solutions) is not considered necessary.”*

The report considered that potential significant effects under the following:

- Potential loss of, or disturbance to designated habitats and species during construction / demolition.
- Potential noise disturbance to designated species during construction / demolition / operation.
- Potential impairment to air quality during construction / demolition / and operation
- Potential impairment of water quality during construction / demolition and operation.

The report assesses these potential significant effects and details mitigation measures to address the potential significant effects on the integrity of the Natura 2000 sites.

2.6 Appropriate Assessment of implications of the proposed development

The following is a summary of the objective scientific assessment of the implications of the project on the qualifying interest features of the European sites using the best scientific knowledge in the field. All aspects of the project which could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects are considered and assessed.

Summary Matrix for European Sites (Stage 2)	
AA Summary Matrix for River Barrow and River Nore SAC (002162)	
River Barrow and River Nore SAC is partially located within the site boundary. Description of Site: This site consists of the freshwater stretches of the Barrow and Nore River catchments as far upstream as the Slieve Bloom Mountains, and it also includes the tidal elements and estuary as far downstream as Creadun Head in Waterford. The site passes through eight counties – Offaly, Kildare, Laois, Carlow, Kilkenny, Tipperary, Wexford, and Waterford. Major towns along the edge of the site include Mountmellick, Portarlinton, Monasterevin, Stradbally, Athy, Carlow, Leighlinbridge, Graiguenamanagh, New Ross, Inistioge, Thomastown, Callan, Bennettsbridge, Kilkenny and Durrow. The larger of the many tributaries include the Lerr, Fushoge, Mountain, Aughavaud, Owenass, Boherbaun and Stradbally Rivers of the Barrow, and the Delour, Dinin, Erkina, Owveg, Munster, Arrigle and King's Rivers on the Nore. Both rivers rise in the Old Red Sandstone of the Slieve Bloom Mountains before passing through a band of Carboniferous shales and sandstones. The Nore, for a large part of its course, traverses limestone plains and then Old Red Sandstone for a short stretch below Thomastown. Before joining the Barrow it runs over intrusive rocks poor in silica. The upper reaches of the Barrow also run through limestone. The middle reaches and many of the eastern tributaries, sourced in the Blackstairs Mountains, run through Leinster Granite. The southern end, like the Nore runs over intrusive rocks poor in silica. Waterford Harbour is a deep valley excavated by glacial floodwaters when the sea level was lower than today. The coast shelves quite rapidly along much of the shore.	
Summary of Appropriate Assessment	
Qualifying Interest: Water courses of plain to montane levels with the Ranunculus fluitantis and Callitriche-Batrachium vegetation Conservation Objective: To maintain the favourable conservation condition of Water courses of plain to montane levels with the Ranunculus fluitantis and Callitriche-Batrachium vegetation in the River Barrow and River Nore SAC	Attribute: Habitat Disruption Target: No decline, subject to natural processes Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied.

	----- Attribute: Habitat Area Target: Area stable or increasing, subject to natural processes. Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Hydrological regime: river flow Target: Maintain appropriate hydrological regimes. Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Hydrological regime: groundwater discharge Target: The groundwater flow to the habitat should be permanent and sufficient to maintain tufa formation. Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Substratum composition: particle size range Target:
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	The substratum should be dominated by large particles and free from fine sediments. Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Water chemistry: minerals Target: The groundwater and surface water should have sufficient concentrations of minerals to allow deposition and persistence of tufa deposits. Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- - Attribute: Water quality: suspended sediment Target: The concentration of suspended solids in the water column should be sufficiently low to prevent excessive deposition of fine sediments. Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- - Attribute: Water quality: nutrients Target: The concentration of nutrients in the water column should be sufficiently low to prevent changes in species composition or habitat condition.
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	Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- - Attribute: Vegetation composition: typical species Target: Typical species of the relevant habitat sub-type should be present and in good condition. Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- - Attribute: Floodplain connectivity Target: The substratum should be dominated by large particles and free from fine sediments. Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- -
Qualifying Interest: Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels Conservation Objective: To maintain the favourable conservation condition of Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels in the River Barrow and River Nore SAC	Attribute: Habitat distribution Target: No decline, subject to natural processes Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute:

	Habitat area Target: Area stable or increasing, subject to natural processes. Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Hydrological regime: Flooding depth/height of water table Target: Maintain appropriate hydrological regimes. Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Vegetation structure: sward height Target: 30-70% of sward is between 40 and 150cm in height Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Vegetation composition: broadleaf herb: grass ratio Target: Broadleaf herb component of vegetation between 40 and 90% Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute:
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	Vegetation composition: typical species Target: At least 5 positive indicator species present Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Vegetation composition: negative indicator species Target: Negative indicator species, particularly non-native invasive species, absent or under control- NB Indian balsam (Impatiens glandulifera), monkeyflower (Mimulus guttatus), Japanese knotweed (Fallopia japonica) and giant hogweed (Heracleum mantegazzianum)At least Q4 at all sites sampled by EPA. Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied.
Qualifying Interest: Freshwater Pearl Mussel Conservation Objective: The status of the freshwater pearl mussel (Margaritifera margaritifera) as a qualifying Annex II species for the River Barrow and River Nore SAC is currently under review. The outcome of this review will determine	

whether a site-specific conservation objective is set for this species. Please note that the Nore freshwater pearl mussel (<i>Margaritifera durrovensis</i>) remains a qualifying species for this SAC. T	
Qualifying Interest: White-clawed crayfish Conservation Objective: To maintain the favourable conservation condition of White-clawed crayfish in the River Barrow and River Nore SAC	Attribute: Distribution Target: No reduction from baseline Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Population structure: recruitment Target: Juveniles and/or females with eggs in at least 50% of positive samples Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Negative indicator species Target: No alien crayfish species Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Disease Target: No instances of disease

	Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Water quality Target: At least Q3-4 at all sites sampled by EPA. Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Habitat quality: heterogeneity Target: No decline in heterogeneity or habitat quality Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. -----
Qualifying Interest: Sea Lamprey Conservation Objective: To restore the favourable conservation condition of Sea lamprey in the River Barrow and River Nore SAC,	Attribute: Distribution: extent of anadromy Target: Greater than 75% of main stem length of rivers accessible from estuary Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Population structure of juveniles Target: At least three age/size groups present Potential Significant Effects:

	No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Juvenile density in fine sediment Target: Juvenile density at least 1/m² Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. Attribute: Extent and distribution of spawning habitat Target: No decline in extent and distribution of spawning beds Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Availability of juvenile habitat Target: More than 50% of sample sites positive Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. -----
Qualifying Interest: Brook Lamprey Conservation Objective: To restore the favourable conservation condition of Brook lamprey in the River Barrow and River Nore SAC,	Attribute: Distribution: Target: Access to all watercourses down to first order streams Potential Significant Effects:

	No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Population structure of juveniles Target: At least three age/size groups of brook/river lamprey present Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Juvenile density in fine sediment Target: Mean catchment juvenile density of brook/river lamprey at least 2/m². Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Extent and distribution of spawning habitat Target: No decline in extent and distribution of spawning beds Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Availability of juvenile habitat Target: More than 50% of sample sites positive Potential Significant Effects:
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	No Significant Effects are foreseen precautionary principle applied. -----
Qualifying Interest: River Lamprey Conservation Objective: To restore the favourable conservation condition of River lamprey in the River Barrow and River Nore SAC,	Attribute: Distribution: extent of anadromy Target: Greater than 75% of main stem and major tributaries down to second order accessible from estuary Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Population structure of juveniles Target: At least three age/size groups of river/brook lamprey present Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Juvenile density in fine sediment Target: Mean catchment juvenile density of brook/river lamprey at least 2/m². Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Extent and distribution of spawning habitat Target: No decline in extent and distribution of spawning beds

	Potential Significant Effects: No significant effects are foreseen. ----- Attribute: Availability of juvenile habitat Target: More than 50% of sample sites positive Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. -----
Qualifying Interest: Atlantic Salmon Conservation Objective: To restore the favourable conservation condition of Salmon in the River Barrow and River Nore SAC,	Attribute: Distribution: extent of anadromy Target: 100% of river channels down to second order accessible from estuary Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Adult spawning fish Number Target: Conservation Limit (CL) for each system consistently exceeded. Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Salmon fry abundance Target: Maintain or exceed 0+ fry mean catchment-wide abundance threshold

	value. Currently set at 17 salmon fry/5 min sampling Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Out-migrating smolt abundance Target: No significant decline Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Number and distribution of redds. Target: No decline in number and distribution of spawning redds due to anthropogenic causes Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Out-migrating smolt abundance Target: No significant decline Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Water quality Target:
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	Q values based on triennial water quality surveys carried out by the Environmental Protection Agency (EPA) Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied.
Qualifying Interest: Otter (<i>Lutra lutra</i>)(1355) Conservation Objective: To restore the favourable conservation condition of Otter in the River Barrow and River Nore SAC	Attribute: Distribution Target: No Significant decline Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Extent of terrestrial habitat Target: No significant decline. Area mapped and calculated as 857.7ha Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Extent of freshwater (river) habitat Target: No significant decline. Length mapped and calculated as 616.6km Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. -----

	Attribute: Extent of freshwater (lake) habitat Target: No significant decline. Area mapped and calculated as 2.6ha Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Couching sites and holts Target: No significant decline Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Fish biomass available. Target: No significant decline Potential Significant Effects: Sedimentation / release of water-bourne contaminants may affect fish biomass availability. -----
Qualifying Interest: Nore Freshwater Pearl Mussel Conservation Objective: To restore the favourable conservation condition of the Nore freshwater pearl mussel in the River Barrow and River Nore SAC	Attribute: Distribution Target: Maintain at 15.5km Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Population size: adult mussels

	Target: Restore to 5,000 adult mussels. Potential Significant Effects: Potential pollutants may lead to water quality impairment. ----- Attribute: Population structure: recruitment Target: Restore to at least 20% of population no more than 65mm in length; and at least 5% of population no more than 30mm in length. Potential Significant Effects: Potential pollutants may lead to water quality impairment. ----- Attribute: Population structure: adult mortality Target: No more than 5% decline from previous number of live adults counted; dead shells less than 1% of the adult population and scattered in distribution. Potential Significant Effects: Potential pollutants may lead to water quality impairment. ----- Attribute: Habitat extent Target: Restore suitable habitat in length of river corresponding to distribution target (15.5km; see map 7) and any additional stretches necessary for salmonid spawning.
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	Potential Significant Effects: Potential pollutants may lead to water quality impairment. Attribute: Water quality: Macroinvertebrates and phytobenthos (diatoms) Target: Restore water quality-macroinvertebrates: EQR greater than 0.90; phytobenthos: EQR greater than 0.93. Potential Significant Effects: Potential pollutants may lead to water quality impairment. Attribute: Substratum quality: Filamentous algae (macroalgae), macrophytes (rooted higher plants) Target: Restore substratum quality-filamentous algae: absent or trace (<5%) Potential Significant Effects: Potential pollutants may lead to water quality impairment. Attribute: Substratum quality: sediment Target: Restore substratum quality- stable cobble and gravel substrate with very little fine material, no artificially elevated levels of fine sediment. Potential Significant Effects: Potential pollutants may lead to water quality impairment. Attribute:
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	Substratum quality: oxygen availability Target: Restore to no more than 20% decline from water column to 5cm depth in substrate. Potential Significant Effects: Potential pollutants may lead to water quality impairment. . ----- Attribute: Hydrological regime: flow variability Target: Restore appropriate hydrological regimes. Potential Significant Effects: Potential pollutants may lead to water quality impairment. . ----- Attribute: Host fish Target: Maintain sufficient juvenile salmonids to host glochidial larvae. Potential Significant Effects: Potential pollutants may lead to water quality impairment. .
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AA Summary Matrix for River Nore SPA (004233)

River Nore SAC located approximately 60m from site.

Description of Site:

The River Nore SPA is a long, linear site that includes the following river sections: the River Nore from the bridge at Townparks, (north-west of Borris in Ossory) to Coolnamuck (approximately 3 km south of Inistioge) in Co. Kilkenny; the Delour River from its junction with the River Nore to Derrynaseera bridge (west of Castletown) in Co. Laois; the Erkina River from its junction with the River Nore at Durrow Mills to Boston Bridge in Co. Laois; a 1.5 km stretch of the River Goul upstream of its junction with the Erkina River; the Kings River from its junction with the River Nore to a bridge at Mill Island, Co. Kilkenny. The site includes the river channel and marginal vegetation. For a large part of its course the River Nore traverses Carboniferous limestone plains; it passes over a narrow band of Old Red Sandstone rocks below Thomastown.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive of special conservation interest for the following species: Kingfisher. A survey in 2010 recorded 22 pairs of Kingfisher (based on 16 probable and 6 possible territories) within the SPA. Other species which occur within the site include Mute Swan (35), Mallard (267), Cormorant (14), Grey Heron (45), Moorhen (14), Snipe (17) and Sand Martin (1,029) – all figures are peak counts recorded during the 2010 survey. The River Nore SPA is of high ornithological importance as it supports a nationally important population of Kingfisher, a species that is listed on Annex I of the E.U. Birds Directive

Summary of Appropriate Assessment

Qualifying Interest:

Kingfisher

Conservation Objective:

To maintain the Favourable conservation condition of Kingfisher in River Nore SPA

Attribute:

Population size

Target:

No significant decline in the long term

Potential Significant Effects:

No Significant Effects are foreseen precautionary principle applied.

Attribute:

Productivity rate

Target:

Sufficient productivity to maintain the population trend as stable or increasing.

	Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Spatial distribution of territories Target: No significant loss of distribution in the long term, other than that occurring due to natural patterns of variation. Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Extent and quality of nesting banks and other suitable nesting features Target: Sufficient area of high-quality nesting habitat to support the population target Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Forage spatial distribution, extent, abundance, and availability. Target: Sufficient number of locations, area of suitable forage habitat and available forage biomass to support the population target Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Water quality
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	Target: Both biotic (i.e. Q-value) and abiotic indices reflect overall good-high quality status Potential Significant Effects: Reduction in food availability due to water quality deterioration. Precautionary principle to apply. ----- Attribute: Barriers to connectivity Target: No significant increase Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied. ----- Attribute: Disturbance to breeding sites. Target: Disturbance occurs at levels that do not significantly impact upon breeding Kingfisher. Potential Significant Effects: No Significant Effects are foreseen precautionary principle applied.
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Section 7 of the applicants NIS stated that the potential significant effects are linked to the following:

- Potential loss of, or disturbance to designated habitats and species during construction / demolition.
- Potential noise disturbance to designated species during construction / demolition / operation.
- Potential impairment to air quality during construction / demolition / and operation
- Potential impairment of water quality during construction / demolition and operation.

I consider that the applicant has provided a detailed description of the likely potential effects of the proposed development at all phases of development.

2.7 Potential Significant Impacts and Proposed Mitigation Measures.

2.7.1 Potential loss of, or disturbance to designated habitats and species during construction / demolition.

I am satisfied that the proposed development will not result in any direct or indirect loss or disturbance of habitat based on the information provided with the planning application, the location of the proposed development which will form part of the existing wastewater treatment system and the distance to any designated habitats identified in the information provided by the applicant. However, due to proximity to the European sites the application has proposed a series of precautionary mitigation in order to ensure no significant impacts. These include a designed Ecological Clerical of Works to oversee the construction of the project, a preconstruction surveys to confirm the absence of any protected species within or close to works areas.

2.7.2 Potential noise disturbance to designated species during construction / demolition / operation.

Construction noise sources have the potential to result in temporary adverse effects on noise levels in the vicinity. I note from the documentation submitted with the application that there is an abundance of habitats in the area, and should species be temporarily disturbed, they will relocate. None the less the applicant has proposed a series of mitigation measures to ensure that there are no adverse effects to designated species due to noise. The noise assessment carried out as part of the planning application concluded that the future operations of the overall Site will continue to be compliant with limits set as per the Industrial Emissions License for the overall facility. However, the applicant has proposed a series of mitigation measures to further reduce noise emissions. I am satisfied that subject to compliance with the mitigation proposed that the proposed development will not result in any adverse effects on or significant disturbance due to noise emissions.

2.7.3 Potential impairment to air quality during construction / demolition / and operation

The air quality assessment carried out for the site indicated that likely impacts on sensitive receptors during the construction and demolition is from dust generation. A Construction Dust Risk Assessment was undertaken by the applicant highlighted that with the implementation of mitigation the potential risk to all receptors is reduced to negligible. During operation, the proposed development will be operated, maintained, and monitored in accordance with the relevant conditions of the Industrial Emissions License. I am satisfied with the mitigation proposed and compliance with the

provisions of the Industrial Emissions License that the proposed development will not result in adverse effects due to dust or air emissions.

2.7.4 Potential impairment of water quality during construction / demolition and operation.

Construction and Demolition work can potentially significantly impact on ground water and surface water quality, should pollutants for the site enter the River Nore, this could adversely affect the water quality within the European Sites. It is unlikely that construction works will have any adverse effect, however due to proximity it is crucial that water deterioration in the River Nore does not arise. The applicants have provided a robust set of mitigation measures to ensure no deterioration of water quality to the River Nore.

The proposed development will not change the quality or quantity of process effluent discharged to the River Nore. However, the proposal will slightly reduce the risk of exceedances of Emission Limit Values as it replaces older infrastructure and designed to withstand shock loads, therefore, the impact on the River Nore is expected to be slightly positive. Mitigation measures are proposed to ensure surface water will be directed back into the Wastewater Treatment Plant.

I am satisfied based on the information provided and the mitigation measures proposed that the proposed development will not have any adverse effects on surface water quality or ground water quality and will not cause any adverse effects on the European Sites.

2.8 'In-Combination' Effects'

The Applicants NIS has identified multiple projects within or in close proximity to the site which may have the potential to cause "in-combination" effects. These projects relate to the existing facility. All projects received planning permission, required statutory consents and no potential in combination effects were identified. The overall facility is operated, maintained and monitored in accordance with the relevant conditions of the IE Licence. Based on the information provided and a review of consented projects in the vicinity of the proposed development, I am satisfied that there will not be any significant in-combination effects by the proposed development to affect any of the Natura 2000 sites.

2.9 Appropriate Assessment Conclusion

The proposed development has been considered under the assessment requirements of Section 177U and 177AE of the Planning and Development Act 2000 and having regard to:

- The scientific information on file in respect of the River Barrow and River Nore SAC (002162) and River Nore SPA (004233)
- The potential impacts and mitigation measures proposed.

I consider that it is reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans and projects would not adversely affect the integrity of the River Barrow and River Nore SAC (002162) and River Nore SPA (004233) or any other European site, in view of the site's Conservation Objectives.

Inspector _____

Date

Approved (DP/ADP) _____

Date
