



An
Bord
Pleanála

Inspector's Report

ABP-307617-20

Development	On farm Anaerobic Digestion (AD) Plant
Location	Tullycallick & Rossarrell, Glaslough, Co. Monaghan
Planning Authority	Monaghan County Council
Planning Authority Reg. Ref.	19219
Applicant(s)	Paschal Carvill.
Type of Application	Permission.
Planning Authority Decision	To refuse.
Type of Appeal	First party.
Appellant(s)	Paschal Carvill
Observer(s)	McAvee; McQuaid; McKenna; Finn; Cannon.
Date of Site Inspection	5 th October 2020.
Inspector	Deirdre MacGabhann

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1.0 Site Location and Description

- 1.1. The 1.65ha appeal site is situated in the townlands of Tullycallick and Rossarrell, c.1.5km to the south west of the village of Glaslough, and c.3km to the south east of Emyvale, County Monaghan. The site lies on a minor road and in a rural environment which is characterised by the rolling pastoral landscape. Agricultural fields are separated by mature hedgerows and woodland. Development comprises a mix of farms and one off housing. Mountain Water river lies c.1.2km to the north of the site and a tributary of this, Glennan Stream, c.200m to the east of the site.
- 1.2. The subject site lies to the north west of an existing farm yard. It comprises agricultural land on each side of an existing farm access track and structures associated with the existing farm to the south east of the site. The site is generally screened in views from the public road by hedgerows and roadside development.
- 1.3. To the south and west of the site is one-off housing alongside the public roads, and to a lesser extent agricultural development. Approximately 250m to the south east of the site is a substantial poultry farm and to the east of it, Donagh Row village. East of the village and c.500m to the east of the appeal site is Old Donagh Church and Cross.

2.0 Proposed Development

- 2.1. The proposed development, as revised by way of significant further information received on the 6th April 2020, comprises a 250kW farm anaerobic digester (AD) with associated combined heat and power (CHP) plant. The principle structures on the site include:
 - An underground slurry reception tank located to the north of the site.
 - Three silage clamps (for silage storage) to the east of the site.
 - A primary and secondary digester to the north west of the site. These domed structures have an internal diameter of 26m and a maximum height of 12m.
 - A containerised CHP (c.38sqm, maximum height c.4.7m with 10m flue), control room (c. 32.4sqm) and sub-station (c.54sqm) located to the south of the digesters.

- Emergency gas flare (5m in height) located to the north of the site.
 - Site office (39sqm) with car parking spaces to the south of the sub-station.
 - A digestate storage tank with an internal diameter of 37.6m and maximum height of 6m, situated to the south east of the site.
 - Weighbridge and wheel wash.
- 2.2. The plant will supply renewable energy to the applicant's farm and the national grid. The AD is considered to be an on farm plant and is designed to process manures and organic materials (slurry and silage) produced by the farms of the applicant and wider family. All infrastructure required for harnessing heat and power (CHP and sub-station) is included in the planning application. No contracts are in place in respect of the sale of energy from the plant. Grid connection will be part of a subsequent planning application.
- 2.3. Feedstock for the anaerobic digester will comprise slurry and silage, estimated to be c.6,167 tonnes per annum. Slurry and silage will be brought to the site and stored in an underground storage tank in silage clamps, respectively. The feedstock, slurry and silage, will be fed into the primary and secondary digesters for biological treatment. Biogas that is generated in the primary and secondary digesters will be directed to the CHP plant. Here the gas will be converted to heat and electricity. Renewable energy and heat generated by the plant will be used to run plant machinery, maintain the temperature of the AD process and any surplus will be supplied to the national grid.
- 2.4. Digestate, the waste product generated by the plant, will be pumped via sealed pipework into the digestate storage tank, and from here, also by sealed pipework, into tankers and removed off site to the spreading location. The applicant's Nutrient Management Plan (NMP) includes agreements from livestock producers on feedstock that will be used in the plant and land parcels which will receive digestate.
- 2.5. Supporting structures include a weighbridge, gas flare (5m in height), feed hopper, electrical sub-station, office building and wastewater treatment plant. The development will be cut into the existing site to provide a FFL of 50. Inside the cut bank, the perimeter of the site will be fenced (2.4m high mesh fenced), and landscaped (native species hedgerow and unspecified planting). Access to the site

will be via an upgraded entrance from the public road, with 50m sightlines provided in each direction.

2.6. Water supply will be via the existing connection (a well shown centrally to site, Proposed Site Layout Plan, Drawing no. 3148-L03). Wastewater will be disposed of into an on-site package wastewater treatment system, with raised sand polishing filter. Dirty water from the yard areas will be directed to the underground slurry reception tank where it will mix with the slurry feedstock and enter the AD system to be processed. Surface water will be discharged into a stormwater attenuation tank with discharge to an existing ditch/stream along the southern roadside boundary of the site via a hydrobrake system, attenuation tank and bypass separator.

2.7. Included with the planning application are:

- Traffic and Transport Assessment Scoping Study (2019).
- Traffic and Transport Assessment (2020).
- Noise Impact Assessment (2019 and updated in 2020).
- Air Quality Assessment (2019 and updated in 2020).
- Site Characterisation Form and Report (2019).
- Archaeological and Cultural Heritage Assessment.
- Drainage Design Report (2020).
- Nutrient Management Plans (2020).
- Drawings and photomontages.
- Supplementary Planning Application Form for Agricultural Development.

3.0 Planning Authority Decision

3.1. Decision

3.1.1. On the 19th June 2020, the planning authority decided to refuse permission for the development on the following grounds:

- i. Development would contravene Policy ENP 1 of the County Development Plan, as the applicant failed to demonstrate that the development would not be detrimental to the visual and residential amenities of the area given the

level of information provided on the scale of the proposed facility, the operation of the development with respect to the reuse of the renewable energy generated on site, grid connection and the level of landscaping proposed.

- ii. Development contrary to Policy WPP1, 8, 9, 11, 16 and 18 and Strategic Objective EECSO1 of the County Development Plan (protection of surface and ground water and the environment), as the applicant has provided inadequate information in relation to the potential for run off of nutrients to vulnerable surface waters (Mountain Water Catchment and the Blackwater Water Body Management Unit) and ambiguous information in the nutrient management plans.

3.2. Planning Authority Reports

3.2.1. Planning Reports

- 19th June 2020 – This report refers to the location and characteristics of the appeal site, technical reports and observations made. It examines the merits of the development against relevant European, national, regional and local planning policy and the need for environmental impact assessment and appropriate assessment. It recommends further information including in respect of licensing, regulatory authorities, EPA determination on waste authorisation, water supply, wastewater treatment, use of the development and power generated, infrastructure for grid connection, impacts on amenity, source of feedstock, storage of feedstock, nutrient management plan for digestate, identification and management of hazards, Traffic and Transport Assessment, sightlines, storm water layout, details of soakaway, surface water management and matters raised by third parties.

Subsequent to the submission of FI, the report refers to the policy context for anaerobic digestion plants which recognise their environmental benefits. It considers that the development is acceptable in terms of landscape and traffic effects, emissions to air, noise, archaeology and cultural heritage but states that the applicant has failed to submit sufficient information to carry out a

comprehensive assessment of the proposed development, with concerns in respect of:

- No scaling back in size of facility despite reduction in feedstock,
- No information on grid connection.
- Lack of clarity regarding Nutrient Management Plans and compliance with on-farm nitrogen limits.
- Risk of runoff from lands to surface water bodies in an at risk area (poor status of the Mountain Water Catchment and Blackwater Water Body Management Unit),
- Type, volume and source of feedstock (i.e. slurry and silage mix) with implications for methane production and therefore the sustainability of the plant and traffic likely to be generated,
- Technical information on gas storage and gas storage capacity, and
- Technical information on size of CHP unit and how surplus heat generated will be used.

The report recommends refusing permission for the development.

3.2.2. Other Technical Reports

- Fire and Civil Protection (27th May 2020) – No objections subject to conditions.
- District Engineer (16th June 2019) – Recommends further information, Traffic and Transport Assessment (to include traffic count survey), sightlines of 50m in both directions, closure of existing farm entrance and details of storm water layout/surface water drainage. Subsequent report (17th April 2020) states that trip generations should not exceed those submitted otherwise the existing road network would not be suitable for the development. Otherwise no objections subject to conditions (sightlines, entrance details, drainage along site frontage, surface water drainage and development charge).
- Roads (18th June 2019) – Recommends further information, sightlines, surface water drainage and details of soakaway. Subsequent report (20th April 2020) no objections subject to conditions (development charge,

sightlines, entrance details, surface water drainage, water storage and discharge rate from hydrobrake system).

- Environment (27th June 2019) – Recommends further information, what authorisations are required for the development, source and nature of feedstock for the facility, storage arrangements for feedstock and infrastructure to prevent pollution, nutrient management plan to demonstrate how it is proposed to sustainably use the digestate and wash waters, assessment of hazards and risk management and details of surface water and foul water management. The report also notes that having regard to the scale and nature of the development and potential impacts on the surrounding environment, an EIAR may be warranted and recommends further details on the usage and infrastructure required for the power and heat to be generated. Subsequent report (30th April 2020) recommends refusal on the grounds of
 - Risk to water quality (from land spreading of digestate),
 - Lack of technical information on use of energy generated and connection to national grid,
 - Lack of information on feedstock material (type, volume and source),
 - Lack of information on proposed biogas technology and safe storage,
 - Management of digestate and means to minimise bad odours,
 - Capacity of CHP unit and use of surplus thermal energy (heat),
 - Reliance on NI land banks for digestate with possible future issues associated with Brexit and absence of ownership details of land bank, and
 - Inadequate storage capacity for digestate.
- Environment (Waste) (11th May 2020) – State that as the development has the capacity to cause harm to the environment, the development would require authorisation by Monaghan County Council under the Waste Management Act (Facility Permit and Registration) Regulations 2007 as amended. Otherwise no objections subject to conditions.

- EHO (3rd July 2019) – Comments on the submitted odour, air quality and noise reports and states that it is not anticipated that significant odour or noise impacts will arise. Subsequent report (20th May 2020), no objections subject to conditions.
- Fire (15th June 2020) – No objections subject to conditions.

3.3. Prescribed Bodies

- None.

3.4. Third Party Observations

3.4.1. Third party observations on the application¹ raise the following issues:

- **Scale of development.** Development has been scaled back from 12,500 tonnes of digestate to 6,167 tonnes and output of AD from 500kW to 250kW. No scale back is size/scale of structures.
- **Visual impact.** Elevated site. Scale/impact on character of area. Inappropriate scale of development, out of character for the area. Industrial scale development. Impact on skyline.
- **Heritage.** Proximity to village of Glaslough and Old Donagh Graveyard (of historic, cultural and archaeological interest and visitor attraction). Full archaeological survey required/excavation under licence in advance of decision. Glaslough to Donagh Row is used as a trail by horses from Castle Lesley, cyclists for Drumlin Trails and walkers.
- **Traffic.** Impact on local roads, used for walking, cycling and recreation (construction and operation). Inadequate nature of public roads for large volume of traffic using (subsidence of road). No assessment of current traffic on local roads. No indication of routes to be used by development traffic (construction and operation). Under representation of likely volume of traffic. Source of feedstock. Traffic survey carried out in December outside of the main farming season. No account of closure of N2 and use of roads by local

¹ R. & O. Cannon; V. & S. McQuaid; S. McKenna; Cllr. Cathy Bennett; J. & A. McQuaid; L. & K. Duffy; S. McAree and others; M. & G. McAree; B. & L. Finn.

chicken farm. Silage harvesting will lead to large amounts of traffic on local roads.

- **Impact on amenity.** Proximity to residential development (>20 families) and other sensitive locations. Noise and odour arising and impact on amenity. Inadequate information on sources/types of feedstock for the plant. Air quality assessment should be based on background assessment/monitoring of gases listed. Risk of odour affecting Glaslough village. Impact on primary school, 1.7km downwind of the development.
- **Health and safety.** Proximity to residential population. Risk to public safety/human health from gas storage (risk of accidents, spillages, emergencies). No health and safety assessment carried out. No emergency response plan, maintenance plan etc. ISO standards being operated at the facility. Training/qualifications required for correct operation of the facility.
- **Regulation.** No information on regulatory authorisation required, or how the site will be regulated/managed. Conflict between site notice and planning application in respect of need for waste licence.
- **Environment.** Appropriate assessment not carried out. Small tributary runs alongside the farm discharges to River Blackwater (spawning ground for fish, site for waterfowl) which discharges into River Bann and Lough Neigh. Risk of impacts on water quality, Area of Action designated under Water Framework Directive, water based species/habitats and Natura 2000 sites in Ireland and Northern Ireland (from discharge of surface water and land spreading, much of land in area at risk of flooding). No evidence of capacity of farm to accommodate digestate on the farm or evidence of compliance with Good Agricultural Regulations and Nitrates Directive. Risk of pollution from spillages. Impact of the development on wildlife in the area (e.g. hares, Queens University study). No aquatic or ecological impact assessment. Land spreading in conflict with WFD, EU Habitats Directive and EU Birds Directive. Much of feedstock and waste will be sourced/transferred to land bank in NI. Need for assessment of transboundary effects and risk with Brexit. No Nutrient Management Plan to deal with land spreading of 10,800 tonnes of digestate. Land proposed for digestate spreading is on a proposed

route for a national road, alternative location for digestate. Impact on local group water scheme.

- **Environmental impact assessment.** Should be carried out as the development is commercial in nature and not farm scale.
- **Need.** Need for the development. No information on output (in terms of gas and heat), how energy generated will be used, if permission secured for its connection to the national grid and the need for any additional infrastructure for grid connection. Development is based on experience in NI where subsidies were given for ADs.
- **Inadequate application/ assessment.** Inadequate information on construction and operational phases. Flawed assessment. Underestimates the impacts of the development.
- **Consultation.** No consultation with ESB or nearby residents groups.

4.0 Planning History

4.1. None.

5.0 Policy Context

5.1. National and Regional Policy/Guidelines

Climate

- Climate Action Plan 2019 (DECC, 2019) - Sets out a framework to guide the country towards decarbonisation, with sectoral strategies for electricity and agriculture. These include to increase reliance on renewable energy sources, support micro-generation and selling into the national grid and the production of bioenergy from agriculture.
- National Planning Framework – Sets out strategic goals in respect of transitioning to a low carbon and climate resilient society and sustainable management of waste resources. Strategic outcomes include delivering 40% of electricity needs from renewables and increased uptake of anaerobic digestion.

- Regional Spatial and Economic Strategy (Northern and Western Regional Assembly) 2020-2032 – Supports the transition towards a low carbon economy and implementation of the Connaught Ulster Regional Waste Management Plan 2015-2021.

Waste

- Connaught Ulster Region Waste Management Plan 2015 – 2021 – Sets out a framework for the prevention and management of waste in the region. The strategic vision of the plan is to rethink the approach to waste, by viewing waste streams as valuable material resources. Key measures in the Plan include to grow the biological treatment sector, in particular anaerobic digestion (and composting).

Water

- The EU Water Framework Directive aims to improve water quality and applies to all water bodies. The Directive runs in six year cycles and is currently in its second cycle 2016 to 2021. Member States are required to achieve ‘good’ status in all waters and must ensure that status does not deteriorate. The Directive has been given effect by the Surface Water and Groundwater Regulations.

5.2. Development Plan

- 5.2.1. Chapters 8 of the Monaghan County Development Plan 2019 – 2025 deals with Environment, Energy and Climate. The Plan recognises the vulnerability of the environment to growth in population, economic development, intensive farming and other factors. **Strategic Objective EECSO1** therefore seeks ‘*To afford a high level of environmental protection in County Monaghan through the provision of quality environmental services which adhere to the precautionary principle, to provide for sustainable development through the promotion of energy efficiency and renewable energy to deliver a low carbon future for County Monaghan, to implement measures to reduce the human causes of climate change and to consider its effects when formulating development plan policies.*’ Subsequent policies provide for the protection of specific environmental resources. Policies **WPP1-WPP19** protect

surface and groundwater bodies from pollution or deterioration, including from including from intensive agriculture.

5.2.2. Section 8.16 deals with bioenergy and recognises that there is potential for the use of bioenergy (fuels from crops, forestry deposits and agricultural wastes) to make a significant contribution towards renewable energy targets and other objectives of the Plan. It therefore supports the development of bioenergy and states that individual proposals will be considered on a case by case basis in accordance with planning and environmental considerations.

5.2.3. Section 15.20 of the County Development Plan sets out development management guidelines in respect of renewable energy, including that particular regard will be shown to the following in assessing applications for development:

- Impact on the visual amenities of the area.
- Impact on the residential amenities of the area.
- Scale and layout of the project, any cumulative effects due to other projects and the extent to which the impacts are visible across the local landscape.
- Visual impact of the proposal with respect to protected views, scenic routes and designated scenic landscapes.
- Impact on nature conservation, ecology, soil, hydrology, groundwater, archaeology, built heritage and public rights of way.
- Impact of development on the road network in the area.
- Level of noise disturbance and where applicable shadow flicker.
- Level of compliance with national and regional guidance documents.

5.2.4. **Policy ENP 1** encourages and facilitates renewable energy proposals at suitable locations where it is demonstrated the development will not have a detrimental impact on the visual and residential amenities of the surrounding area and other matters of acknowledged importance where it is located and assessed in line with the above criteria.

5.3. Natural Heritage Designations

5.3.1. The appeal site lies c.2km to the west of Glaslough Lake a proposed Natural Heritage Area (pNHA, site code 000559) and c.2.2km to the south east of Emy

Lough, also a pNHA (site code 000558). The nearest European sites in Ireland lie c.9km to the west and comprises Slieve Beagh Special Protection Area (site code 004167). The nearest European site in Northern Ireland, also lies to the west of the site (c.13km) and comprises Slieve Beagh-Mullaghfad-Lisnaskea Special Protection Area and Slieve Beagh Special Area of Conservation. These sites lie to the west of Slieve Beagh SPA designated in Ireland. In Northern Ireland Lough Neagh and Lough Beg, over 30km to the north east of the appeal site, is designated as a Special Protection Area.

5.4. EIA Screening

5.4.1. Part 1 and Part 2 of Schedule 5 of the Planning and Development Regulations 2001 (as amended) set out classes of development which require environmental impact assessment under section 176 of the Planning and Development Act 2000 (as amended). Of relevance to the proposed development, Part 2 sets out the following classes of development:

- Class 3. Energy industry:

‘(a) Industrial installations for the production of electricity, steam and hot water not included in Part 1 of this Schedule with a heat output of 300 megawatts or more’.

- Class 11. Other projects:

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

5.4.2. Under the Article 2(1)(f) of the Waste Framework Directive 2008/98/EC *‘straw and other natural non-hazardous agricultural...material used in farming...or for the production of energy from such biomass through processes or methods which do not harm the environment or endanger human health’* are excluded from the scope of the Directive i.e. they do not constitute a ‘waste’. I would infer from this that silage would not fall within the scope of the Waste Directive or constitute a waste product.

5.4.3. Under Article 2(2)(b), *‘animal by-products...which are destined for use in a biogas...’* fall within the scope of the Directive. These include cattle manure.

- 5.4.4. The proposed development will import c.6,167 tonnes of feedstock (5,150 tonnes slurry and 1,017 tonnes silage – see section 2.45) per annum for the production of heat and electricity, with a stated heat output of 250 megawatts. It is stated that no requirement to store gas on site (see section 2.49 of appeal). The proposed development therefore falls below the thresholds for EIA.
- 5.4.5. Schedule 7 of the Planning and Development Regulations 2001 (as amended) sets out criteria for determining whether a sub-threshold development should be subject to EIA. These include the characteristics of the proposed development, its location and the type and characteristics of potential impacts. The proposed development is a substantial development however it is not out of scale with other large scale agricultural development in the area. It is removed from any sensitive site such as natural heritage areas, densely populated areas or landscapes or sites of historical or archaeological significance. There is little use of natural resources with the development utilising waste material from farming. Environmental effects can arise from noise, odour and traffic generated by the development, risk of accidents/to human health and the application of digestate to agricultural land. These matters are explored in the Assessment section of this report and it is considered that the development is not likely to give rise to significant effects on the environment, to warrant environmental impact assessment, due to the modest or short term nature of effects, the requirement for a Waste Permit Licence (which will control process standards and accident and emergency procedures) and the application of digestate in accordance with European Union (Good Agricultural Practice for Protection of Waters) Regulations 2017.

6.0 The Appeal

6.1. Grounds of Appeal

- 6.1.1. The first party state as a preliminary matter that the notice of the planning authority's decision was not received until the 10th July 2020 (posted to former address).
Grounds of appeal are:

- The planning authority confirm on page 45 of the Planning Report that in principle the development is acceptable.

Reason for refusal, no. 1

- Visual amenity. The reason for refusal is inconsistent with planners report which concluded that the development is suitable at the proposed location in terms of its visual amenity. The planning authority do not explain why the landscaping shown on drawing no. DWG L03 Proposed Site Plan is inadequate. Notwithstanding this, the applicant has no objection to submitting and implementing a revised landscape plan, which could be addressed by condition.
- Residential amenity. The Noise Impact Assessment and Air Quality Impact Assessment Reports found the proposal to be acceptable and in line with guidelines. Planning and Environmental Health reports considered the development to be acceptable in terms of emissions to air and noise.
- Scale of development. Irrespective of whether or not the proposed plant could accept a greater amount of feedstock in terms of its design capacity, the level of feedstock considered is 6,167 tonnes which would be imposed by way of planning condition (to ensure not exceeded). The development is also likely to be governed by a waste permit which would also stipulate a maximum annual/daily output. Despite the reduction in capacity, it was not considered necessary to alter plant design as all proposed infrastructure is required for the AD process.
- Re-use of renewable energy generated on site. Surplus heat from the development could be used in a number of ways (e.g. digestate drying, pre-heating of feedstock and pasteurisation associated with the AD process). These would be in addition to utilising heat for existing/future farm practices and would be subject to a future application for permission.
- Grid connection. The process of applying for grid connection requires planning permission to be obtained first. It is then up to ESB to determine the most appropriate method. No contracts for the sale of energy have been entered into as there is no guarantee of these without planning permission. If granted, energy will be transferred to the grid by inclusion of a Medium Voltage substation containing dedicated rooms for switchgear, metering and telecommunications.

Refusal Reason No. 2

- Impacts on the water environment at the application site. Development designed to restrict dirty water from leaving the site. Development located on a hardstanding surrounded by a raised kerb. All dirty water from yard areas to be directed to underground slurry reception tank and enter AD system. Clean water will be discharged to sheugh after attenuation and passing through a bypass separator. Stormwater attenuation tank proposed for heavy rain. Water from wheel wash will be reused and eventually tankered off site. Foul water will discharge through a wastewater treatment plant and soil polishing filter, designed to comply with relevant standards as set out in Site Characterisation Report.
- Digestate land spreading. Page 47 of the planning report is incorrect (nutrient management plan proposals based on achieving an upper limit of 250kgN/Ha). The 250kgN/ha referred to is the used for illustration purposes and based on maximum levels used in the UK. The limit of 170kgN/Ha/year has been applied in the NMP calculations. Recipient farmers are not required to import any other fertilisers as the digestate supplied by the AD plant will meet all crop requirements within the 170kgN/ha/year limit. All lands identified for digestate spreading have been soil sampled and digestate is only applied in line with crop requirements, informed by the soil analysis. All digestate will be spread in accordance with the European Union (Good Agricultural Practice for Protection of Waters) Regulations 2017 and the Nutrient Action Programme 2019-2022 for lands in NI. The method of land spreading digestate can be regulated by the local authority by way of conditions attached to a Waste Facility Permit.

Other considerations

- Feedstock. Throughput of feedstock annually will be c.2.7 tonnes of grass silage daily (1,017 tonnes total) and c.14 tonnes of slurry/manure daily (5,150 total tonnes). This is the same breakdown as set out in the original application for a larger total throughput. The volume of feedstock was reduced to address concerns raised largely in respect of transport. The information necessary for the planning authority in terms of type and sources has already been provided. The traffic/transport, amenity impacts, and

adequacy of feedstock storage provision have been considered. Roads and Environmental Health have no objections to the development. The proposed silage clamps (replacing those existing on the site), remain a necessary part of the system in order to provide sufficient storage for silage to be used in the AD system and for use by the appellant for his existing livestock rearing activities. The quality of feedstock and its implications for biogas yield are not relevant to consideration of the planning application. No other feedstocks will be imported (e.g. sugar/fodder). Any variation in feedstock from that stipulated would be subject to a future planning application.

- Gas storage. With the exception of the gas contained within the system (buffer capacity), there is no requirement for biogas storage on site as it is continually passed through the CHP plant to produce energy. If the CHP goes offline the buffer gas in the headspace of the domed tanks is used to maintain system throughput. If off for an extended period of time, gas is vented through the back up gas flare. In the highly unlikely event that both are offline, the tanks have in-built pressure release valves which can be opened to vent gas to the atmosphere as a final safety and last resort (and unanticipated) measure.
- CHP Plant. Details of a candidate CHP unit was used for the Noise Impact Assessment and Air Quality Impact Assessment modelling exercise (section 4.2 of NIA and section 2.4 of AQIA). Environmental Health had no objection to the input parameters. For clarity, the proposal will operate with a CHP unit with a 250kW rated capacity. CHP units can be adapted to a particular specification and the appellant is willing to accept a negative condition to this effect if required.
- Waste facility permit. The EPA have declared that the development is exempt from a waste authorisation under section 3(1)(g) of the Waste Management Act 1996. Monaghan County Council have yet to declare the proposal exempt from waste authorisation or that a Waste Facility Permit is required. If required, conditions can be applied detailing the scope of the permit and permitted classes of activities. Conditions relate to project scope, management, record keeping, site infrastructure, material acceptance and handling, accident prevention and emergency response procedure, closure,

restoration and aftercare and any financial provisions. Planning control should not seek to duplicate other statutory controls or be used to achieve objectives of other legislation.

6.2. **Planning Authority Response**

- None.

6.3. **Observations**

6.3.1. Five observations have been made on the appeal. The matters raised generally repeat those made previously in the course of the planning application and focus on the following matters:

- Scale of development and impact on residential amenity and Glaslough village.
- Lack of information on how the development will supply energy to the national grid, failure to reduce size of development with reduction in feedstock and, therefore, piecemeal form of development.
- Inadequate assessment of transboundary effects.
- Risk of pollution of surface water.
- Lack of public consultation.
- Risks to health and safety.

6.4. **Further Responses**

- None.

7.0 **Assessment**

7.1. The proposed development comes forward within a national, regional and local planning policy context which supports the development of bioenergy projects, in the interest of climate change and waste reduction, subject to environmental safeguards (see section 5.0 above). Having regard to this context and having inspected the site,

examined the documentation on file, including all of the submissions received in relation to the appeal, I consider that the main issues for this appeal are:

- Scale of development.
- Feedstock.
- Visual impact.
- Impact on residential amenity.
- Traffic.
- Grid connection.
- Re-use of renewable energy.
- Impact on the water environment.
- Gas storage.
- Health and safety.
- Transboundary effects.

7.2. Matters raised in the course of the appeal in respect of environmental impact assessment and appropriate assessment are dealt with in sections 5 and 8, respectively, of this report. In the course of the planning application and appeal, observers raise the following matters which I comment on briefly below:

- Archaeology – The applicant’s Archaeological and Cultural Heritage Assessment identifies one location of cultural heritage interest within 500m of the site (Figure 3 of report). This comprises Old Donagh Church and associated structures (MO007-007001-0070010). No adverse effects are predicted for this site of cultural heritage interest. The Report recommends archaeological monitoring of top soil removal, given the potential of the site for archaeological remains.

The proposed development is physically removed from the site of cultural heritage interest. Having regard to this and the conclusions reached below in respect of landscape effects of the development and emissions to air, no direct or indirect effects on protected monuments are likely to arise. Archaeological monitoring can be addressed by condition.

- Consultation – The applicant is not obliged to consult with the public in respect of the proposed development. Further, statutory notices have served their purpose and alerted the public to the development. Submissions have been made on it and these are considered here.

7.3. Scale of development.

- 7.3.1. The proposed development was originally designed to accommodate feedstock of 12,000 tonnes per annum. In the course of the planning application this volume of feedstock was reduced to 6,167 tonnes per annum, with no reduction in the physical size of the facility. The applicant argues that it is not considered necessary to alter plant design as all proposed infrastructure is required for the AD process (no information is provided to support this statement) and the development is likely to be governed by a waste permit to be issued by the local authority, which would also stipulate a maximum annual/daily output.
- 7.3.2. The Waste Management (Facility Permit and Registration) Regulations 2007 (as amended) set out classes of activity which are subject to a waste facility permit. These include in Class No. 8:
- ‘The reception, storage and composting of biowaste at a facility where— (a) the maximum amount of compost and biowaste held at the facility does not exceed 6,000 cubic metres at any time, and (b) the annual intake shall not exceed 10,000 tonnes’.*
- 7.3.3. The proposed development will have an annual intake of 5,150 tonnes of waste (slurry). It is my understanding, therefore, that the applicant would be required to make an application to the local authority for a waste facility permit. This would require details of the waste process to be carried out on site, likely emissions, monitoring, housekeeping, procedures for accident and emergency, environmental monitoring and environmental management systems. Any permit which is granted can provide conditions in respect of the operation of the facility, including in respect of type and amount of waste which may be accepted, record keeping, measures to control emissions and monitoring (EPA, Amended Guidance Manual Waste Facility Permit and Registration Regulations 2008, as amended in 2012).

7.3.4. Having regard to the foregoing, I consider that there is a lack of clarity regarding the necessity for the scale of the proposed development and a risk, therefore, that it is over-sized. However, as permission has been sought for a specific volume of feedstock and as the proposed development would be subject to a Waste Facility Permit which would also prescribe and, importantly, monitor the volume of feedstock entering the site to the proposed levels, I do not consider that the potential oversizing of the development is, of itself, a significant issue subject to satisfactory environmental safeguards which are discussed below.

7.4. Feedstock

7.4.1. Parties to the appeal have raised the issue of use of alternative feedstock for the AD. However, permission has been sought for an AD with a defined feedstock i.e. from slurry and silage. Any alternative feedstock would require an application for planning permission.

7.5. Visual Impact

7.5.1. The appeal site is situated in an undulating rural landscape. It is removed from the public road and will be served by a new entrance to the west of the existing farm entrance. The proposed development comprises large physical structures. For instance, the substantial domed digesters and digestate storage tank, have a substantial footprint and a maximum height of 12m and 6m, respectively. However, the development would not be dissimilar to other large scale agricultural developments in the area, including the poultry farm to the south east of the site. Further, the structures will be largely cut into the landscape, with little skyline impact, and substantial additional planting is proposed around the perimeter the site and behind the proposed sightline. Views of the site from the public road, therefore, will be largely limited, with views through gaps in the vegetation and between structures alongside the public road. The development would also be visible from the rear of properties along Donagh Row (see photomontages). However, having regard to the profile of these structures within the undulating rural landscape and proposed landscaping, I do not consider that the development would unduly be prominent from these properties.

7.5.2. Cumulative effects. Approximately 100m to the south east of the appeal site is a large existing poultry farm. Given the relative positioning of the proposed development and the existing agricultural structures, existing and proposed roadside boundaries and proposed perimeter landscaping, the two developments do not and would not read together. However, I would accept that there would be a modest cumulative effect regarding the occurrence of large scale agricultural development in the area.

7.6. **Impact on residential amenity**

7.6.1. The appeal site lies in a rural area that is characterised by one off houses along public roads, a cluster of properties at Donagh Row to the south east of the site, and agricultural development. Nearest residential properties lie to the south and south west of the site, at c.80m and c.100m remove from it (Appendix Z, Noise Impact Assessment).

7.6.2. Noise. The applicant's Noise Impact Assessment is set out in two reports. The first is dated 20th February 2019 and the second 3rd April 2020. The reports refer to the same baseline data, modelling exercise and draw the same conclusions.

7.6.3. The noise modelling exercise is carried out in accordance with BS4124:2014, Methods for rating and assessing industrial and commercial sound. It is based on a 5-day survey of background noise on the appeal site and predicted noise levels from the operation of the CHP plant, HGV traffic movements and feeder operations during the day, as follows:

- Sound power output of CHP plant is 85dB(A),
- Tank stirrer motors 60dB(A),
- HGV movements from the roadside entrance to the feedstock building, 98dBA (4 movements/hr at 20kmh),
- Manitou movements, assumed power sound level 104 dB(A), 16 movements/hr at 20km/hr,
- Feed operations with sound power level of 90dB(A) based on similar plants.

- 7.6.4. I note that the HGV movements referred to above represent the number of trips that would be associated with 30 HGV trips/day, the maximum number associated with the movement of digestate from the site in any one day.
- 7.6.5. Night time noise is based on the operation of the CHP plant and tank stirrer motors only.
- 7.6.6. The report identifies quiet background noise levels in the vicinity of the site (35dB LA90 daytime; 26dB LA90 nighttime), which are typical of a rural area, and predicts increases in noise of +2.3dB during the day and +2.5dB at night, at the nearest residential receptors (R1 to R7, Appendix 1), with no tonal or impulsive noise. The predicted changes in noise levels at properties are modest, and well below standard noise limit levels prescribe to protect human health (WHO). I am satisfied therefore that the proposed development will not give rise to significant effects on residential amenity by virtue of noise. This conclusion was also accepted by the planning authority's EHO.
- 7.6.7. Emission to air and odour. The applicant's Air Quality Assessment is also set out in two reports. The first is dated 8th March 2019 and the second 3rd April 2020. The second report refers to the reduced intake of feedstock, but predicted emissions remain as per the original report and the conclusions are also the same. It is therefore inherently conservative in its assessment.
- 7.6.8. The Air Quality Report (2020) states that all silage will be delivered into the proposed silage clamps and all slurry will be pumped into the underground reception tank. From the underground reception tank, slurry will be fed, via the slurry storage tank, into the AD, with biogas produced directed to the CHP unit and converted to heat and electricity via the internal combustion engine. Post treatment digestate will be moved to the covered storage tanks.
- 7.6.9. Emissions to air are stated to arise from the CHP unit combustion stack (9m above ground) and comprise:
- Nitrogen dioxide, sulphur dioxide and carbon monoxide,
 - Minor emissions of particulate matter,
 - Volatile organic compounds and ammonia.

- 7.6.10. Emissions are predicted using the EPA's guidelines on Air Dispersion Modelling from Industrial Installations Guidance Note (AG4), based on source characteristics (strength, height of discharge etc.), prevailing atmospheric conditions and topography/local surface conditions. Forecast emissions are compared to European limits transposed into Irish law by the Air Standard Regulations 2011 (Tables 1 and 2 of report).
- 7.6.11. The appeal site lies in a rural area, within air quality zone D, rural Ireland where air quality is considered to be 'good' (Table 3). The use of this data as baseline information is standard practice in air quality impact assessments and provides a low (conservative) baseline for assessment purposes.
- 7.6.12. Likely emission concentrations from the CHP plant are set out in Table 4. However, it is stated that in practice actual levels are likely to be lower in the interest of operational efficiencies (see section 2.4 of report).
- 7.6.13. Tables 7 to 13 set out the predicted concentration of pollutants at the nearest receptors to the appeal site (R1-R7, Appendix A). In each case predicted ground level emissions are significantly below limit values. In Table 14, highest annual predicted levels of pollutants and predicted levels combined with baseline concentrations are compared to limit values. Again, predicted emissions, and cumulative concentrations, are well within limit values.
- 7.6.14. Potential odour effects are likely from animal manure/slurry, digestate and exhaust emissions. It is stated in the Air Quality Assessment that whilst the AD will give rise to odorous gases (methane, ammonia, hydrogen sulphide and carbon dioxide), these will be direct to the CHP plant whereupon they will be exposed to temperatures in excess of 470°C effectively deodorising the air (prior to discharge via the CHP exhaust stack). No assessment is therefore carried out as the CHP unit is not considered a source of malodour. It is also stated that a gas boiler is attached to the system to act in periods of fault (in the CHP system), ensuring deodorisation of the gas at high temperature.
- 7.6.15. With regard to manure/slurry, it is stated that all of the slurry required for the AD process is generated on the adjacent existing cattle farm and once pumped to the AD facility it will be stored on site in the onsite reception tank and subsequently fed through a closed loop system into the AD, with emissions to air passing through the

CHP unit. This assertion contradicts the assumptions of the Traffic and Transport Assessment which state that slurry will also arrive from Farms 2, 3 and 4. I assume that this material will be pumped into the reception tank (i.e. it will be transferred in a sealed manner) and is a matter which can be controlled by condition. In principle therefore I would accept that manure/slurry arriving on the site in this manner and being processed through the site, is unlikely to give rise to significant odour emissions, over and above those already associated with the existing farm yard.

7.6.16. With regard to digestate, having passed through the AD, digestate will be stored on site in a covered tank for up to 6 months. The Air Quality Report refers to technical reports which indicate significant reduction in odorous emissions from digestate compared to animal slurries (up to 80%). This principle has been accepted by the EPA and I would acknowledge that digestate is less odorous than animal slurry, and emissions from the development are not likely to exceed those already occurring on the site.

7.6.17. In summary, having regard to the foregoing, I consider that the processing carried out on site is unlikely to give rise to significant noise or odorous impacts to detract from the residential amenity of property in the vicinity of the site or wider area (e.g. Glaslough).

7.7. Traffic.

7.7.1. The applicant's Traffic and Transport Assessment (April 2020) states that traffic will be generated by the proposed development arising from the movement of feedstock to it, digestate from it and from site operatives. Of note, it is stated that of the 126.59ha of land bank, 33.08ha are located adjacent to the application site (Farm 1 and 2), 35.06ha are located 4.5km from the site in County Monaghan (Farm 3) and 49.93ha, 8.7km away in County Armagh (Farm 4, see Figure 1). Proposed haul routes to farms are shown in Figure 2 (this will also be the route for construction traffic from the site to and from the A3/N12). The roads identified as routes for construction and operational traffic are largely rural roads and are minor in nature. However, they are also trafficked by and accommodate contemporary agricultural vehicles.

7.7.2. A traffic survey was carried out between Thursday 21st November 2019 and Wednesday 4th December 2019, with the traffic count recording an average of 133 vehicles/day (excluding weekends) and 126/day for the whole period. The busiest day was Friday with 150 vehicles/day and least busy, Sunday with 91 vehicles/day.

7.7.3. Estimated traffic movements associated with the development are:

- Throughout the year, slurry will be transferred from four identified farms on the basis of 14 trips per week (7 loads per week), with half of this coming from the existing farm (Table 1).
- During 3 cutting periods, silage will be transferred from the surrounding farmland and satellite farms to the on-site clamps using agricultural trailers, with 24 trips/day (12 loads) for 6 days each year. It is stated that given the proximity of some of the land not all of these trips are additional, however these are not excluded from the assessment of likely trips.
- During spreading periods, digestate will be transferred from the site to the surrounding farmland (from where silage is drawn) and satellite farms using agricultural tankers (Table 2). The digestate will be spread in 4 periods, at the start of the spreading season and after each cut. This is estimated to occur over 24 days/year when there would be c.30 trips/day (15 loads). Again it is stated that some of the lands are adjacent to the site and do not involve additional trips on the public road. There will be no spreading of digestate in the closed season, between October and February.
- Trips associated with two site operatives.

7.7.4. In total, it is estimated that the development will give rise to:

- 2 personnel on site per day.
- 2 trips per day associated with slurry import (1 load/day each week).
- For a further 6 days/year, 12 additional trips per day associated with silage transport (24 trips/day over 6 days of the year).
- For 24 days/year, 30 additional trips per day associated with digestate transport (15 loads per day, 1 week, 4 times).

7.7.5. The applicant intends to import 5,150 tonnes of silage to the AD plant per annum (83%) and 1,017 tonnes of silage (17%). Having regard to the foregoing it is evident

that the daily movement of slurry, which forms to the largest feedstock input to the site, will be modest in terms of existing flows on the local road. This aspect of the development is not unreasonable in principle. However, what is not clear is the source of slurry i.e. the land holdings referred to by the applicant do not give rise to slurry, cattle do, and it is typically collected and held in underground slurry storage tanks as cattle over winter off the land. I am assuming that the cattle associated with the subject land holding are housed and that the source of slurry is therefore approximate to the same landholding. In the interest of clarity and if the Board are minded to grant permission for the development, I would recommend that the applicant be required to demonstrate a clear link between landbank referred to in the application, associated herd(s) and source, therefore, of slurry for the development.

- 7.7.6. With regard to silage and digestate, movement of silage to the site and movement of digestate from it is likely to coincide with similar trips in the area, for example, with most farmers cutting silage from May on and applying manure in late summer or spring. These additional background trips have not been factored into the traffic count.
- 7.7.7. It is proposed to move silage to the site in 14t loads with 73 loads in total, spread over 6 days (but divided into three separate cuts) i.e. 12 loads per day (24 vehicle trips). The 24 additional trips per day would comprise a moderate increase in traffic on the local roads, comprising a 20% increase in average daily flows (126 vehicles/day). It is stated in the application that some of these movements take place already on the roads in the area, associated with Farms 1 and 2 and I would accept that the number of new trips taking place on local roads would therefore is likely to be less than 12 loads per day.
- 7.7.8. With regard to digestate, it is proposed to move the 5,550 tonnes of digestate offsite in 370 x 15t loads, over a 24 day period associated with the application of manure to fields. This is estimated to equate to 30 vehicle trips per day but would be unlikely to correspond to silage movements on the same farm holdings. Again this would comprise a moderate increase in traffic on the local roads.
- 7.7.9. During construction, vehicle movements on local roads are likely to increase (not numerically addressed in TTA). However, these movements would be short term

and negative effects could be addressed by way of a construction Management Plan.

- 7.7.10. Having regard to the foregoing, I would accept that at times when silage is being imported to the site and when digestate is being exported from it, the development would result in a moderate increase in traffic over existing levels. Further, this effect is likely to occur when background traffic on local roads is already elevated. However, given that the more substantial effects of the development will be short term and take place in an environment where there is a relatively low level of traffic on the public roads (e.g. busiest hour was observed to be with 18 vehicles passing the site), I do not consider that the traffic effects of the development are of such significance to give rise to a serious risk of traffic hazard or sufficient to refuse permission for the development.

7.8. Grid connection.

- 7.8.1. Reason no. 1 of the planning authority's decision to refuse permission refers to the lack of information on grid connection and therefore the potential for detrimental effect on the visual and residential amenity of the area. In practice, the type of connection for the proposed development to the national grid will be determined by ESB and it would not be unusual for the details of the connection to be determined following a grant of planning permission. However, any such connection which requires substantial works over and above the sub-station proposed here is likely to require planning permission and issues of visual and residential impacts would be considered at this time.

7.9. Re-use of renewable energy.

- 7.9.1. My understanding of the AD process is that slurry and silage, in the contained and oxygen free environment, will produce biogas which can be used to generate heat or electricity or both, with the last option of combined heat and power being the most common.
- 7.9.2. The planning authority have raised concerns regarding the absence of information on the reuse of the renewable energy generated on site (reason 1 for refusing permission). The Environment Report (date stamped 20th May 2020) also refers to

the absence of technical data regarding the estimated proportion of renewable energy to be used on-site and the amount projected to be exported to the national grid. It states that this information can be used to determine if the project is considered a commercial operation.

- 7.9.3. In his appeal, the applicant does not provide information on the proportion of renewable energy to be used on site or exported, but provides general information on the potential use of renewable energy and heat within the site (e.g. digestate drying, pre-heating feedstock). It is stated that any additional infrastructure required to utilise surplus heat would be subject to a planning application.
- 7.9.4. Having regard to the foregoing and the details on file, I would accept that there is a lack of information regarding the proportion of energy that is generated to be used on site and exported into the national grid. However, the development comes forward in a policy context which encourages the development of renewable energy, to substitute fossil fuels for activities on the site and to provide additional sources into the national grid. The lack of clarity regarding proportion of renewable energy to be used on site/exported is therefore not unreasonable or necessarily relevant as both uses of energy are consistent with the policy context. The commercial nature of the development has been raised by parties to the appeal in the context of the need for EIA. However, I have addressed this matter previously in my report.

7.10. Impact on the water environment.

- 7.10.1. The planning authority's second reason for refusal states that inadequate information has been submitted in relation to the impact the proposed development on the quality of surface waters, given the lack of detail submitted on the potential for run off of nutrients to vulnerable surface waters and the ambiguous information contained within the nutrient management plans for recipient landholdings.
- 7.10.2. The proposed development lies c.200m to the west of Mountain Water river and the ditch running along the southern boundary of the site discharges into this water body. The site and Farms 1 to 4 (Figure 2 of TTA) lie within the Blackwater (Lough Neagh-Lower Bann) Catchment, with Farms 1 and 2 lying within the Mountain Water Sub-catchment (reference no. 03_2) and Farms 3 and 4 in the Cor River Sub-catchment (reference no. 03_5). For the period 2013 to 2018 Mountain Water had

'moderate' status and was 'at risk' of not meeting good status (see attachments). The status of Cor River was unassigned.

7.10.3. The Blackwater (Lough Neagh-Lower Bann) Catchment 2010-2015 Assessment report (December 2018) identified Mountain Water and other surface water bodies in the vicinity of Farm 3 and 4 (in NI) as water bodies where agriculture is a significant pressure (see Figure 11 in attachments). Further, Mountain Water and Emy Lake (sub-catchments 3_2 and 3_4) have been identified as an 'Area for Action' under the Water Framework Directive.

7.10.4. The surface water management arrangements for the appeal site include:

- Location of all development on a hardstanding surrounded by a raised kerb to contain all runoff.
- Collection of dirty water from the yard area and its direction into the underground slurry storage tank for treatment in the AD.
- Collection of clean water from roofs, entrance and covered structures with discharge to a surface water course to the south of the site via a hydrobrake system (limiting discharges to 5l/s) and bypass separator (oil interceptor).
- Provision of a storm water attenuation tank (to provide storage of 215m³, for a 1 in 100 year storm event, with capacity to include allowance for climate change over 100years).
- Treatment of foul sewage arising from the on-site offices into a package waste water treatment system with sand polishing filter.

7.10.5. The proposed arrangements are supported by the technical assessments and specifications set out in the Drainage Design Report, Site Characterisation Form and Report. The Site Characterisation Form and Report, which identify bedrock at 1.3m below ground level, slow percolation values in soils and location over Locally Important Aquifer (with low vulnerability rating), support the proposed use of a package treatment system with sand polishing filter. Having regard to the foregoing I do not consider that the proposed would give rise to a risk of water pollution from on-site activities, including the management of surface and foul water.

7.10.6. The Lough Neagh and Lower Bann Catchment Assessment Report (see attachments) states that the impact from agricultural pressures include phosphorus

loss to surface waters from, for example, direct discharges; or runoff from farmyards, road ways or other compacted surfaces, or runoff from poorly draining soils, sediment from land drainage works, bank erosion from animal access and stream crossings. Digestate from the facility will be exported to associated farm lands, Farms 1 to 4. If improperly applied, there is a risk, therefore, that digestate from the proposed development could exacerbate existing pressures and result in further water pollution of surface water bodies.

7.10.7. The Nutrient Management Plan for Farm 1, 12.79ha, states that 550m³ of digestate can be used on the land bank. Lands are shown in an aerial photograph within the report and comprise agricultural fields to the east, and one to the west, of the appeal site. The Nutrient Management Plan for Farm 2 refers to an area of 25.81ha, this is 3ha less than the area of the farm holding shown in Table 1 of the TTR. The Plan concludes that 1,300m³ of digestate can be used on the on the land bank and aerial photographs show fields to the west of the appeal site and to the south of the site and public road. Similarly, for Farm 3 and 4 the Nutrient Management Plans state that 1,700m³ and 2,000m³ of digestate can be used on the land banks of 35.06ha and 49.63ha, respectively, with fields removed from the application site. All of the reports indicate that nitrogen loading is within the statutory 170kg livestock manure nitrogen loading per year limit set out in the European Union (Good Agricultural Practice for Protection of Waters) Regulations 2017.

7.11. There is little explanation given in respect of the detail provided in the Nutrient Management Plan. However, the applicant states that all of the lands identified have been soil sampled and digestate is only applied in line with crop requirements informed by soil analysis. I note that the soil index ratings given for different fields within the overall lands upon which digestate will be spread are typically 1 or 2 indicating lower soil fertility.

7.12. The approach proposed by the applicant of applying organic fertiliser based on measured nutrient status of soils is consistent with the best practice in the industry and, in principle with regard to maximum loading, with the requirements of the European Union (Good Agricultural Practice for Protection of Waters) Regulations 2017 (with similar legislation in Northern Ireland). Further, in practice, the detailed application of digestate to lands will be site specific and subject to additional controls set out in the Regulations, for example governing minimum distances from

watercourses, circumstances under which organic fertiliser cannot be applied (e.g. land that is likely to flood, on steeply sloping ground) and record keeping.

Compliance with the Regulations is a matter for local authorities who are responsible for monitoring surface water bodies and the inspection of farm holdings etc.

7.13. Having regard to the foregoing, and for the purpose of this appeal, I am satisfied that the applicant has provided sufficient information on the arrangements for the spreading of digestate, including identification of the lands to which it will be applied and has demonstrated, in principle, the current capacity of these lands to accommodate it. In practice, the detailed application of digestate to these lands will be site specific and is a matter which is governed by other statutory codes and overseen by the local authority. Subject to these arrangements, the proposed development is not likely to have an adverse effect on water quality either individually or cumulatively with other development.

7.14. **Gas storage.**

7.14.1. As stated by the applicant in response to the appeal, section 2.49 of submission, no gas will be stored on site that is not an inherent part of the AD process. In the event of the CHP going offline, I note that there are alternative arrangements for the venting gas.

7.15. **Health and safety.**

7.15.1. As stated, this will be a matter for the local authority to address in a Waste Permit Licence.

7.16. **Transboundary effects.**

7.16.1. The proposed development includes the spreading of digestate in lands in Northern Ireland. My understanding is that land spreading in the North is also the subject to statutory control under the Nutrient Action Programme 2019-2022 and would be a matter for this jurisdiction.

8.0 **Appropriate Assessment**

- 8.1. The nearest European site in the state to the appeal site is Slieve Beagh Special Protection Area (site code 004167), lying c.9km to the east of it. Conservation interests of the site are to maintain or restore the favourable conservation condition of the bird species Hen harrier which is listed as Special Conservation Interest in the SPA. European sites in Northern Ireland are >9km from the site and its associated lands.
- 8.2. The appeal site is therefore substantially removed from any European site and no direct effects are likely to arise. Indirectly, inappropriate management of surface water on site and land spreading could result in the deterioration of water quality, with adverse effects on downstream water bodies. The ditch into which the appeal site discharges and the lands upon which digestate will be spread discharge, downstream into Lough Neagh and Lough Beg Special Protection Area. However, this European site is over 30km from the appeal site and, in the absence of any mitigation measures, at this distance pollutants would be subject to substantial dilution, biodegradation and attenuation and significant effects on water quality are unlikely to arise. Consequently, it is concluded that no Appropriate Assessment issues arise as the proposed development would not be likely to have a significant effect individually or in combination with other plans or projects on a European site.

9.0 **Recommendation**

- 9.1. Having regard to the foregoing, I recommend that permission from the proposed development be granted.

10.0 **Reasons and Considerations**

Having regard to national planning policy in respect of waste management and climate action, the location of the proposed development in a rural area, on a site which is currently used for agricultural operations, the scale, siting and detailed design of the proposed development, including the arrangements for landscaping and the management and discharge of surface water and digestate arising on site, it is considered that, subject to compliance with the conditions set out below, the

proposed development would not seriously injure the amenities of the area or of property in the vicinity, would not be prejudicial to public health or water quality, and would be acceptable in terms of traffic safety and convenience. The development would, therefore, be in accordance with the proper planning and sustainable development of the area.

11.0 Conditions

1.	<p>The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars submitted on the 6th day of April 2020, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.</p> <p>Reason: In the interest of clarity.</p>
2.	<p>The operator of the proposed facility shall not commence operations until a waste facility permit has been received from the planning authority.</p> <p>Reason: In the interest of orderly development.</p>
3.	<p>Water supply and drainage arrangements, including the disposal of surface water shall comply with the requirements of the planning authority for such works and services.</p> <p>Reason: In the interest of public health and to ensure a proper standard of development.</p>
4.	<p>Prior to the commencement of development, details of the source of slurry for the proposed development (herd location and number) shall be submitted to the planning authority for written agreement.</p> <p>Reason: In the interest of clarity.</p>

5.	<p>Digestate generated by the proposed development shall be disposed of by spreading on land, agreed in writing with the planning authority. The location, rate and timing of spreading together with any buffer zones required shall be in accordance with the requirements of the European Communities (Good Agricultural Practices for the Protection of Water) Regulations, 2014.</p> <p>Reason: to ensure the satisfactory disposal of waste material, in the interest of amenity, public health and to prevent pollution of watercourses.</p>
6.	<p>The site shall be landscaped in accordance with a comprehensive scheme of landscaping, details of which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This scheme shall include the following:</p> <ul style="list-style-type: none"> (a) A plan to scale of not less than 1:500 showing the species, variety, number, size and locations of all proposed trees and hedgerows (which shall comprise predominantly native species such as mountain ash, birch, willow, sycamore, pine, oak, hawthorn, holly, hazel, beech or alder). (b) Specifications for mounding, levelling, cultivation and other operations associated with grass establishment. (c) A timescale for implementation. <p>All planting shall be adequately protected from damage until established. Any plants which die, are removed or become seriously damaged or diseased, within a period of five years from the completion of the development, shall be replaced within the next planting season with others of similar size and species, unless otherwise agreed in writing with the planning authority.</p> <p>Reason: In the interest of visual amenity.</p>
7.	<p>Prior to the commencement of development, details of the materials and colours of all external finishes to the proposed buildings and other plant associated with the development shall be submitted to, and agreed in writing, with the planning authority.</p>

	<p>Reason: In the interest of orderly development and the visual amenities of the area.</p>
8.	<p>The construction of the development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including hours of working, noise management measures and off-site disposal of construction/demolition waste.</p> <p>Reason: In the interests of public safety and residential amenity.</p>
9.	<p>Details of all loading and unloading of waste on site shall be agreed in writing with the planning authority prior to the commencement of development.</p> <p>Reason: In the interests of amenity.</p>
10.	<p>The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the developer shall -</p> <ul style="list-style-type: none"> (a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development, (b) employ a suitably-qualified archaeologist who shall monitor all site investigations and other excavation works, and (c) provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove. <p>In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.</p> <p>Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.</p>

11.	<p>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.</p> <p>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.</p>
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Deirdre MacGabhann

Planning Inspector

16th November 2020