An Bord Pleanála

Specialist Report

R322098_App1

Development	**Construction of an Anaerobic Digestion facility along with all associated site works at Country Crest, Collinstown, Lusk, Co. Dublin.**
Applicants	**Country Crest ULC**
Type of Application	**Normal Planning Appeal**
Planning Authority	**Fingal County Council**
Senior Planning Inspector **Senior Env Scientist**	**Stephen Ward.** **Emmet Smyth**
Date	**18th March 2026**

Contents

1.0 Scope of the Report

1.1 This report to the Senior Planning Inspector and available to the commission is a written record of my review and examination of the following.

1.2 Review of the relevant information with regard to the Environmental Impact Assessment, with particular regard to Land- soils Geology and Hydrology (Chapter 10). My assessment provides specific advice in relation to the potential for environmental impact from the development adequacy of the Assessment presented. In preparing this report, I have had regard to submissions and observations received by the Commission as they relate to the proposed development.

1.3 I will address the regulatory requirements pertaining to the subject development. I will address the hydrological and the hydrogeological assessments submitted, including the potential for WFD implications, onward use of the digestate as fertiliser, Fugitive Methane Emission losses, feedstocks and storage of both liquid and solid digestate. This report will supplement the Inspector's Report.

1.4 In addition to the above I have reviewed the following. Data available on up-to-date water Quality using the EPA's Eden WFD application, the GSI data, research papers identified within the submissions, the National Biomethane Strategy.

1.5 In my capacity as Inspectorate Environmental Scientist with over 25 number of years professional experience, I have the relevant expertise to provide a professional opinion as to the aforementioned.

2.0 Issues examined and matters for consideration.

2.1 Regulatory requirements of the subject development.

2.1.1 Biogas Facilities & Licensing requirements.

2.1.2 Anaerobic digestion (AD) of organic materials, including waste and non-waste feedstocks, may be carried out subject to an appropriate regulatory authorisation issued by the Environmental Protection Agency or a Local Authority. The type of authorisation required is dependent on a number of factors, the feedstock type and whether or not the feedstock is classified as a waste.

Waste Feedstocks from Agriculture (Manure).

Waste is defined in the Waste Framework Directive (Directive 2008/98/EC) as "*any substance or object which the holder discards or intends or is required to discard*". If waste is utilised as a feedstock to an AD plant, then a waste authorisation will be required.

2.1.3 Requirements for the exemption from the need for waste authorisation:

It may be the case that certain wastes are excluded from the need for a waste authorisation under Article 2 of the Waste Framework Directive. Article 2, 1(f), excludes "faecal matter, if not covered by subsection (2)(b), straw and other natural non-hazardous agricultural or forestry material used in farming, forestry for the production of energy from such biomass through processes or methods which do not harm the environment or endanger human health.

In order for any waste stream to meet the requirements of Article 2, 1(f), the waste in question needs to be sourced from agriculture or forestry. The term **agriculture is defined** in the Waste Management (Facility Permit and Registration) Regulations 2007, as amended, as "the growing of all types of commercial food crops, including food crops for stock-rearing purposes".

Article 2, (2)(b) of the Waste Framework Directive exempts the treatment of animal by-products including processed products, except those which are destined for incineration, landfilling or **use in a biogas** or composting plant.

As per the Animal by-product Regulations 1069/2009, manure is a Category 2 Animal By-product and 'manure' means any excrement and/or urine of farmed animals other than farmed fish, with or without litter.

This means that agricultural manure does not require a waste authorisation when it is used directly as a fertiliser on land, **however when used as a feedstock for AD, waste authorisation is required.**

2.1.4 Types of waste authorisation for an Anaerobic Digestion plant?

There are three different waste authorisations applicable to AD as follows:

1. Industrial Emissions Licence:

Industrial Emissions Licences are issued by the EPA under the Environmental Protection Agency Act 1992 as amended. The following activity class is applicable to AD plants with a capacity threshold greater than 100 tonnes per day:

11.4 (b) Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, (other than activities to which the Urban Wastewater Treatment Regulations 2001 (S.I. No. 254 of 2001) apply):
(i) biological treatment.
(c) Notwithstanding clause (b), when the only waste treatment activity carried out is anaerobic digestion, the capacity threshold for that activity shall be 100 tonnes per day.

Note: Capacity refers to the technical capacity of an installation e.g. technical or physical limitations on waste processing capacity by infrastructure or machinery. In short, whereby capacity at a facility exceeds, for example 100 tonnes per day authorisation is required.

2. Waste Facility Permit/Certificates of Registration:

Waste Facility Permits and Certificates of Registration are issued by Local Authorities to private operators for waste recovery activities, and Certificates of Registration are issued by the EPA to Local Authorities, under Part I and Part II of the Third Schedule of Waste Management (Facility Permit and Registration) Regulations 2007 as amended.

The Waste Management (Facility Permit & Registration) Regulations 2007, as amended the 3rd Schedule Parts 1 and 2 **MAY** be applicable depending on the feedstock.

Under the 3rd Schedule Part 1 Class 8 lays out the criteria where there is a requirement for a Waste Facility Permit.

Class 8; the reception, storage, and biological treatment of **biowaste** at a facility where-

(a) The maximum amount of compost, biowaste and digestate 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.

Under the 3rd Schedule Part 2 Class 12 lays out the criteria where there is a requirement for a Certificate of Registration.

Class 12; The storage and biological treatment on the premises where it is produced, of **biowaste**, where-

(a) The amount stored and treated does not exceed 50 tonnes per annum, and

(b) the maximum amount of biowaste, compost and digestate held at the facility at any time does not exceed 20 tonnes.

Both classes explicitly reference 'biowaste.' The definition of 'Biowaste' is defined under the Waste Management Act 1996, as amended by Statutory Instrument number 323 of 2020 European Union (Waste Directive) Regulations 2020.

'Biowaste defined as follows, biodegradable garden and park waste, food and kitchen waste from households, restaurants and caterers and retail premises and comparable waste from food processing plants.

In addition, biowaste does not include forestry or agricultural residues, manure, sewage sludge or other biodegradable waste such as natural textiles, paper, or processed wood. It also excludes those by-products of food production that never become waste.

3. Waste Licence: If the conditions of the activity classes under Part I and Part II of the Third Schedule of Waste Management (Facility Permit and Registration) Regulations 2007 as amended, cannot be met, and the capacity threshold is below that required for an IE licence, then a waste licence from the Agency will be required.

Where there is a question regarding the type of authorisation required: industrial emissions licence, waste facility permit, waste licence or none of these a request to the Agency can be made under Article 11 of the Waste Management (Facility Permit and Registration) Regulations 2007 as amended.

2.1.4 Non-Waste Feedstocks

A non-waste feedstock is a feedstock which does not meet the definition of "waste" under the Waste Framework Directive. Non-waste feedstocks to AD may include by-products (Article 27) and materials which achieve end-of-waste (Article 28) status.

The production of biomethane from AD is covered by the Industrial Emissions Directive (IED) activity 4.1 'Production of organic chemicals', as biomethane is an organic chemical. Under IED activity 4.1, production means "…production on an industrial scale by chemical or biological processing…" and as the national competent authority for regulating industrial emissions, the EPA has set industrial scale at an installation capacity of 100 tonnes per day. IED activity 4.1, and the specific activity class relating to the production of biomethane of 4.1(a), are transposed in the first schedule of the EPA Act 1992 as follows:

5.12 The production of organic chemicals, such as:

(a) simple hydrocarbons (linear or cyclic, saturated or unsaturated, aliphatic or aromatic)

For plants **whose primary activity is AD**, utilising only non-waste feedstocks, and with an installation capacity exceeding 100 tonnes per day, an industrial emissions licence under activity Class 5.12(a) will be required.

In the case of an AD plant authorised under industrial emissions activity class 5.12(a), the EPA will utilise the BAT conclusions set out in the Commission Implementing Decision (EU) 2018/1147, establishing BAT conclusions for waste treatment, in accordance with Article 14(6) of the IED, as the most appropriate BAT for the control of AD processes.

In cases, where AD is not the main site activity, but an AD plant is operated on site and AD is identified as a BAT technique under the main sector activity BAT, then the AD plant will be authorised under the main activity class of the installation. Activity class 5.12(a) will be applied by the EPA to the AD process on a case-by-case basis when production of biomethane at the installation is deemed to be on an industrial scale i.e. exceeding and installation capacity of 100 tonnes per day.

The EPA will consider the application of activity class 5.12(a) further on a case-by-case basis, where AD is not the main activity on site and is not a BAT Technique under the main activity sector BAT.

2.1.5 Animal by-products

Animal by-products means the entire bodies or parts of animals; any product obtained from animals or products of animal origin which are not intended for human consumption. Licences for the processing of ABP are issued by the Department of Agriculture, Food, and the Marine (DAFM).

The proposed development will include an Anaerobic Digestion Facility which will be a 'Type 1' plant under the European Union (Animal By-Products (ABP)) Regulations (S.I. No. 187 of 2014). The facility will process Category 2 animal

by-products, specifically farmyard manures i.e., cattle slurry, pig slurry and poultry manure. Approval will be required from the Department of Agriculture, Food, and the Marine (DAFM) in accordance with Article 24(a) of Regulation (EC) No. 1069/2010, for the acceptance and/or treatment of animal by-products.

The applicant has advised that DAFM were consulted during the design phase and the Proposed Development has been designed in accordance with DAFM guidance *CN11: Conditions for approval and operation of biogas plants transforming animal by-products and derived products in Ireland.* The application process for approval and operation of the proposed facility by the DAFM occurs in three stages as follows.

• Application for approval in principle.

• Application for conditional approval to operate which allows an operating period of three months to test and demonstrate ABP compliance. This stage commences following the construction and handover of the facility.

• Full approval.

2.1.6 Feedstock proposed

The facility is proposed to accept the following feedstocks these are summarised in the following table.

As evidenced from the following table the primary feedstock is ensiled grass and whole crop silage accounting for a significant proportion of the feedstock c.49%.

Substrate	**Quantity tonnes/Annum**	**Classified as waste**
Poultry Litter	**7,000**	**Yes**
Cattle Manure	**1,080**	**Yes**
Vegetable Processing by-products	**650**	**Yes**

Food Processing By-product	**100**	**Yes**
Draff Grains	**400**	**Yes**
Whole Crop silage	**10,000**	**No**
Grass silage	**24,500**	**No**
Slurry	**17,080**	**Yes**
Water	**8,000**	**No**
Wastewater Treatment Plant sludge	**1,300**	**Yes**

The activity would require an Industrial emissions Licence from the Environmental Protection Agency. No additional authorisation will be required as the activity in its entirety will be carried out under the confines of the aforementioned licence.

3.0 Soils, Geology & Hydrology.

3.1 Site Overview.

3.1.1 Soils and geology

The quaternary sediment type that underlies the area of the subject site and the surrounding area is a till derived from Namurian sandstones and shales. The site is underlain by predominantly with the parent material description being shales and sandstone tills with the soil grouping of surface and groundwater gleys which are categorised by poorly drained soils with recharge coefficient for the area showing 8%, which essentially means that's run-off will dominate over infiltration in this area. Consequently, the vulnerability is deemed to be low. There is a rib of alluvial soils aligning with the watercourse located to the east of the development and running northwest to southwest, and a rib of alluvial soils also to the south of the subject development.

The soils described above was corroborated by the finding of the site characterisation report submitted to address the ability of the site to attenuate and dispose of wastewater effluent generated by the facility.

Geologically the site and the surrounding areas is mapped as being underlain by bedrock of the Loughshinny formation which is described as primarily dark micrite and calcarenite shale which would be included under the rock group name of Dinantian Upper impure Limestones.

The aquifer underlying the site is mapped as a Locally important aquifer with bedrock that is generally moderately productive. There are no karst features within the site with the nearest recorded on the Geological Surveys map viewer recording a spring c1.3km to the southeast. Groundwater flows are expected to flow with the topography and towards surface water features. This type of aquifer in which the networks of fractures, fissures and joints, through which groundwater flows, is reasonably well connected and dispersed throughout the rock, giving a moderate permeability and groundwater throughput. Aquifer storage is moderate and groundwater flow paths can be up to several kilometres in length. There is likely to be a substantial groundwater contribution to surface waters in the form of baseflow and large (>2,000 m3/d), dependable springs may be associated with these aquifers. This type of bedrock aquifer will typically be able to yield 100-400m^3 per day.

3.1.2 Hydrology and Water Framework Directive.

The subject site is located within the 08 Nanny-Devlin catchment, the sub catchment 08_2Palmerstown_SC_010 and the waterbody Palmerstown_010. The monitoring station located within this waterbody is at bridge downstream of Rathmooney river confluence. Monitoring data at this location shows indicative quality for the parameter total ammo nia as N as moderate and trending upwards and this was similar for Total oxidised Nitrogen. The indicative quality with regard to Ortho-phosphate as P is bad and also trending upwards. The waterbody has not been assigned a Water Framework Directive (WFD) risk calculation and so presently its WFD risk is under review. The pressures identified in the waterbody have been

attributed to anthropogenic pressures although this is presently under assessment.

The ground waterbody underlying the site is the Lusk- Bog of the Ring ground waterbody (IE_EA_G_014) and is deemed to be at risk of not achieving the objectives of the Water framework Directive. This groundwater body is 232.91km^{2} ^{in} area with 5 monitoring stations. Indicative quality has varied across the waterbody, with regard to Total Ammonia (as N) it is failing to achieve good status with this parameter trending upwards at one of the stations, regarding Chloride also failing to achieve good status across two stations and similar for the parameter Ortho-phosphate (as P) also failing to achieve good status at one of the stations. The pressures across the ground waterbody can be attributed to Agriculture, domestic wastewater and anthropogenic pressures. Each of these identified pressures identified as adding to the nutrient issues within the ground waterbody.

3.1.3 Flooding.

Given the geology of the site surface water run-off would dominate over infiltration with the likelihood of artificial drainage in the forms of drainage ditches throughout the lands. This was confirmed that the subject site is surrounded by drainage ditches which drain towards the Rathmooney stream which is part of the Palmerstown_010 waterbody. However, the site is not located on or within any flood plains or lands liable to flooding. Record of pluvial flooding was indicated some distance to the North-west of the site.

4.0 Impacts.

4.1 Impacts during construction and mitigation proposed.

This is the phase where the applicant states the existence of the potential for impact. The applicant identified and broke the various categories down as follows.

4.1.1 Soil removal & compaction.

Given the nature of the development there will be excavations and the removal of soils from the area to be worked with excavations between depths of 1 and

4 metres. The depths of soil across the site, given the low permeability and low vulnerability would be expected to be between 5 and 10 metres of clayey subsoil material present across site. The applicant has stated that between 3 and 5 metres of subsoil exist across the site with the deepest excavation being required for the digester unit itself. This would essentially remove the requirement for any bedrock removal which the applicant has confirmed. These excavation works may pose a temporary reduction in the protections afforded the groundwaters by the subsoil, but post reinstatement will not pose likelihood of significant impact to the underlying groundwaters. Regarding the potential compaction of soils within the area, it is proposed to utilise hardcore yard areas for the routing of construction traffic through the site and hardcore areas in and around the areas of the proposed structures. The permeability of the soils within the area are of low permeability and as such these works will have a short term and not significant impact.

4.1.2 Potential for spillages from mobile plant and Equipment during works.

Given the nature of the soils across this site the likelihood of groundwater impacts from hydrocarbon spillages is considered to be minimal. There will be an increased vulnerability in areas of excavation where the clay subsoil material has been temporarily removed. Given this the applicant asserts that any such accidental spillages would have a negative short to medium term impact on soils and potentially groundwaters.

4.1.3 Run-off waters and Sediment

Run-off will dominate over infiltration given the soil and subsoil materials across the site as a result during times of heavy precipitation this could lead to contaminated surface waters making there way to the local waterbody Palmerstown_08 via the drainage ditches surround the subject site. The potential impact on the groundwater body is limited given the nature of the soils across the site. The applicant also states that given the limited time for soils to be exposed this will minimise the potential for sediment contamination and also asserts that there will be no impact on the Local waterbody. Regarding concrete and the potential risk to surface water and groundwaters will exist during

construction and equipment washdown. However, the risks remain the same with surface waters being the most likely impacted.

4.1.4 Mitigation measures proposed during the Construction Phase.

The mitigation measures being propose during the Construction Phase are largely based on the on CIRIA (Construction Industry Research and Information Association, UK) technical guidance on water pollution control and are currently accepted best practice, in addition to guidance issues by the IFI in the prevention of water pollution in and adjacent to waters. The adherence to the measures as outlined in these documents and additional measures outlined in the Environmental Impact Assessment Report will certainly reduce the potential impacts on soils, geology, ground waters and surface waters during the construction phase.

4.2 Impacts during operation and mitigation

This is the phase where the applicant states the existence of the potential for impact. The applicant identified and broke the various categories down as follows.

4.2.1 Detention basins.

The applicant has stated that there will be no process emissions to any waterbody from the site operations. The site will be provided with 2 No. detention basins for the containment of clean surface waters run-off from the facility**.** This water will be discharged to the existing drainage ditches within the site.

4.2.2 Foul Waters.

All staff at the facility will be served by an existing wastewater treatment system which has been designed to cater for a population equivalent of 6. Staffing at the facility would be given a daily hydraulic loading of 30 litres per day based on the EPA 1999 Treatment system Manual. Based on this the existing system has the capability to cater for a maximum daily staffing of 30 employees. In the absence of a site characterisation report in support of the application, I am not

in a position to comment on the capacity within the percolation area to cater for this maximum daily loading.

4.2.3 Soiled water Storage.

Imported silage is to be transported to the facility and stored in clamps this is where soiled waters will be generated from this aspect of the development. Soiled waters will be collected at transferred to a holding tank. The holding tank will also collect soiled waters from the feedstock holding area and solid digestate holding area directing it to the holding tank. The potential will be provided for the soiled water to be introduced to the digestion process.

4.2.4 Digestate Storage

The digestate storage and potential contamination with rainwater can impact on surface water quality within the area if not appropriately managed. The yard area where the anaerobic digestion occurs is completely bunded with concrete wall and earth berm to the south. All the drainage basins have automatic shut-off valves to prevent the transfer of contaminated liquid to an unprotected area. The liquid digestate is to be stored in sealed lagoons with collection chambers providing protection from spillages of the liquid digestate. The storage tanks are adequately sized to accommodate both liquid and solid fractions of digestate during the closed period for landspreading as required in the European Union (Good Agricultural Practice for the Protection of waters) (Amendment) Regulations 2025.

4.2.5 Landspreading of Digestate

The activity of the landspreading of the digestate will be governed by the provisions of the European Union (Good Agricultural Practice for the Protection of waters) (Amendment) Regulations 2025, with the Local authority being the competent Authority in this regard. Adherence to the requirements outlined in

this statutory instrument will ensure no significant impacts to soils, groundwaters or surface waters.

4.2.6 Spills and Leaks

During the operational phase of the development there exists the potential for the contamination of soils, surface waters and to a lesser degree groundwaters. All tanks and containers are to be appropriately bunded.

The applicant submitted an air Quality Assessment report to support the application. They state that the EPA guidance directs assessment of the impacts of Ammonia and Nitrogen European sites from intensive agricultural installations. The guidance sets out that dispersion modelling predictions regarding emissions of ammonia from such facilities at ecologically sensitive locations in European sites should be assessed against a threshold of 1% of the critical load of Nitrogen and 1% the critical load for ammonia. The report established that ammonia levels would increase with regard to the proposed combustion process at the site but predicted that that they will not result in significant concentrations in areas beyond the site. The predicted Nitrogen deposition rates were predicted to be well below the 1% threshold of significance at ecologically sensitive locations with no potential significant impact predicted on these sites as a result of air emissions from the proposed facility. A flare will exist at the facility for the purposes of burning off biogas not meeting the required standard for export, or the production of excess gas, this system is not envisaged to be utilised normally.

4.2.8 Mitigation measures proposed during the Operational phase.

The applicant has proposed the following mitigation measures during the operational phase so as to reduce the potential impact on the soil's geology and the local water environment. Regarding the delivery of feedstock this will arrive at the facility via HGV. The vehicle will enter the facility via high-speed roller doors which will close prior to the truck unloading. Solid feedstocks will be stored in silos with liquid feedstock being stored in a 500m^3 tank which will be bunded. Additional liquid feedstock can be delivered via a feeding line, which

is double lined, in an attempt to curtail the impact of odours. As referenced earlier the landspreading of digestate will be done so in accordance with the requirements of European Union (Good Agricultural Practice for the Protection of waters)(Amendment) Regulations 2025. The area of the yard proposed for Anaerobic digestion will be bunded and at a lower final floor level than the area where digestate will be stored. Solid digestate will be stored in a roofed compound to prevent the generation of soiled waters. Liquid digestate lagoons will be at a lower final floor level than all surrounding areas. These lagoons will also be covered with chambers to collect soiled waters from any spillages.

Surface waters across the site will be collected via a clean water collection system. Gradients across the site will allow for the drainage via gravity towards the proposed detention basins and to the existing drainage network via a petrol interceptor and a flow control device restricting the flow to existing greenfield run-off rates. All chemicals and fuels will be stored in appropriately bunded areas with spill kits etc to be provided. Any contaminated waters will be retained within bunded areas.

5.0 Submissions

A number of submissions were raised and submitted outlining many concerns about the proposed development. Theses can be summarised as follows. For the purposes of this report I will discuss the first 3 topics.

- Feedstock & Sewage Sludge
- Fugitive Methane Emissions & potential health impacts and proximity to residences
- Digestate and Biomethane use
- Traffic and Transport

5.1 Submission topics

5.1.1 Feedstock

An Taisces submission refers to the variety of the feedstock and make the point that the feedstock must be sustainable in the first instance and that their

production will not exacerbate the ongoing issues with greenhouse gas emissions and water quality deterioration amongst others. The emissions that contribute to the production of the feedstocks, in this case ensiled grass and whole crop silage accounting for a significant proportion of the feedstock c.49%. The point is made that the production of these need to be considered as indirect impacts, as the production of these has the potential to lead for significant impacts both climate and waters. I am not sure that the applicant has adequately addressed this issue in full and as such I have concerns as to whether the proposed development can attain the key requirements of environmental sustainability outlined in Ireland's National Biomethane Strategy (2024) that outlines that for biomethane production from AD plants to be classified as a zero-carbon renewable fuel, plants must be able to achieve increasingly strict sustainability criteria as outlined within the EU Renewable Energy Directive II ("RED") and RED III criteria. The RED II criteria stipulated that biomass fuels produced from agricultural biomass cannot be derived from raw material obtained from (1) land that was formerly peatland; (2) lands with a high biodiversity value; or (3) lands with a high carbon stock.

In addition, RED II required that all biomass fuels used for electricity, heating and cooling must achieve at least a 70% GHG emission saving, increasing to 80% for installations that start operating from 2026.

A number of submissions cite the use of Biosolids as a feedstock within the process as a concern. Referencing the Bord Bia certification associated with the Country Crest facility adjacent to the proposed site. Sewage sludges are recognised as a feedstock in the anaerobic digestion process, and I would not see any concern regarding the use of same in the process.

5.1.2 Fugitive Methane Emissions & potential health impacts and proximity to residences.

An Taisce reference that fugitive emissions in the form of methane losses are a significant issue in anaerobic digesters citing various papers highlighting this issue. Considering this the submission goes on to say that this is an issue that needs to be addressed as part of the assessment. This issue was not raised or addressed in the assessments submitted. Regarding the issues of odour and

deposition I am of the opinion that the applicant has addressed the potential for impact from the proposed development via modelling and that the mitigation measures proposed will afford sufficient protection to sensitive receptors.

5.1.3. Digestate & Biomethane use.

Having regard to the landspreading of the digestates An Taisce cite concerns regarding Ammonia emissions and their potential impacts on waterbodies and soils. The applicant has adequately modelled and established that ammonia levels would increase regarding the proposed combustion process at the site but predicted that that they will not result in significant concentrations in areas beyond the site. The landspreading of the digestates will be controlled by the provisions of the European Union (Good Agricultural Practice for the Protection of waters) (Amendment) Regulations 2025 with the enforcement of this residing with the local Authority.

6.0 Conclusion.

I have considered the potential impact of the proposed development on the environment and water quality. I can conclude, from the information provided, that the proposed development will not result in a risk of deterioration of any water body, in this instance surface waters (Palmerstown_08), either on a temporary or permanent basis. Regarding the content of third-party submissions and concerns raised with respect to the Environmental sustainability of the feedstock and other issues the applicant would be required to meet the key tenets of the Biomethane Environmental Sustainability Charter with particular regard to Digestate Management, Sustainable Feedstock Production, Plant Design & Operation and Community and Local Engagement. Much of the recommendations in this charter incorporate existing legal and regulatory obligations.

In addition, given the evidence submitted and the mitigation measures proposed I am satisfied that the applicant has submitted sufficient evidence

regarding the potential for environmental impact to support the development as proposed. I am satisfied that, in my opinion, no reasonable scientific doubt remains regarding the proposal.