Specialist Report

322136

R322136_App 2

Development	Construction of anaerobic digestion facility with all associated site works at Curraghnagarraha, Reatagh, and Curraghballintlea, Carrick-on-Suir, Co. Waterford. EIAR and NIS submitted. EPA (IE) licence will be applied for.
Type of Application	Normal Planning Appeal
Topic	**Ecology/Appropriate Assessment (AA):** Adequacy of AA Scr/NIS and impacts on Lower River Suir SAC. Inadequate ecology surveys in relation to QI of the SAC.
Senior Ecologist Inspector	Fiona Patterson, BSc. MSc. Adv Dip Planning & Env Law, MiSEP, CEnv.
Senior Planning Inspector	Matthew McRedmond
Date	19th September 2025

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1.0 Introduction

1.1. Scope of Report to Inspector

1.1.1. Following review of the Environmental Impact Assessment Report and Natura Impact Statement submitted with this application and the observations received by the Commission, specialist support is requested regarding:

- Surface water contamination raised as a concern due to storage of digestates and subsequent threat to nearby waterbodies.
- Adequacy of the AA/NIS and impacts on the Lower River Suir SAC raised in the context of the above.
- Inadequate ecology surveys in relation to QI of the SAC.

1.1.2. I note that a Specialist Report (R322136_App1) has been prepared by the Commission Environmental Scientist in relation to a number of environmental matters including the first item above "*surface water contamination raised as a concern due to storage of digestates and subsequent threat to nearby waterbodies*". I have reviewed this specialist report, and it has informed my assessment in relation to the adequacy of the AA/NIS and impacts on the Lower River Suir SAC in the context of these issues.

1.1.3. In my capacity as Senior Ecologist Inspector with over twenty of years professional experience, I have the relevant expertise to provide a professional opinion in relation to the second and third items above (ie AA/NIS adequacy and ecology surveys).

1.1.4. This report to the Planning Inspector and available to the Commission is a written record of my review and examination of the submitted information and will support the Ecological Impact Assessment (EcIA) of the EIA and Appropriate Assessment.

1.2. Documentation

1.2.1. For the purpose of this specialist report, I have read all the documentation attached to this case relating to ecology/AA matters including inter alia, details of the proposed development, EIAR, NIS, outline CEMP, updated documentation in further information response, updated documentation in appeal response, drawings and site layout plans, and all associated documentation prepared by the Applicant, observations received by the Commission and Planning Authority and the reports of the Planning Authority. I have reviewed the conservation objectives documents of the relevant European sites. I have also reviewed the Specialist Report (R322136_App1) prepared by the Commission Environmental Scientist in relation to a number of environmental matters already discussed above.

1.2.2. I note the proposed development requires an Industrial Emissions licence from the EPA prior to commencing operation.

1.3. Site Location and Description of Proposed Development

1.3.1. The subject site is located in a rural area of Co. Waterford, in the townlands of Curraghnagarraha and Reatagh, approximately 3km south east of Carrick on Suir. The site is approximately 7.7ha in area and is currently in use for agricultural purposes, primarily grassland. The site is surrounded by similar agricultural lands. The Tinhalla Stream is located along the eastern boundary of the site and runs from south to north to connect to the River Suir, c. 1.5km to the north.

1.3.2. The proposed development is described in detail in the Inspectors report and not repeated here.

2.0 Assessment

2.1. Approach to examining the issues

2.1.1. In my examination of the issues, I have considered the following questions:

- Has the Applicant demonstrated sufficient expertise to carry out ecological surveys, to prepare the biodiversity EIAR chapter, to prepare the AA Screening and NIS report?
- Is there a sufficient baseline (including ecology surveys) upon which AA Screening/AA and EcIA can be carried out?
- In relation to adequacy of the NIS and surface water contamination on downstream Lower River Suir SAC, does the NIS provide a detailed scientific assessment of all aspects of the development for which significant effects could not be ruled out (at screening), with specific reference to implications for European sites conservation objectives? Have mitigation measures been described in detail for each significant impact and assessed for effectiveness?
- Have other plans/projects which may act in combination been considered?

2.2. Applicant Competency

2.2.1. Chapter 5 (Biodiversity) of the EIAR and the NIS have been authored by Noreen McLaughlin, MSc, MCIEEM of Whitehill Environmental on behalf of ORS. Her experience and qualifications are presented in Section 1.9 of Chapter 1 and Section 5.2.1 of Chapter 5 of the EIAR and Section 1.2 of the NIS.Ms Mclaughlin carried out ecological surveys in 2024. Larry Manning (ORS) carried out ecological surveys in 2025 and peer reviewed Chapter 5 of the EIAR. His experience is presented in Section 5.2.1 of Chapter 5 of the EIAR.

2.2.2. Chapters 7 (Land, Soils and Geology) and 8 (Hydrology & Hydrogeology) have been prepared by Jack Wilton, Cathal Tighe and Anna Quaid of ORS. Chapter 9 (Air Quality, Odour & Climate) is prepared by ORS and Irwin Carr Consulting. The results of these assessments all feed into the biodiversity chapter and NIS. Their experience and qualifications are presented in Section 1.9 of Chapter 1 of the EIAR.

2.2.3. In order to avoid confusion, I note that the AA Screening and NIS is combined into one document titled “NIS”. Sections 1 to 3 consist of an introduction, methodology and project description. Stage 1 – Screening for AA is presented in Section 4 whilst Stage 2 – AA is presented in Section 5 of the NIS. Mitigation measures are detailed in Section 6 whilst the AA conclusion is detailed in Section 7. References follow Section 7.

2.2.4. I am satisfied that the Applicant has demonstrated sufficient expertise to carry out ecological surveys, to prepare the biodiversity EIAR chapter, to prepare the AA Screening and NIS and to prepare other chapters which feed into the biodiversity/AA assessments.

2.3. Inadequate Ecology Surveys

2.3.1. One of the grounds of the third-party appeal is that ecology surveys conducted to inform the EIAR and NIS were inadequate, including on protected species such as otters, lamprey and Atlantic Salmon, which are qualifying interests of the Lower River Suir SAC.

2.3.2. The Applicant provided an updated NIS and Chapter 5 (Biodiversity) in the Applicant Technical Response document. Section 2 of the NIS sets out the methodology undertaken to prepare the NIS. Section 2.1 states that the NIS has been prepared regarding best practice listed. Section 2.3 describes the desk studies and consultation undertaken whilst Section 2.4 describes the methodology for undertaking the field surveys. Section 5.2.4 of Chapter 5 of the EIAR also describes the ecology surveys which were undertaken for the proposed development.

2.3.3. The initial site survey carried out in February 2024 by Noreen McLaughlin. Follow-on surveys were completed in April 2025 by Larry Manning. The habitat surveys covered habitat classification (in accordance with Fossitt, 2000 and mapping in accordance with Smith et all 2011 (see Section 2.4.1 of NIS) and floral composition. The terrestrial mammal surveys focused on otter and badger and bat roost potential (see Section 2.4.2 and 2.4.4 of NIS) and breeding birds. The 2025 survey covered nesting bird survey at the proposed site entrance to account for an addition to the proposed site development works based on the FI response. Aquatic and macroinvertebrate sampling and water quality profiling was conducted at the Tinhalla Stream in March 2024 by ORS to inform the EIAR and NIS. Refer to Section 2.4.5 of NIS and Section 5.2.4.2 of Chapter 5 of the EIAR for details. Section 2.4.6 of the NIS notes that no seasonal constraints were encountered for the surveys, the February survey was ideal for mammal track/sign identification and the April 2025 survey accounted for seasonal variation and nesting birds.

2.3.4. Otter is a QI species of the Lower River Suir SAC. Section 3.5.1 of the NIS states that the riparian zone of the Tinhalla stream was "*walked to determine the presence*

of any otter signs such as slips, couches or spraints. None of the signs were noted, however this does not exclude the possibility that otters use this stream. The National Biodiversity Data Centre has records for otters for separate streams that lie to the south of the site, whilst otters are also present along the River Suir". Section 3.5.1 of the NIS goes on to state that the grasslands within the proposed development site yielded no signs of otter runs which are easily identifiable and there were no signs in the surrounding areas just outside of the site boundaries. Section 5.2.4.1 of Chapter 5 (Biodiversity) of the EIAR states that survey effort in 2025 was focused along the riparian habitats and banksides of the Tinhalla stream, that otter signs including spraints, tracks, slides and couches were searched and that all surveys were conducted during suitable weather conditions to maximise the detectability of signs. Whilst the surveys did not record signs of otter, the presence of otter in the catchment is assumed and assessed in the NIS. The NIS acknowledges potential impacts on otter (water quality and noise pollution) and addresses these via mitigation measures. Having reviewed the documentation, I consider that the surveys undertaken for otter are adequate.

2.3.5. The presence of other aquatic QI species in the Lower River Suir SAC including Atlantic salmon, lamprey and white clawed crayfish in the catchment, whilst not directly surveyed (see Table 5, Section 5.2.3 of NIS) are assumed in the assessment. There is potential for direct impacts on these species, if present, during the in-stream works and potential for indirect water quality impacts on these species, if present downstream, during construction and operation phases. Both direct and indirect impacts are addressed via mitigation measures. No process water will be discharged to watercourses during operation. Given the above, I consider that ecology surveys of these QI species are not required.

2.3.6. Other QI species of the Lower River Suir SAC have been screened out as presented in Table 4 of Section 5.2.2 of the NIS because they are either too distant from the proposed development or they are features not sensitive to changes in water quality. I am in agreement with the reasoning for screening out these QI species. Ecology surveys of these species are not required.

2.3.7. The dominant habitat as reported in the NIS within the proposed development site is improved agricultural grassland and is of low ecological value. No Annex habitats were identified. The majority of the hedgerows and treelines along the field

boundaries will be retained except for a section of low-value hedgerow along the site entrance which will require removal to facilitate safe-site lines. I consider that the habitat surveys are adequate.

2.3.8. The ecological surveys also focused on non-QI species (of the Lower River Suir SAC) including badgers and bats. Field signs were searched for along linear landscape features including hedgerows, watercourses and field margins. Bat habitats at the site were visually assessed for their potential to support bat roosts. Mature trees within hedgerows and gaps in stone walls were assessed for their bat roost potential. There are no buildings on site. The proposed development site is not identified as an important foraging/breeding habitat for Qualifying Interest bird species of SPAs. The use of hedgerows/mature treelines by bats for foraging or birds for nesting is acknowledged by the Applicant and addressed via mitigation measures. Having reviewed the documentation and considering the nature of the proposed development, I consider that the surveys undertaken for birds and non-QI species are adequate.

2.3.9. Given the nature of the proposed development and given the desk study and ecological surveys undertaken to date, I consider that comprehensive baseline data has been collected by the Applicant to allow a full assessment of impact in both the EIAR and NIS to be undertaken. I consider that the ecological surveys are adequate to inform the EIA and AA of the proposed development.

2.4. Adequacy of the AA/NIS and impacts on the Lower River Suir SAC in relation to surface water contamination

2.4.1. The appeal questions the adequacy of the AA/NIS and impacts on the Lower River Suir SAC in relation to surface water contamination. The appeal also claims mitigation measures proposed in the NIS are vague and do not provide details for accidental spill, increased nutrient loads, surface water run-off, or the long-term impacts of digestate storage and land spreading. The appeal states that monitoring, post-construction cannot be considered an appropriate mitigation measure.

2.4.2. Section 4 of the NIS presents the Stage 1 Screening for AA. Given the nature of the proposed development, I consider that Section 4.2 correctly identifies the potential

significant effects from the proposed development on European sites. These are listed below:

- deterioration of water quality in designated areas arising from pollution to surface water or ground water during construction and operation phases,
- noise pollution,
- impacts from land-spreading of digestate and;
- cumulative impacts.

2.4.3. Based on the zone of influence, Sections 4.3 and 4.4 screens out significant effects on all European sites except for the Lower River Suir SAC which it brings forward to AA. I am in agreement with this approach.

2.4.4. Section 5 of the NIS presents the Stage 2 AA. Sections 5.3.2 to 5.3.6 of the NIS provide a scientific assessment of the proposed development with reference to the conservation objectives of Lower River Suir SAC. These sections establish whether the impacts of the proposed development (as identified in Section 4.2 and listed above) are likely to occur and whether or not they are significant with respect to each of the specific QIs and conservation objectives of the Lower River Suir SAC. Sections 5.3.2-5.3.3 consider the potential for significant impacts on the QI of the Lower River Suir SAC due to water quality deterioration. Section 5.3.4 consider the potential for significant noise impacts on otter whilst Section 5.3.5 considers the potential for significant impacts due to land-spreading. Significant cumulative effects are considered in Section 5.3.6.

2.4.5. Cumulative effects are discussed in Section 5.3.6 of the NIS. Other projects which may act in combination with the proposed development have been assessed. Additional mitigation measures are not proposed nor required.

2.4.6. Section 6 of the NIS details the mitigation measures proposed to minimise the identified significant effects. In order to assess the effectiveness of the mitigation measures, I have considered if they have been clearly detailed for each likely significant impact in addition to considering how they will be implemented and degree of confidence in their likely success,

2.4.7. Section 6.4.1 addresses protection of water quality and management of pollutants during the construction phase whilst Section 6.5.1 addresses management of

contaminated run-off during operation. The majority of the mitigation measures at operational stage have been embedded into the design as standard. Best practice documentation will be followed. An outline CEMP, whilst not directly referenced in the NIS (Section 6.1 of NIS recommends that the mitigation measures are contained in a CEMP and that all works are overseen by an onside Environmental or Ecological Clerk of Works) has been included in the planning documentation – this describes the approach that will be taken to ensure construction activities have the least impact on the surrounding environment. Section 4.4 of the outline CEMP includes additional mitigation measures for surface water and groundwater protection including the use of spill kits, refuelling a safe distance from the watercourse and earthworks management. Section 7 of the outline CEMP describes implementation including roles and responsibilities, awareness and training. The measures outlined are standard practice, implementable and effective in minimising adverse water quality impacts on QI species/habitats. There is a high degree of confidence that these measures will be successful. I note that some of the standard mitigation measures have been framed as “should” or “could” or “is recommended” rather than “shall” or “will” which can lead to a degree of uncertainty. However, I consider that this can be addressed via a planning condition, should the Commission decide to grant the proposed development.

2.4.8. Section 6.5.2 addresses increased groundwater vulnerability whilst Section 6.5.3 addresses uncontrolled releases and spillages during operation. Again, the majority of the mitigation measures at operational stage have been embedded into the design as standard. Section 6.5.7 discusses an environmental management system which will be put in place during the operational phase. It is worth reiterating that an industrial emissions licence will be required from the EPA for the operational phase which includes annual monitoring and reporting of licenced emissions. I also refer the Commission to the Specialist Report (R322136_App1) prepared by the Commission Environmental Scientist in relation to his review of the hydrological and hydrogeological assessment which he considers acceptable. The Applicant provides a range of embedded measures aimed at containing any accidental spillages on site including bunded areas, contained storage tanks, attenuation tanks with impermeable membrane and spill kit measures. The site is not prone to flooding as set out in the submitted flood risk assessment and therefore the likelihood of

inundation and increased surface run off is low. In relation to onsite storage of digestate, the Commission Environmental Scientist has stated that he is satisfied that the proposed development has provided for the appropriate storage of feedstocks and digestate and in the event of spillages and/or accidental release of contaminated waters, the site will be bunded sufficiently to protect all adjacent surface and groundwater resources. The measures outlined are standard practice, implementable and effective in minimising adverse water quality impacts on QI species/habitats. There is a high degree of confidence that these measures will be successful.

2.4.9. The management of noise pollution to minimise disturbance on otter is described in Sections 6.4.3 (construction) and 6.5.5 (operation) of the NIS. The NIS states that the Contractor will be responsible for implementing these measures during the construction phase to eliminate or reduce noise levels where possible. The measures outlined are standard practice, implementable and effective in minimising adverse impacts on QI species. There is a high degree of confidence that these measures will be successful.

2.4.10. In relation to minimising impacts from digestate, the transfer of organic fertilisers from the proposed facility to farmers and its subsequent application to lands is governed by the provisions of S.I. No. 113/2022 - European Union (Good Agricultural Practice for Protection of Waters) Regulations 2022 as amended. These regulations (Article 23(1)) require farmers importing organic fertilisers to keep records including quantities, type, dates and details of exporters and importers, as the case may be, in a format specified by the Minister for Agriculture, Food and the Marine.

2.4.11. I also refer the Commission to the Specialist Report (R322136_App1) prepared by the Commission Environmental Scientist in relation to the use of digestate as a fertiliser. I note that land-spreading is considered to be an indirect impact that does not form part of the application for consent in this instance however it has been considered in the NIS. The GAP regulations are referenced by the Applicant in Section 6.5.6 of the NIS. Overall, I am satisfied that subject to the proper implementation of the provisions of S.I. No. 113/2022 - European Union (Good Agricultural Practice for Protection of Waters) Regulations 2022 as amended, the use of digestate on agricultural lands will not lead to enrichment of waters and in particular an adverse impact on the integrity of any European site.

2.4.12. In conclusion, based on my review of the documentation, I consider that the AA Scr/ NIS is adequate. It is based on best available scientific information, it has taken account of nature conservation objectives, the relevant qualifying interests have been catalogued. It comprises a detailed scientific assessment of the effects, taking into account the targets and attributes necessary to support the site-specific conservation objectives and effective mitigation measures have been clearly detailed such that effects will reduce to non-significant levels. I consider there is sufficient information for the Commission to carry out AA.

3.0 Conclusion

3.1.1. I consider that the the Applicant demonstrated sufficient expertise to carry out ecological surveys, to prepare the biodiversity EIAR chapter, to prepare the AA Screening and NIS report.

3.1.2. I consider that the ecological surveys are adequate to inform the EIA and AA of the proposed development.

3.1.3. I consider that the NIS is adequate to inform the AA of the proposed development.

3.1.4. I note that some of the standard mitigation measures have been framed as “should” or “could” or “is recommended” rather than “shall” or “will” which can lead to a degree of uncertainty. However, I consider that this can be addressed via a planning condition, should the Commission decide to grant the proposed development.

Signed:

19/09/2025

Fiona Patterson BSc, MSc, MISEP CEnv

Inspectorate Ecologist