

Inspector's Report ABP-311963-21

Development Construction of a Gasification and

Methanation Plant, biomass processing and storage area,

gasification and combined heat power plant, containerised battery storage facility, thermal energy recovery

storage facility, and all ancillary

energy production facilities. Two 38kv

substations and associated site

development works. The application is

accompanied by a Natura Impact

Statement (NIS).

Location Finisklin, Finisklin Road, Co Sligo

Planning Authority Sligo County Council

Planning Authority Reg. Ref. 21334

Applicant(s) Carbon Sole Group Ltd.

Type of Application Permission.

Planning Authority Decision Refuse Permission

Type of Appeal First Party

Appellant(s) Carbon Sole Group Ltd.

Observer(s) Bird Watch Ireland Sligo Branch

Date of Site Inspection 29th October 2022

Inspector Bríd Maxwell

1.0 Site Location and Description

- 1.1 This appeal relates to a site located within the townland of Finisklin circa 1km to the northwest of Sligo town centre and south of Sligo Harbour and the Garavogue River Estuary. The site encompasses an approximate area of 3.9 hectares and comprises part of a former landfill site the total area of which was approximately 13 hectares. The landfill operated from 1958 to 1994 with waste material comprising municipal, commercial and industrial waste in particular large quantities of construction and demolition (C&D) waste. The waste was deposited directly on mudflats and no landfill infrastructure was installed during filling. The former landfill is regulated by the Environmental Protection Agency (EPA) under a Certificate of Authorisation. The former landfill has been capped and has been naturally regenerating with a variety of weed scrub and other vegetation.
- 1.2 The appeal site is adjacent to commercial and industrial facilities including recycling bring centre and end of life vehicles facility adjacent to the Port of Sligo which are accessed off Deepwater Berth Road to the east. The Municipal Waste Water Treatment Works, Pumping Station and Sludge Treatment Centre is located to the north of the appeal site. Lands to the southwest are in agricultural use for grazing with a number of scattered residential and community uses also.
- 1.3 The topography of the appeal is low lying and level with average finished ground levels close to sea level. The adjacent commercial and industrial facilities on the Deepwater Berth Road were also built entirely or partly on waste deposits on the oldest part of the landfill and the Sligo Wastewater Treatment plant is also located within the former landfill lands.
- 1.4 Application documentation (NIS) details that there was no associated landfill infrastructure installed at the site such as a landfill liner, leachate collection system or gas collection system. Land was reclaimed from the estuary by depositing waste material directly on top of the tidal mudflats and sandflats of the Garavogue Estuary and progressively filling into the estuary parallel to the shore.

- 1.5 Since the closure of the landfill, an application was made for a Historic Landfill Certificate of Authorisation to the Environmental Protection Agency EPA on 16th August 2012. A Historic Landfill Certificate of Authorisation was granted by the EPA under reference no. H0006-01 on 13th September 2018. Documentation submitted with the application outlines that in 2010-2011, Sligo County Council commissioned a preliminary assessment of the environmental contamination risks associated with the former Finisklin landfill site. The report concluded that there would be little or no restrictions on the type of development that could take place on the older parts of the former landfill, while the level of restrictions would increase significantly towards the northern areas, which were filled more recently. The report also recommended that further landfill gas investigation and risk assessment should be undertaken prior to any site development works, depending on the sensitivity of the proposed development to potential landfill gas.
- 1.6 According to the NIS submitted with the application and revised NIS submitted with the appeal to the Board (Para 3.1) an Environmental Report detailing the results of a conceptual risk model was published by Malone O Regan in 2012 which found that the former landfill site represents a high risk site, with potential for the migration of leachate from the former landfill site to surface water and the Cummeen Strand / Drumcliff Bay (Sligo Bay) SAC and the Cummeen Strand SPA adjacent to the landfill site.
- 1.7 Vegetation occurring on the site is representative of ruderal species, with a mixture of ruderal grassland and herb species and scrub species colonising the surface of the site. Geophysical Survey data outlined in Report on the Geophysical Survey at Flinisklin, Sligo for Malone O Regan, Apex Geoservices dated 12th October 2010 (carried out to inform an environmental risk assessment of the landfill site) (provided at Appendix D of Appeal Submission) relating to overall landfill site indicates that the thickness of the fill material ranges from 0.6m to possibly up to 10m. Localised increases in resistivity values within the fill material indicate localised increases in C&D content and a decrease in organic waste content of the fill suggesting the highest concentration of C&D waste in the east of the site. Some very high

conductivity values in the northwest and southeast of the site have been interpreted as indicating the presence of very conductive / possibly metallic material spread across the surface of the site. Three localised zones in the centre of the site are highlighted as zones of predominantly organic waste material. It is noted that the presence of leachate underlying the fill material cannot be determined as in this environment the leachate is likely to have similar low resistivity value to the estuarine sands and silts.

2.0 **Proposed Development**

- 2.1. The proposed development, Finisklin Bio-energy Park, involves the construction of a biomass gasification, methanation, combined heat and power production plant and battery storage facility. The proposal as set out in public notices involves:
 - The construction of a biomass processing and storage area utilising forestry products.
 - Construction of a gasification and methanation plant including buildings for the production of advanced biofuels
 - Construction of a gasification and combined heat and power plant including building for the production of electricity and heating
 - Construction of a containerised battery storage facility (20MW)
 - Construction of a thermal energy recovery and storage facility including buildings for district heating distribution
 - Construction of two on-site 38kV substations
 - Creation of a new access from Finisklin Road
 - All ancillary development, including the provision of site office, car parking, internal access roads, perimeter landscaping. Fencing, lighting and on site drainage.

- 2.2 The detail of the proposed development is outlined in the various reports accompanying the application which include the following:
 - Planning report by Jennings O Donovan and Partners Ltd. dated August 2021
 - Civil Works Design Report and Appendices relating to Effluent Water Requirements and Emissions, Jennings O Donovan and Partners Ltd. August 2021.
 - Outline Construction Environmental Management Plan Jennings O Donovan and Partners Ltd. August 2021
 - Noise Impact Assessment, Irwin Carr Consulting. 7th June 2021.
 - Air Quality Impact Assessment, Irwin Carr Consulting. 4th June 2021
 - Natura Impact Assessment, Doherty Environmental Consultants Ltd. 20th August 2021.
 - Written Assessment to comply with Schedule 1 of the Chemicals Act, (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015. Eqtec. 30th July 2021
 - Technical Report : Main Effluents from Eqtec gasification plants. Eqtec 15/9/2020
- 2.3 The application outlines that the proposal involves a number of separate but interrelated bioenergy production elements. Bioenergy is a low carbon renewable energy that can be used to replace carbon intensive fossil fuels. The proposed development will use forestry residues from harvest in the form of wood chips, approximately 71,000 tonnes (initially 66,000 figure revised upwards in grounds of appeal) of dried biomass woodchip per annum and will generate approximately 32MW of green energy per year. I note that the planning report and public notices refer to use of forestry woodchip whereas the NIS and the revised NIS submitted with the appeal assert that "The project proposals will utilise forestry and agricultural waste such as woodchip, straw and energy crops." The green biogas produced in the gasificaton plant is to be converted in the different process operations to produce

a clean green advanced biofuel/biomethane, electricity and heat for district heating to meet local needs.

2.4 Table 2.2 page 12 of the revised NIS Doherty Environmental Consultants Ltd., dated 12th November 2021 summarises the energy output as follows:

Table 2.2 : Green Energy Outputs

Hybrid Bioenergy Park

32MW of Green Energy Output comprising the following:

13MW of Renewable Gas per hour = 102,000MW per annum

5MW of Renewable Electricity per hour = 32,490MW per annum

14MWth of Renewable Heat per hour = 110,000MW Thermal per annum for District Heating Network (DHN), delivered in two stages:

Phase 1L 7MW from Gasification & Methanation Plant = 55,000MWth per annum

Phase 2: 7MW from Gasification & CHP Plant = 55,000MWth

Distributed through DHN to Industrial Parks and utilised for biomass drying /processing

Both Stage 1& 2 Subject to Climate Action Funding of Renewable District Heating Networks

In addition, an element of 20MW of battery storage will be provided on the site to meet peak electrical demand.

- 2.5 It is proposed to connect the development directly to the national electrical grid network at Finisklin substation to the south of the site and to develop the grid connection within the public road network.
- 2.6 A 10 year permission is sought for the proposed development.

3.0 Planning Authority Decision

3.1. **Decision**

- 3.1.1 By order dated 20th October 2021 Sligo County Council issued notification of the decision to refuse permission for the following reasons:
 - 1. The proposed development is located on the site of a closed landfill. Insufficient information is provided as part of the planning application including the submitted Natura Impact Statement in relation to the treatment of contaminated leachate and gas emissions which may emanate from the site during construction and operational phases of the proposed development. The Planning Authority is, therefore, not satisfied that the proposed development individually or in combination with other plans or projects would not adversely affect the integrity of European site(s) including Cummeen Strand / Drumcliff Bay (Sligo Bay) Special Area of Conservation and Cummeen Strand Special Protection Area in view of the site's Conservation Objectives. In such circumstances, the planning authority is precluded from granting permission.
 - 2. The documentation and details submitted with the planning application have not demonstrated adequate proposals for the proper and satisfactory management of surface water at the proposed development. It is considered that the proposed development would pose an unacceptable risk of environmental pollution having regard to the potential of contaminated leachate discharging to surface waters, groundwater and marine waters. The proposed development would, therefore, be contrary to the proper planning and sutaniable development of the area.
 - 3. Under the Waste Management (Certification of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008, Sligo County Council were required to carry out a risk assessment of environmental pollution associated with the closed Finisklin Landfill. Having completed the risk assessment, a site remediation plan has been prepared and authorised by the Environmental Protection Agency. These remediation measures are required to be implemented before any new buildings can

be constructed within the site of the former landfill. It is considered, therefore, that the proposed development is premature pending the completion of these remediation measures required to address the environmental contamination risks associated with the closed landfill."

3.2. Planning Authority Reports

3.2.1. Planning Reports

Planner's report notes in relation to Appropriate Assessment that the submitted NIS is insufficient with regard to the constraints arising from location on landfill. No mitigation measures are included to deal with the landfill leachate which has potential to have a direct impact on the Natura sites. The mitigation measures proposed are of a general nature and are not specific to the site. The site NIS is incomplete therefore Sligo County Council cannot determine that there will be no significant adverse effects on the integrity of the Cummeen Strand Drumcliff Bay SAC and Cummeen Strand SPA in view of the sites' conservation objectives.

The proposal is considered a suitable development in principle. Regarding visual impact no streetscape / context drawings or cross sections or photomontages have been provided. The area has a precedent for large industrial units however insufficient information has been provided to enable comprehensive assessment. Insufficient information provided regarding the entrance and access layout however traffic and parking is not considered to be a barrier to development.

Concerns arise regarding potential contaminants to nearby water resources and surface water seepage and potential impact on residential amenity and human health. While the principle of development is in line with the zoning objective for the site and its setting in the Harbour area, it does not satisfy the specific objectives and policy for the site particularly O-WM-1. Site remediation plan was prepared and subsequently authorised by the EPA are required to be implemented before any new buildings can be constructed within the site and the development is considered premature pending these works.

Outline CEMP is insufficient in detail and does not detail with landfill leachate. The disturbance of substrated via excavation and placement of foundations and the

management of potentially contaminated excavated material does does not demonstrate proper and satisfactory management of surface water.

Other issues are raised in relation to the lack of detailed information with regard to woodchip sources of supply to assess the sustainability of the proposal and the grid connection should be addressed within the NIS.

Potential for build-up of gases arising from the former landfill has not been considered in the air quality assessment.

Refusal was recommended for three reasons as per subsequent decision.

3.2.2. Other Technical Reports

- 3.2.2.1 Executive Engineer Roads Design notes conflicting and incorrect information within the planning report for example with regard to traffic movements, details of existing road networks and construction phase duration section. Further information including a revised site layout is required detailing entrance taking account of elements such as public lighting, pedestrian and cyclist facilities, corner radii, alterations to kerbs etc.
- 3.2.2.2 Senior Executive Engineer Environment.

Sligo County Council is in the process of seeking permission to remediate Finisklin landfill as regulated by the EPA under the Certificate of Authorisation COA issued in September 2018. The proposed development is not compatible with the requirements of the COA particularly conditions 1.5 and 1.6. as follows:

- "1.5 Nothing in this certificate of authorisation shall prohibit authorised beneficial uses of the site of the closed landfill that do not interfere with the integrity of the remediation measures adopted,
- 1.6 Notwithstanding the generality of condition 1.5 the construction of any buildings at the "southern", "middle" and "northern" areas of the closed landfill shall only take place following revision of the risk assessment, and, if deemed necessary by the Agency, grant of a revised certificate of registration. The "southern", "middle" and "northern" areas of the closed landfill and the areas so labelled in the drawing referred to in condition 1.1."

The application is premature until such time as the current COA is surrendered by the EPA or a revised COA issued by the EPA in accordance with condition 1.6.

Refusal was recommended.

3.2.2.3 Fire Service.

A fire safety certificate application is required in accordance with Article 11(1)(e) of Building Control Regulations 1997-2018.

3.2.2.4 Water Services report — A pre connection enquiry has been made to Irish Water. The requirement of 75l/s is unavailable from the Irish Water Network and the developer will need to consider on site storage or upgrading of the IW network. Pipework to be designed to prevent existing contaminates which may be present within the groundwater entering the water network in accordance with specifications for pipework in contaminated ground. The proposed foul pipe network shall be designed so that contaminated ground water shall not enter the Irish foul network uncontrolled. No surface water or storm water runoff shall be accepted onto the IW foul water network. Storm water shall be limited to greenfield run off rate with capacity of 20% for climate change. Concerns arise regarding proposal for premier land drain surrounding the site and possibility of contaminated groundwater entering the drainage system via this system. Details of mitigation measures should be submitted. Further information required to address these issues.

3.2.2.5Area Engineer

Any works to the public road to be caried out under a road opening licence.

Construction phase traffic management plan to be submitted to Sligo County

Council. Tactile paving at pedestrian crossing points. Details of entrance to be submitted. All street lighting of LED type. Road construction details to be submitted.

3.3. Prescribed Bodies

3.3.1 Inland Fisheries Ireland notes proximity to Garavoge River Estuary a migratory route for salmon, sea trout, lamprey and eel into the Garavogue River, Lough Gill and the Bonet River System. Sligo Bay is popular for sea angling and provides habitat for sea trout, mackerel, bass and flatfish. Cummeen Strand /Drumcliff Bay (Sligo BAY) SAC is designated for the protection of lamprey species. The Garavogue Estuary has been allocated moderate ecological status in the River Basin Management Plan. This status must be improved to Good to comply with the Water Framework Directive.

IFI has concerns in regard to the risk of leachate from the site discharging to surface waters, groundwaters or marine waters as a result of civil engineering works. The NIS notes that the site has been identified as a high risk site, particularly in relation to surface water discharge during excavations. A site specific method statement for excavation of the site and containment of surface water and ground waters and the elimination of polluted waters from the site to the Garavogue river should be provided as further information. A water monitoring programme designed to detect the presence of leachate contamination during construction and operation of the development must also be put in place. Due to the risk of leachate seepage from the site IFI request that an alternative location for the development be considered.

Construction phase measures Section 5.3 of NIS do not address the presence of landfill leachate on the site. Leachate management also not addressed in outline Construction Environmental Management Plan.

The civil works design report states that the onsite watercourse will be culverted resulting in it being sealed from potential contamination. The stream should be retained as an open channel. A5m buffer zone should be fenced off along the channel prior to works commencing on site. A silt fence should be erected to prevent discharge of sediment into the channel. Where a culvert is required to facilitate access to the site this must be kept a minimum length. Where a diversion is required the IFI guidance on the protection of fisheries during construction should be followed. The small wetland to the south of the site should be retained if possible or reinstated as part of the surface water drainage system, SUDS must be incorporated into the surface water drainage design. IFI request that green infrastructure features are

used to attenuate surface water drainage from the stie instead of the proposed attenuation tank. Where underground tanks are installed, sediment may build up unnoticed reducing the attenuation value of the structure. An open swale pond or wetland area can be accessed and maintained more easily and will provide additional benefits for biodiversity. A maintenance schedule for silt trap and petrol interceptor to be put in place.

Other matters to be addressed include measures to prevent spread of invasive species and an emergency response management plan to address case of accidental chemical spill or fire on site to include the management of discharge firewaters.

3.3.2 Geological Survey Ireland.

Recommend the use of and reference to GSI datasets. There is no groundwarter vulnerability and aquifer data for site, however the surrounding area is underlain by an aquifer classed as 'locally important aquifer – bedrock which is moderately productive only in local zones' and the groundwater vulnerability is classified as high.

Aggregate potential mapping to be used, geochemistry of soils, surface waters and sediments and INFOMAR Ireland's National Marine mapping programme to be addressed. If development goes ahead GSI would request copy of reports detailing with any site investigations carried out.

3.3.3 Health and Safety Authority - the application is covered by Regulation 24(2) (c) of SI 2019 of 2015. Insufficient information has been provided to enable technical advice on this application. Further information is required including clarification in relation to EQTEC Technical Report 20211990-EQT-A1105 dated 30/7/2021:

How the tonnage in Table 1 for produced syngas (0.4 tonne) is derived. Clarify Note 3 'reflected amount indicates the syngas accumulated in the equipment during normal operation' and demonstrate if the tonnage quoted represents 'maximum tonnage which is present or likely to be present at any one time'. Review and revise as appropriate the COMAH qualifying calculations as per schedule 1 of SI 209 of 2015 to demonstrate that the total inventory of anticipated flammable substances is

below the threshold for a lower tier COMAH establishment. It is noted that future development around COMAH establishments has the potential to impact on the expansion of those establishments.

- 3.3.4 Irish Water Submission. No objection to the proposal. Where connection is proposed to a public water / wastewater network the applicant to sign a connection agreement. Development will be subject to Irish Water capacity requirements and constraints of the Irish Water Capital Investment Programme.
- 3.3.5 An Taisce submission asserts that the proposal should not result in any water quality deterioration in the estuary. Issue of landfill leachate has not been sufficiently addressed in the NIS and not addressed at all in the outline CEMP which appears to be general rather than site specific. Detailed plans to prevent leachate related contamination particularly during construction should be sought as further information and not left to post consent condition. The council should fully evaluate the sustainability and security of biomass sourcing. Section 2.3 of the Planning report states that detailed assessments of forestry supply have been completed supporting a consistent supply of raw materials from the region required to run the plant. Over 100% or raw materials would be sourced from Sligo, Leitrim, Donegal Mayo and Roscommon. These assessments should be requested as further information.

3.3.6 Department of Housing Local Government and Heritage. Development Applications Unit Nature conservation.

The department notes that based on the character (energy production), scale (32MW) and proximity (ie. Less than 200m to two European Sites) such projects and their associated infrastructure have the potential to significantly affect nature conservation biodiversity and environmental interests in close proximity and at a great distance. The Department therefore recommends that the consent authority consider screening in the development for EIA. Given the risks arising from associated works that may occur offsite (District Heating Network) as well as the

storage and transport of materials used in the production of energy products (liquified natural gas) and waste by-products (eg fertiliser or sludge) from the site should be considered in the screening for EIA.

The Department notes that the Planning report notes 14 sites within 15km yet only two sites are considered in the NIS. The screening report for the NIS is not included in the documentation. The NIS identifies potential impacts during construction and operational phases on Cummeen Strand and Drumcliff Bay SAC and Cummeen Strand SPA, particularly the qualifying interests nearby. Potential pollution risks associated with the disturbance of landfill substrate are inadequately accounted for in the EIA screening report and NIS. Specifically, the disturbance of substrate via excavation and placement of foundations and the management of potentially contaminated excavated material are not fully addressed in the NIS. The mechanism by which such effects will be eliminated should be outlined in an NIS /EIAR. The NIS does not assess disposal of waste materials, offsite works and / or the offsite transport, distribution, or use of materials and / or products.

Construction disturbance to the SPA Special Conservation Interests (SCIs) and anthropogenic and lighting disturbance to Qualifying Interests (QIs) and SCI species during the operational phase are inadequately detailed, assessed and accounted for in the NIS.

NIS insufficient in detail and should include the mechanism through which the mitigation measures will be secured, implemented and monitored.

The Department is concerned that the NIS does not contain adequate information or fully address all impacts to allow for a complete Appropriate Assessment. The Planning and Environmental report identifies that ground and surface water seeps from the landfill and this poses a significant risk to European sites in close proximity. A dedicated drainage management plan is required for the wider development site. Naturally regenerating vegetation on site is currently providing an ecosystem service and may potentially mitigate some effects of leachate. A landscape plan incorporating the use or retention of suitable flora and vegetation areas should be proposed to reduce potential impacts arising. Opportunity to showcase how development projects can enhance and result in an overall net gain or improvement in biodiversity should be taken.

A survey should be undertaken by a competent specialist to consider presence of invasive species. The location as reclaimed foreshore has been identified as vulnerable to waste overtopping in the Irish Coastal Wave and Water Level Modelling Study 2018 Phase 2 – Coastal Areas Potentially Vulnerable to Wave Overtopping. Such events should be planned for in the design and construction proposed and any associated risks to the environment or nature conservation interest addressed in ecological and environmental assessments. The Department notes the comments made by Inland Fisheries Ireland (IFI) and support the observations made therein in relation to the concerns about pollution from leachate and surface sources, retention of wetlands and other habitats, SUDS and Green infrastructure to protect important biodiversity.

3.3.7 Department of Housing, Local Government and Heritage submission regarding archaeology. Given the location, scale and extent of the development it is possible that subsurface archaeological remains could be encountered during construction phase that involve ground disturbance. Pre-development testing should be carried out.

3.4. Third Party Observations

- 3.4.1 Submission from Nolan Quinlan Architects on behalf of Mr Michael McGoldrick, Seamount House, Finisklin raises concerns that the proposal will be visually obtrusive, particularly the 20m high gasification island. Concerns also regarding noise, increased traffic, and industrial nature incongruous close to the Garavogue estuary. The amenities enjoyed by existing residences in the vicinity, including Seamount House, should be maintained and protected following development at the site.
- 3.4.2 Rathedmond Residents Association c/o JA O Sullivan submission objects to the proposal outlining concerns regarding emissions, noise, odour and heavy vehicle traffic volumes.

4.0 Planning History

There is no planning history on the appeal site. In relation to the adjoining lands to the west and also incorporating part of the appeal site the following refers:

ABP-311863 Sligo County Council Application for approval under section 177AE of the Planning and Development Act 2000, as amended Remediation and restoration works at former landfill and development of a public park, Finiskin, Sligo. The Board Approved with conditions on 8/4/2022.

Waste Management History

Certificate of Authorisation H0006-01 was granted by the EPA on 13th September 2018 under regulation 7(6) of the Waste Management (Certificate of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008 subject to a number of conditions including:

- "1.5 Nothing in this certificate of authorisation shall prohibit authorised beneficial uses of the site of the closed landfill that do not interfere with the integrity of the remediation measures adopted,
- 1.6 Notwithstanding the generality of Condition 1.5, the construction of any buildings at the "southern", "middle" and "northern" areas of the closed landfill shall only take place following revision of the risk assessment and, if deemed necessary by the Agency, grant of a revised certificate of registration. The "southern", "middle" and "northern" areas of the closed landfill are the areas so labelled in the drawing referred to in Condition 1.1."

5.0 Policy Context

5.1 National Policy

Climate Action Plan 2021

The Climate Action Plan 2021 provides a detailed plan for taking decisive action to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and setting us on a path to reach net-zero emissions by no later than 2050, as committed to in the Programme for Government and set out in the Climate Act 2021.

National Planning Framework: Project Ireland 2040

A key focus on the transition to a competitive low carbon, climate resilient and environmentally sustainable economy by 2050, through harnessing the country's prodigious renewable energy potential.

National Policy Objective 53 Support the circular and bio economy including in particular through greater efficiency in land management, greater use of renewable resources and by reducing the rate of land use change from urban sprawl and new development.

National Policy Objective 55 Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050.

National Policy Objective 56 Sustainably manage waste generation, invest in different types of waste treatment and support circular economy principles,

prioritising prevention, reuse, recycling and recovery, to support a healthy environment, economy and society.

Regional Spatial and Economic Strategy for the North Western Region

The Regional Spatial and Economic Strategy (RSES) for the North-western region came into effect in January 2020. The RSES provides the implementation strategy for the NPF. Sligo is earmarked as a Regional Growth Centre in the RSES.

In reference to Sligo Port the RSES notes – The Docklands it is noted that the docklands encompassing an undefined area around and including Sligo Port, has been the subject of piecemeal development over the years consisting of port-related and non-port-related uses. It has become evident that such an approach is neither desirable nor sustainable. The area can be characterised as an under-utilised industrial/warehousing area with lower-value, lower-intensity uses that should be

relocated elsewhere. This would enable the area to be redeveloped for residential, commercial and community development

A redevelopment framework should be prepared for the area focussing on:

The retention of the Port as a valuable piece of commercial/industrial infrastructure; Remediation of the former landfill and other potentially contaminated lands;

Revised street/road layout and improved connectivity with Sligo centre;

An improved mix of uses, including community, commercial and residential;

Enhanced provision of open space in the form of linear parks and cycle/pedestrian routes;

The provision of a cultural landmark building;

The re-use of former industrial buildings for creative enterprises and the new community uses.

Regional Policy Objectives of Relevance to the current appeal case include:

RPO 3.7.52 Promote the consolidation of the existing IDA business Park at Finisklin and the possible expansion of other business and enterprise activities into the Northern Docklands area.

RPO 4.16 The NWRA shall co-ordinate the identification of potential renewable energy sites of scale in collaboration with Local Authorities and other stakeholders within 3 years of the adoption of the RSES. The identification of such sites (which may extend to include energy storage solutions) will be based on numerous site selection criteria including environmental matters, and potential grid connections.

RPO 4.17 To position the region to avail of the emerging global market in renewable energy by: g Stimulating the development and deployment of the most advantageous renewable energy systems g Supporting research and innovation g Encouraging skills development and transferability g Raising awareness and public understanding of renewable energy and encourage market opportunities for the renewable energy industry to promote the development and growth of renewable energy businesses g

Encourage the development of the transmission and distribution grids to facilitate the development of renewable energy projects and the effective utilisation of the energy generated from renewable sources having regard to the future potential of the region over the lifetime of the Strategy and beyond

RPO 4.18 Support the development of secure, reliable and safe supplies of renewable energy, to maximise their value, maintain the inward investment, support indigenous industry and create jobs.

RPO 4.20 Support and encourage the development of the bio-economy sector, and facilitate its development for energy production, heat, and storage distribution, in particular advocating Combined Heat and Power Units integrated into District Heating networks, in combination with Pyrogenic Carbon Capture and Storage (PyCCS) or Bio-Energy Carbon capture and storage (BECCS) all to be done in collaboration with EPA and other regulators.

5.2 Development Plan

5.2.1 The Sligo County Development Plan 2017-2023 refers. I note that the County Development Plan Review current stage (updated on 20/05/2022)

https://www.sligococo.ie/cdp/CountyDevelopmentPlanreview-currentstage/ outlines that on 7 March 2022 – The members of Sligo County Council directed the Chief Executive to prepare the draft County development Plan 2023-2029. The formal preparation of the Sligo and Environs LAP will commence after the Sligo County Development Plan is adopted. I understand that the Sligo County Development Plan 2023-2029 will include a land use zoning map for Sligo.

The County Development Plan 2017-2023 states at 3.5.1 that the zoning and objectives contained in the Sligo and Environs Development Plan 2010-2016 (SEDP) are incorporated as statutory provisions and shall remained unchanged until the adoption of a local area plan for Sligo and Environs.

The site is on lands zoned Mix 2 with an objective to "Encourage mixed-use development emphasising employment / enterprise, residential, leisure and commercial uses, with retail warehousing open for consideration."

Variation No 2 of the Plan, the Core Strategy Variation, the site became part of lands zoned "Strategic Land Reserve"

Strategic Land Reserve policies

"It is the policy of Sligo Borough and County councils to:

P-SLR-3 On lands included in the SLR, permit the development of community facilities and other no -residential developments compatible with residential uses insofar as they do not adversely impact on the potential for comprehensive and coordinated development of surrounding lands."

Waste Management Policies and Objectives of relevance :

"P-WM-14 Ensure that the known waste disposal site at Finisklin is assessed and an appropriate remediation plan is developed and implemented in order to reduce the environmental risk associated with the former landfill.

O-WM-6 Continue to carry out the investigation of the landfill site at Finisklin, and complete the management and remediation of the site.

O-WM-7 In relation to any proposals for development of lands at the Finisklin landfill site, or any other lands that may be contaminated (e.g. reclaimed / filled lands formerly used for port related activities, or the site of the former Saehan factory at Hazelwood), require the applicants to engage specialist environmental consultants to investigate and assess the presence and extent of contamination, and to recommend remediation measures for agreement with the local authorities."

Within the Sligo County Development Plan 2017-2023 at 9.5.6 in relation to historic landfills it is noted that Finisklin is a Class A – high environmental risk site.

"Finisklin

The former Finisklin landfill, located on the western edge of Sligo City, beside the Docklands area, was operated by Sligo County Council between 1958 and 1994. In 2010-2011, Sligo County Council commissioned a preliminary assessment of the environmental contamination risks associated with the former Finisklin landfill site. The report concluded that there would be little or no restrictions on the type of

development that could take place on the older parts of the former landfill, while the level of restrictions would increase significantly towards the northern areas, which were filled more recently. The report also recommended that further landfill gas investigation and risk assessment should be undertaken prior to any site development works, depending on the sensitivity of the proposed development to potential landfill gas. The final stage of the certification process and remediation of the Finisklin site, in accordance with the EPA Code of Practice: Environmental Risk Assessment for Unregulated Waste Disposal Sites (April 2007), is due to commence in 2017. Upon completion of this process, it may be necessary to formulate specific policies or objectives for inclusion in the Sligo and Environs Local Area Plan in relation to future development in the Finisklin area."

Waste management objective

"It is an objective of Sligo County Council to: O-WM-1 Ensure that the certification and remediation process of the known historic landfill at Finisklin is completed in accordance with the EPA Code of Practice: Environmental Risk Assessment for Unregulated Waste Disposal Sites (April 2007)."

P-WM-5 In relation to any proposals for development of lands that may be contaminated or filled with waste (e.g. reclaimed/filled lands), require the applicants to engage specialist environmental consultants to investigate and assess the presence and extent of contamination, and to recommend remediation measures for agreement with the Local Authorities.

P-WM-6 Require that any development proposals on known historic landfill sites or in their vicinity shall take into consideration the EPA Code of Practice: Environmental Risk Assessment for Unregulated Waste Disposal Sites (April 2007). Where landfills meet the definition of a 'closed landfill', as set out in the Waste Management (certification of historic unlicensed waste disposal and recovery activity) Regulations 2008 (S.I. No 524 of 2008), there will be a requirement for authorisation of the landfill by the EPA under those regulations.

P-WM-7 Ensure that the zoning or the rezoning of known former landfill sites, as part of the preparation or review of local area plans, is the most appropriate having regard to the potential sensitivities of such lands

5.3 Natural Heritage Designations

The nearest European Site is the Cummeen Strand Drumcliff Bay (Sligo Bay) SAC and Cummeen Strand SPA located within circa 180m of the site. Seven other SACs and five other SPAs are located within 15km of the site as follows:

Lough Gill SAC 1.6km SE

Balysadare Bay SAC 6.6km SW

Benbulben, Gleniff and Glenade Complex SAC 6.7km NE

Unshin River SAC 7.5km SW

Union Wood SAC 7.5km SE

Streedagh Point Dunes SAC 12.5km NW

Bunduff Lough and Machair / Trawlua / Mullaghmore SAC 15km N

Drumcliff Bay SPA 4km NW

Ballysadare Bay SPA 6.6km SW

Sligo Leitrim Uplands SPA 7km NE

Ballintemple and Ballygilgan SPA 7km NW

Arboline Island and Horse Island SPA 13km NW

5.4 EIA Screening

The applicant's screening report Section 1.4 of Planning Report Jennings O Donovan & Partner's Limited, August 2021 concluded that EIA is not mandatory for the proposed development.

The relevant categories for consideration in schedule 5 include Part I and II requiring FIA include:

Schedule 5 Part 1.

Class 2(a) of Part 1 Schedule 5. A thermal power station or other combustion installation with a heat output of 300 megawatts or more.

Class 3(a) of Part 2 Schedule 5

"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."

Based on the submitted details the proposed 20MW Gasification and Methanation plant will produce 13MW of advanced biofuel as Renewable Natural Gas (RNG) for injection into gas networks or Liquid Natural Gas (LNG) for transport off site and 7MW of heat for district heating per hour. The 15MW CHP Gasification plant will produce 4MW of Electricity and 7MW of heat for district heating per hour.

The electrical output is below the threshold limits and is therefore not subject to mandatory EIA.

It is noted that in relation to battery storage – This is not a type of development included in Schedule 5.

Class 10(b)(iv)

"Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of the built up area and 20 hectares elsewhere."

The appeal site has a stated area of 3.9 hectares and is not within a built-up area or business district. On the basis that it is 'elsewhere' it is substantially below the threshold.

Class 11(b) of Part 2 of Schedule 5

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

The proposed facility involves the use of forestry residues from harvest in the form of woodchip of 71,000 tonnes (revised in appeal from initial proposal 66,000 tonnes). I

have noted above the anomalies within the application documentation whereby reference is made within the NIS to the potential use of agricultural waste in addition to woodchip.

On the basis that the application involves the use of woodchip, a forestry by product, and not waste, Class 11(b) of Part 2 of Schedule 5 would not apply.

Assessment of Environmental Significance.

Characteristics of the Proposed development.

The site size is 3.9 hectares

In relation to other planning permissions – no significant cumulative impact with adjacent industrial activities have been identified.

Regarding resource use the proposed development will use forestry residues in the form of woodchips to generate energy (As noted the documentation submitted includes an anomaly whereby NIS refers to use of agricultural waste and energy crops in addition to woodchip). Biomass – an abundant resource

Main sources of operational waste arising would be non-hazardous and relatively limited.

Emissions. – Operational - Air Quality Impact Assessment by Irwin Carr Consulting (4 June 2021) sets out predicted air emissions based on air quality monitoring concluded that airborne pollutants in the form of Nitrogen Dioxide (NO_x), Sulphur Dioxide (SO₂). Carbon Monoxide (CO) and Particulate Matter (PM₁₀) are in the long term significantly less than appropriate limit levels and in the short term less than 75% of the appropriate limits levels. The predicted environmental concentration PEC did not exceed any of the appropriate limits.

Construction activities would be subject to mitigation as outlined in the CEMP

Regarding risk of accidents, having regard to substances or technologies used I note the submission of the applicant in the application specifically in Technical Report: Storing chemicals Act - Ectec gasification Plants, Report 20211990-EQT-A1105, dated 30/7/2021, submitted with the application asserts that the total inventory of dangerous substances is below the threshold for a Lower Tier COMAH

establishment. I note that the submission of the Health and Safety Authority HSA requested clarification on the matter. The inventory of hazardous substances which might be on site at any one time to be clarified to ascertain whether the proposed development would fall under the Major Accident Hazard COMAH Directive. The applicant did not address this issue in the appeal.

Location of the Proposed Development

Site is within a former landfill site adjacent to industrialised area.

Absorption capacity of the natural environment -

The site is a former landfill site and does not itself contain habitat flora or fauna of conservation significance.

Regard must be had to proposal for remediation and restoration works at former landfill and development of a public park, Finisklin, Sligo. Approval under section 177AE of the Planning and Development Act 2000, as amended ABP.311863.21

Site is adjacent to European sites and the coastal zone and marine environment – Development is subject to Appropriate Assessment under the Habitats Directive

The location is away from areas of significant residential density

No significant landscape, historical cultural or historical landscape constraints. Background of the site as landfill to be addressed.

Characteristics of Potential Impacts

A large geographical area would not be impacted as a result of the proposal. The development is located adjacent to an industrial area.

No trans-frontier impacts

No anticipated long term adverse environmental impacts arising from construction and operational phases.

Duration of proposal would be long term. Decommissioning is not proposed.

No anticipated cumulative negative impacts arising from development in the vicinity,

No significant emissions are expected from construction and operational phase due to control measures.

Conclusion.

Overall, it may reasonably be concluded that the proposal does not exceed the thresholds or meet the classes of development as defined in Schedule 5 of the Planning and Development Regulations. Having regard to the consideration of the likely environmental significance of the proposed development, it may reasonably be concluded that the characteristics of the proposal, its location, and the type and characteristics of the potential impacts arising from the construction and operation of the scheme would not result in a significant environmental impact. It is, thus, reasonably determined that EIA is not required and the requirement for the applicant to submit an EIAR does not arise.

6 The Appeal

6.1 Grounds of Appeal

- 6.1.1 The appeal is submitted by Jennings O Donovan Consulting Enigneers on behalf of the applicant. The appeal includes a number of documents including a revised NIS. Grounds of appeal are summarised as follows:
- 6.1.2 Regarding Reason No 1, the site has been subject to a detailed Environmental Study and Environment Assessment reports were prepared by Malone O Regan and commissioned by Sligo County Council in 2011 and 2012. Their assessment concluded that the remediation to take place at the site should include, interalia the installation of passive vent trench to give preferential pathway for gas emissions along the north-eastern landfill boundary, installation of passive venting wells at 5m centres to give preferential pathways for gas emissions at the north-western landfill boundary. None of these remediation measures are located within the proposed development site.

The MOR environmental report determined that with regard to the application site this was filled between 1985 and 1994 and is classified as earlier fill which has largely decomposed. The material in this area has been WAC tested and is considered to be partly inert with regard to methane, carbon dioxide and leachate generation and migration. The waste within the area complied with inert / non

hazardous limits. The report calculated that leachate within this area and the fomer landfill as a whole is unlikely to significantly impact on receiving waterbodies.

The proposed development will not result in any change to the low risk associated with gas and leachate migration from the old landfill site. To prevent any changes to the low risk of gas migration as a result of the development the proposed works will include a gas collection system under all proposed impermeable areas of the development. The system will consist of a layer of gas permeable stone with perforated pipework under a flexible impermeable membrane that will block methane and carbon dioxide from migrating upwards. The collected gas will be carried to sumps where it can be safely collected and re-used in the plant's process if concentration levels permit.

- Mitigation measures to prevent possibility of contamination of groundwater due to construction will include:
 - Foundations will consist of localised vertical bore piles to a suitable sub-landfill strata with horizontal ground beams above the existing landfill spanning between the piles. This method of foundation will limit the amount of landfill materials that will be exposed or disturbed as part of works thus minimising risk of migration of trace amounts of gas or leachate.
 - Where the existing stone and clay capping layer is removed to construct roads and yard areas, a bentonite impregnated liner will be immediately placed on exposed formations. This will prevent direct migration of rainwater into landfill which will minimise risk of any trace amounts of leachate. All other normal construction stage mitigations as detailed in the NIS and CEMP.
 - The approach will limit the excavations and the extent of surface exposed within the project site during the construction phase. The implementation of all construction phase and operation phase mitiation measures as outined in the accompanying updated Natura Imapet Statement and preliminary CEMP.

Having regard to the Inert /non-hazardous waste material under the footprint of the project site and the low concentration of methane and gas and the low risk of their migration from the former landfill site as a whole it can be concluded that the project will not result in significant adverse effects to the conservation objectives of the

Cummeen Strand / Drumcliff Bay (Sligo Bay) SAC and the Cummeen Strand SPA or any other European Stie.

- 6.1.3 Regarding Reason No 2 as outlined in the civil works and roads design report and associated drawing 6265-JOD-XX-DR-C-200-006-P-01, the appeal proposal includes a separated foul and storm drainage system that has been hydraulically designed using the latest causeway flow analysis and SUDS compliant software. The storm system includes an adequately sized petrol interceptor / silt trap that will capture any possible contaminants including hydrocarbon spills from vehicles and trace quantities of silts from timber residues. The proposed drainage system and foundation design combined will prevent any remaining contaminated leachate from discharging to surface waters and will in effect remediate the area of landfill site to which the application relates. The development would not have the potential of contaminated leachate discharging to surface waters groundwater and marine waters.
- 6.1.4 Regarding refusal reason no 3 and the contention of prematurity pending the completion of the remediation measures required to address the environmental contamination risks associated with the closed landfill, it is understood that Sligo County Council work would have to be carried out before any development would commence on site. In the event of permission pre-commencement conditions can be imposed to deal with contamination. None of the remediation measures as identified in the MOR report are located in the application site. A 10 year planning permission is sought and no works would commence until such time as the conditions relating to the certificate of authorisation H0006-01 were satisfied in accordance with condition 1.6.

Notably during the period 2007-2009 Sligo County Council constructed the new wastewater treatment plant which included the construction of a new road across the landfill as well as a rising main pipeline and storm water sewer. Thus, there is a precedent for work having been carried out on the landfill since its closure.

6.1.5 The proposal can be viewed as sustainable and as such the proposal adheres to the core principles of sustainable development. Proposal meets the objectives of the Climate Action Low Carbon Development Act 2015-2021. Proposal makes the best use of previously developed land and issues raised by third parties and statutory consultees can be addressed by condition. The proposal will contribute to supplying the demand for renewable energy which in the context of the ongoing climate emergency is an urgent Irish National Priority. It is imperative that renewable energy developments which are acceptable in planning policy terms such as the appeal proposal, are given planning permission without delay. The ethos of the project is to promote clean green energy in accordance with the objectives of the Climate Action Plan. The project will offset an estimated 67,500 tonnes of CO₂ per annum, which equates to more than 1 million tonnes over 15 years. The updated NIS demonstrates that the proposal will not result in significant adverse effecs to the conservation objectives of the Cummeen Strand / Drumcliff Bay (Sligo Bay) SAC and the Cummeen Strand SPA or any other European sites. The proposed development would not have the potential for contaminated leachate discharge to surface water, groundwater and marine waters. The site has lain vacant for 20 years and the proposal will not be delivered until such time as the landfill remediation measures are implemented.

6.2 Planning Authority Response

6.2.1 The response of the planning authority refers to the Planner's report and other reports prepared in connection with the assessment of the application and decision. Insufficient information is provided in relation to the treatment of contaminated leachate and gas emissions which may emanate from the site during construction and operational phases of the development. Notwithstanding the Malone O Regan report which indicates that the application site does not include remedial work, the area and is classified as 'earlier fill'. Sligo County Council forms the view that the proposed development should be considered in combination with other plans or projects that may impact on the proposal, and it is not considered that this has been adequately addressed. A condition delaying the commencement of development

pending remedial works is not considered appropriate when no remedical works or application for remedial works had taken place. Decision to refuse permission should be upheld.

6.3 Observations

6.3.1 Submission from Bird Watch Ireland, Sligo Branch notes that the site for this project was created by the destruction of mudflat habitat when the landfill site was originally created. This resulted in a consequent loss for birds other wildlife and biodiversity. It was therefore excluded from what is now an interationally protected area (SAC / SPA). Objective 4 of the National Buidiversity Action Plan 2017-2021 states "conserve and restore biodiversity and ecosystem services in the wider countryside." Concern is that anything that could prevent restoration of the underlying mudflat habitat should that become feasible at a future date. Note no awareness of the successful restoration of mudflats anywhere worldwide following the removal of landfill material however perhaps it could not be done in the future. Project should not involve any further significant damage to the underlying sediments. Removal of all infrastructure at the project end of life should be satisfactorily guaranteed, and the site left free of all introduced materials except for a top layer similar to what is there presently.

7 Assessment

- 7.1 Having regard to the matters raised in this first party appeal, which seeks to refute the three reasons for refusal in the decision of Sligo County Council, I consider it appropriate to address these matters under the following broad headings:
 - Principle of Development
 - Pollution Risk
 - Question of Prematurity
 - Appropriate Assessment

Other Matters

7.2 Principle of Development

- 7.3.1 On the question of the acceptability in principle of a development of this nature, it is a welcome proposal for a renewable energy project which utilises biomass to generate green energy, including advanced biofuels, biomethane, electricity and heat for district hearing, and thereby replacing intensive fossil fuels. On the question of acceptability of the proposed development as a land use, I have noted the submission of BirdWatch Ireland in response to the appeal, which refers to the background of the site created by the destruction of mudflat habitat, with its consequent loss for birds, wildlife and biodiversity, and resulting in the exclusion of this area from the designated SAC and SPA. Reference is made to Objective 4 of the National Biodiversity Action Plan 2017-2021 which seeks "to conserve and restore biodiversity and ecosystem services in the wider countryside". The submission notes concern that the development could prevent restoration of the underlying mudflat habitat should that become feasible in the future. I have taken on board these arguments and the question of reversibility which is worthy of analysis however this is a wider policy and land use zoning issue.
- 7.3.2 The appeal site is brownfield in nature and zoned Mix 2 within the Sligo and Environs Development Plan 2010-2016. The objective is to "Encourage mixed use development emphasising employment / enterprise, residential, leisure and commercial uses, with retail warehousing open for consideration." The land use zoning matrix sets out that Industry General industrial Use is not open for consideration whereas Industry science and technology based is permitted in principle.
- 7.3.3 I note that the based on the nature of the development, it does not expressly fit into a specific type of development addressed within the zoning matrix. I consider that it is an energy related technology process which would be regarded as an industrial process. I note that the Planning Authority considered that the proposal would be acceptable in principle, having regard to its location adjacent to an industrial area,

Sligo Docks and Sligo main drainage wastewater treatment plant main pumping station and sludge treatment centre, and also in light of the broader policies and obligations in relation to climate action, renewable energy generation and energy efficiencies. I consider that the proposal would not be a non-conforming use and would comply with the zoning and overall energy policy and on this basis I consider that the zoning does not present a barrier to the proposed development in principle.

7.3 Pollution Risk

- 7.4.1 Sligo County Council's second reason for refusal related to pollution risk arising from potential for leachate from the site discharging to surface water, ground water and marine waters. Prescribed body submissions including those of the Department of Housing, Local Government and Heritage, considered that this risk was poorly accounted for within the application documentation including the planning report, the draft CEMP and the NIS.
- 7.4.2 The appeal submission includes a revised NIS dated 12th November 2021, by Doherty Environmental Consultants which provides some additional elaboration on the issue of leachate runoff risk. The first party refers to detailed analysis of groundwater and surface water impact arising from water seeping from the base of the landfill, carried out by Malone O Regan in 2012, which concluded that based on the assimilative capacity of the receiving Garravogue Estuary to dilute, disperse and assimilate the leachate loading from the landfill, the receiving Garravogue Estuary is not significantly impacting on the quality of receiving waters. Notwithstanding this conclusion it is proposed that a range of measures will be implemented during construction and operation phase to minimise and/or eliminate potential for leachate emissions.
- 7.4.3 Landfill leachate mitigation measures are outlined in at 5.2.2 in the Revised NIS. which include localised vertical bore pile foundations to limit the amount of exposed and disturbed landfill material, use of bentonite impregnated liner on exposed

formations within road and yard areas to prevent direct migration of rainwater to the landfill. Operational Phase measures to protect surface water quality are detailed at 5.6.1.1. It is asserted that with the implementation of these measures during the operation and construction phase, and the low baseline risk of leachate migration, the development will not have potential to generate contaminated leachate discharging to surface water, groundwaters and marine waters.

- 7.4.4 I consider that the application documentation is incomplete in terms of detail with regard to the management of potentially contaminated excavated material on the site. The NIS refers to future method statements by civil engineering contractor with regard to earthworks. The submitted Outline Construction Environmental Management Plan, Jennings O Donovan and Partner's Ltd, dated August 2021 is a generic document which does not address the specifics of the site. I consider that the context of the site within the wider landfill site, and the requirement for a holistic drainage management has not been adequately addressed. On this basis concerns with regard to leachate migration to surface water remain.
- 7.4.5 In also note in relation to landfill gas, the Malone O Regan report March 2011, recommended that "If any development of the former landfill is considered in the future, a more detailed landfill gas assessment will be required, including revising the risk assessment in this report in order to address any potential landfill gas risks to future onsite occupier and also to evaluate the impact that any onsite development would have on offsite receptors. A further assessment of soil quality should also take place." I note that the current appeal fails to provide up to date gas monitoring results. I note an encroachment of the appeal site with respect to site of remediation and restoration works approved under ABP311863.21. This is further addressed at 7.5 below.
- 7.4.6 Based on the submitted details I consider that the concerns with regard to surface water and potential for contaminated leachate discharging to surface waters, groundwater and marine waters as outlined in the Council's second reason for refusal has not been overcome.

- 7.5 Question of Prematurity pending implementation of remediation measures under the Waste Management (Certification of Historical Unlicensed Waste Disposal and Recovery Activity) Regulations 2008.
- 7.5.1 As noted above the appeal site encroaches partially on the site to which ABP-311863-21 refers, which was approved by the Board on 8/4/2022, under Section 177AE of the Planning and Development Act 2000, as amended for Remediation and Restoration works at the former landfill and development of a public park. The remediation and restoration works, as approved, are required to comply with the Historic Landfill Certificate of Authorisation H006-01, granted by the EPA on 13th September 2019. The specific measures include provision of bio windows and bioactive trenches within the current appeal site. These measures are designed to passively vent methane gas. The proposed development does not take account of remediation and I would concur with the Planning Authority that the proposed development is premature pending the completion of these remediation measures.
- 7.5.2 Whilst the first party acknowledges that the proposed development could not commence pending remediation, and therefore is seeking a 10 year permission duration, I consider that it would be inappropriate to grant permission given the uncertainty with regard to the timeframe. I note that in advance of these remediation measures uncertainty remains with regard to baseline conditions for the proposed development site. This is a notable constraint with regard to the completion of Appropriate Assessment, where this assessment must contain complete, precise and definitive findings and conclusions, and may not have lacunae or gaps, as set out below.
- 7.6 Appropriate Assessment
- 7.6.1 Screening for Appropriate Assessment
- 7.6.1.1 Background

The Natura Impact Statement (NIS) submitted with the application, and revised NIS submitted with the appeal, refer to a Screening for Appropriate Assessment. This Stage 1 AA Screening report is not included within the application documentation. The NIS outlines at 1.0 Introduction that "The Screening report for Appropriate Assessment concluded, in view of best scientific knowledge that the project, in the absence of appropriate mitigation, it could not be ruled out at the screening stage that the project would not result in significant negative effects to two European Sites, namely the Cummeen Strand Drumcliff Bay (Sligo Bay) SAC and the Cummeen Strand SPA."

As the Screening was not submitted with the application it is appropriate that the screening assessment be addressed de novo.

7.6.1.2. Screening for Appropriate Assessment – Test of likely significant effects

The project is not directly connected with or necessary to the management of a European Site and therefore it needs to be determined if the development is likely to have significant effects on European Sites.

The proposed development is examined in relation to any possible interaction with European Sites, designated Special Conservation Areas (SAC) and Special Protection Areas (SPA) to assess whether it may give rise to significant effects on any European Site.

7.6.1.3Description of Development

The applicant provides a description of the development at 2.0 of the NIS, Doherty Environmental, November 2021. Section 2.2 and Table 2.1. Description of Site Plot Envelopes, and also at 2.4 within the Planning Report, Jennings O Donovan and Partners Ltd. August 2021.

In summary the development comprises, the construction of a biomass gasification, methanation, combined heat and power production plant and battery storage facility to include

- The construction of a biomass processing and storage area utilising forestry products.
- Construction of a gasification and methanation plant including buildings for the production of advanced biofuels
- Construction of a gasification and combined heat and power plant including building for the production of electricity and heating
- Construction of a containerised battery storage facility (20MW)
- Construction of a thermal energy recovery and storage facility including buildings for district heating distribution
- Construction of two on-site 38kV substations
- Creation of a new access from Finisklin Road
- All ancillary development, including the provision of site office, car parking, internal access roads, perimeter landscaping, fencing, lighting and on site drainage.

I have noted a number of anomalies with regard to the description of the development. The NIS outlines that "The project proposals will utilise forestry and agricultural waste such as woodchip, straw, and energy crops" whereas, the planning report refers to the use of forestry residues from harvest in the form of wood chips.

Taking account of the characteristics of the proposed development in terms of its location and the scale of works, the following issues are considered for examination in terms of implications for likely significant effects on European Sites:

Construction related – uncontrolled surface water / silt, leachate

Hanitat loss/ fragmentation

Habitat disturbance / species disturbance (construction and or operational)

7.6.1.4European Sites

The following European Designated sites occur within 15km of the appeal site.

Cummeen Strand Drumcliff Bay (Sligo Bay) SAC within 180m NW

Cummeen Strand SPA within 180m NW

Lough Gill SAC 1.6km SE

Balysadare Bay SAC 6.6km SW

Benbulben, Gleniff and Glenade Complex SAC 6.7km NE

Unshin River SAC 7.5km SW

Union Wood SAC 7.5km SE

Streedagh Point Dunes SAC 12.5km NW

Bunduff Lough and Machair / Trawlua / Mullaghmore SAC 15km N

Drumcliff Bay SPA 4km NW

Ballysadare Bay SPA 6.6km SW

Sligo Leitrim Uplands SPA 7km NE

Ballintemple and Ballygilgan SPA 7km NW

Arboline Island and Horse Island SPA 13km NW

The site is within 180m of the Cummeen Strand Drumcliff Bay (Sligo Bay) SAC and Cummeen Strand SPA. Given the proximity and potential for siltation and pollution arising from construction and operation without appropriate assessment it cannot be ruled out that the proposed development would not result in significant effects to these two European Sites.

Lough Gill is located upstream of the proposed development therefore is screened out based on the lack of pathway.

Based on the nature of the project, the lack of pathways and the intervening distances between the site and the remaining European sites, it is highly unlikely that any qualifying features of these sites could be affected by the project. It is, therefore, reasonable to screen out these from further assessment.

The qualifying features of conservation interest and conservation objectives for the two European sites screened in are as follows:

Cummeen Strand / Drumcliff Bay SAC (Site Code: 000627)

Qualifying Features

Estuaries

Mudflats and sandflats not covered by seawater at low tide

Embryonic shifting dunes

Shifting dunes along the shoreline with Ammophila arenaria (white dunes)

Fixed coastal dunes with herbaceous vegetation (grey dunes)

Juniperus communis formations on heaths or calcareous grasslands

Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)

Petrifying springs with tufa formation (Cratoneurion)

Vertigo angustior (Narrow-mouthed Whorl Snail)

Petromyzon marinus (Sea Lamprey)

Lampetra fluviatilis (River Lamprey)

Phoca vitulina (Harbour Seal)

Conservation Objectives

To maintain the favourable conservation condition of Estuaries, Mudflats and sandflats not covered by seawater at low tide, Embryonic shifting dunes, Petrifying springs with tufa formation (*Cratoneurion*), *Vertigo angustior* (Narrow-mouthed Whorl Snail), Lampetra fluviatilis (River Lamprey), and *Phoca vitulina* (Harbour Seal).

To restore the favourable conservation condition of Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes), Fixed coastal dunes with herbaceous vegetation (grey dunes), *Juniperus communis* formations on heaths or calcareous grasslands, and *Petromyzon marinus* (Sea Lamprey).

Cummeen Strand SPA (Site Code: 004035)

Qualifying Features

Light-bellied Brent Goose (Branta bernicla hrota)

Oystercatcher (Haematopus ostralegus)

Redshank (Tringa totanus)

Wetland and Waterbirds

Conservation Objectives

To maintain the favourable conservation condition of the bird species and the wetland habitat.

7.6.1.5Identification of Likely Effects

The proposed development is not connected with or necessary for the conservation management of any Natura 2000 site. The site may reasonably be determined to be in a sensitive ecological location due to its immediate proximity to the SAC and SPA.

The range of activities with potential effects on the adjoining European sites would include:

- Construction phase works;
- Construction and Operational Waste Management
- Construction and Management of Site Drainage.
- Operational Noise air and light emissions
- Associated ancillary works, including drainage works, landscaping.
- Offsite works, Transport, Distribution.

The potential effects would include adverse effects on water quality associated with pollution at the construction and operational phases and displacement and disturbance of waterbirds and protected species arising from the works, presence of workers, and operational use. It is reasonable to determine that the proposed development has the potential to result in disturbance effects due to noise emissions

from plant, equipment, and machinery and from the presence of workers and employees and that there is potential for displacement of birds and other protected species due to this disturbance. It is also considered reasonable to determine that the nature and extent of the proposed works may potentially impact on the natural marine environment at this location arising from the effects on water quality through the release of pollutants which could negatively affect the species that use the waters as well as the seabed habitats.

Having regard to these considerations, it is reasonable to determine that the proposed development could have effects, direct and/or indirect, on the conservation objectives of the adjacent European sites.

7.6.1.6 In-combination Effects

Having regard to the range of developments and activities in the immediate vicinity of this site (wastewater treatment plant, and recycling facilities and port related industry to the north and east, residential development to the west and south, etc.), and the extent of the European sites adjoining this site, possible point and diffuse sources of pollution within the Garavoge Estuary must also be acknowledged.

There is potential for cumulative effects with the wide range of projects and activities at this location and with the sources of pollution within the estuary.

7.6.1.7 Mitigation Measures

No measures designed or intended to avoid or reduce any harmful effects of the proposed development on a European site have been relied upon in this screening exercise.

7.6.1.8 Screening Determination

The proposed development has been considered in light of the requirements of Section 177U of the Planning and Development Act 2000 as amended. Having carried out Screening for Appropriate Assessment of the project, it has been

concluded that the project individually or in combination with other plans or projects would be likely to give rise to significant effects on Cummeen Strand / Drumcliff Bay (Sligo Bay) SAC (Site Code: 000627) and Cummeen Strand SPA (Site Code: 004035), in view of their Conservation Objectives, and Appropriate Assessment is therefore required.

This determination is based on the following:

- The nature and extent of the works associated with the proposed development,
- The proximity to the European sites, and
- The known pathways between the site and the adjoining European sites.

7.6.2 Appropriate Assessment

- 7.6.2.1The requirements of Article 6(3) as related to appropriate assessment of a project under part XAB, sections 177U and 177V of the Planning and Development Act 2000 (as amended) are considered fully in this section. The areas addressed in this section are as follows:
 - Compliance with Article 6(3) of the EU Habitats Directive
 - Screening the need for appropriate assessment
 - The Natura Impact Statement and associated documents
 - Appropriate assessment of implications of the proposed development on the integrity each European site

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

The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the

management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site before consent can be given.

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

7.6.2.3 Screening the need for Appropriate Assessment

Following the screening process above, it has been determined that appropriate assessment is required as it cannot be excluded on the basis of objective information that the proposed development individually or in-combination with other plans or projects will have a significant effect on Cummeen Strand / Drumcliff Bay (Sligo Bay) SAC (Site Code: 000627) and Cummeen Strand SPA (Site Code: 004035). The possibility of significant effects on other European sites has been excluded on the basis of objective information. Measures intended to reduce or avoid significant effects were not considered in the screening process.

7.6.2.4Natura Impact Statement

The appeal includes a document entitled *Sligo Bio Energy Park, Finisklin, Sligo Co Sligo, Natura Impact Statement* dated 12th November 2021, an update of earlier draft submitted with the application to Sligo County Council dated 20th August 2021.

The NIS gives a description of the project and identifies the relevant Natura 2000 sites and assesses potential significant effects thereon and details mitigation measures. Potential adverse effects of the proposed development on Cummeen Strand / Drumcliff Bay (Sligo Bay) SAC and Cummeen Strand SPA were examined and assessed. The NIS provided an assessment of a number of potential effects on the SAC and SPA arising from the proposed development. An evaluation of the

potential impact of discharges of drainage waters, emissions during construction phase such as noise and emissions during operational phase such as noise, light and air.

The NIS concluded that the project will not result in significant adverse effects to the conservation objectives of the Cummeen Strand / Drumcliff Bay (Sligo Bay) SAC and Cummeen Strand SPA.

I note the submissions received from the prescribed bodies in relation to the initial NIS draft dated 20 August 2021 as follows:

Inland Fisheries Ireland expressed concern with regard to the risk of leachate from the site discharging to surface waters, groundwaters or marine waters as a result of civil engineering works. On the basis that the site has been identified as a high risk site in relation to surface water discharge during excavations a site specific method statement for excavation of the site and containment of surface water and ground waters and the elimination of polluted waters from the site to the Garavogue river should be provided prior to a decision. Based on the risk of leachate seepage from the site IFI alternative location should be considered. NIS does not adequately address the presence of landfill leachate. Other matters to be addressed include measures to prevent spread of invasive species and an emergency response management plan to address case of accidental chemical spill or fire on site to include the management of discharge firewaters.

An Taisce submission considers that the issue of landfill leachate has not been sufficiently addressed in the NIS and not addressed at all in the outline CEMP.

Applications Unit Nature Conservation considers that the potential pollution risks associated with the disturbance of landfill substrate are inadequately accounted for particularly the disturbance of substrate via excavation and placement of foundations and the management of potentially contaminated excavated material. The mechanism by which such effects will be eliminated should be outlined. The NIS does not assess disposal of waste materials, offsite works and / or the offsite transport, distribution or use of materials and / or products. Construction disturbance to the SPA Special Conservation Interests (SCIs) and anthropogenic and lighting disturbance to Qualifying Interests (QIs) and SCI species during the operational

phase are inadequately detailed, assessed and accounted for in the NIS. The NIS is considered insufficient in detail and should include the mechanism through which the mitigation measures will be secured, implemented and monitored. Issue of invasive species is not addressed. The Department outlines concern that the NIS does not contain adequate information or fully address all impacts to allow for a complete Appropriate Assessment.

Having reviewed the documents, submissions and consultations with the prescribed bodies, I concur that there are deficiencies in terms of the detail of potential effects at construction and operational phases. I am not satisfied that the information allows for a complete assessment of any adverse effects of the development, on the conservation objectives of the following European sites alone, or in combination with other plans and projects:

Cummeen Strand / Drumcliff Bay (Sligo Bay) SAC (Site Code: 000627) and Cummeen Strand SPA (Site Code: 004035),

7.6.2.5 Appropriate Assessment of the implications of the proposed development.

The following is a summary of the objective scientific assessment of the implications of the project on the qualifying interest features of the European Site.

The following guidance is adhered to in the assessment:

DoEHLG (2009) Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities.

EC (2002) Assessment of plans and projects significantly affecting Natura 2002 sites. Methodological guidance on the provisions of Articles 6(3) and 6(4) of the Habitats Directive 92/43/EC.

EC (2018) Managing Natura 2000 sites.

7.6.2.6European Sites

The following sites are subject to appropriate assessment:

- Cummeen Strand / Drumcliff Bay(Sligo Bay) SAC (Site Code: 000627)
- Cummeen Strand SPA (Site Code: 004035)

A description of these sites and their Conservation and Qualifying Interests / Special Conservation Interests are set out at 3.0-3.6 of the NIS.

Relevant Aspects of the Proposed Development

The main aspects of the proposed development that could adversely affect the conservation objectives of the European sites include

Impacts to water quality and wetland habitat through construction related pollution event and surface water management

Operational impacts Noise / Air / Disturbance

Habitat disturbance

The potential effects would include:

- Indirect effects on water quality associated with pollution at the construction and operational phases.
- Contaminated surface water run off leachate during construction and operational phases
- Displacement and disturbance of waterbirds arising from the works and presence of workers, noise and visual sources.

Cummeen Strand / Drumcliff Bay (Sligo Bay) SAC

Section 4 of the applicant's NIS identifies potentially significant effects on this European site's Qualifying Features.

Embryonic shifting dunes, Shifting dunes along the shoreline with *Ammophila* arenaria, Fixed coastal dunes with herbaceous vegetation (grey dunes), *Juniperus*

communis formations on heaths or calcareous grasslands, Petrifying springs with tufa formation (*Cratoneurion*), and *Vertigo angustior* (Narrow-mouthed Whorl Snail) are not present on the site or within the immediate vicinity of the site. Likely significant effects on these habitats and species can reasonably be screened out.

There is the potential for the receiving marine waters of the Garavogue Estuary and the mudflats and sandflats within the SAC to be altered as a result of the ingress of pollutants such as hydrocarbons, chemical, sediments or leachate during the construction and operational phase, reducing water quality and potentially having a negative effect on water quality, affecting the distribution or abundance of species. The Garravogue Estuary provides suitable habitat for lamprey species and as such these qualifying species are considered to occur within the zone of influence. It is, therefore, accepted that mitigation would be required to control pollutant emissions to the marine environment.

Section 5 of the NIS sets out a number of **mitigation measures** to address potential impairment to water quality and to protect the Garavogue Estuary, its habitats and species.

Cummeen Strand SPA (Site Code: 004035)

Section 4 of the applicant's NIS identifies the potentially significant impacts to this European site's Qualifying Interests.

The habitats of the former landfill are considered to be of limited value for the bird species designated as being of special conservation interest however the birds of special conservation interest would likely use the estuary in the vicinity.

There is potential for receiving marine waters to be altered as a result of the ingress of pollutants during the construction and operational phase with the reduction of water quality, potentially having a negative effect on water quality and the habitat which the birds of special conservation interest depend on for foraging.

The proposed works would result in noise and light emissions from the construction and operation.

The construction works would result in disturbance and displacement of birds in the vicinity due to site works, plant and machinery and operations on the site.

Section 5 of the applicant's NIS details the range of mitigation measures intended to be employed as part of the proposed development.

Mitigation

Section 5 of the applicant's NIS details the range of mitigation measures intended to be employed as part of the proposed development. A requirement for landfill gas assessment and soil quality assessment, as identified in the Malone O Regan 2012 report is noted, and it is asserted that a detailed construction phase method statement will be required.

The issue of site remediation is not addressed within the NIS which impairs the completion of Appropriate Assessment, where this assessment must contain complete, precise and definitive findings and conclusions, and may not have lacunae or gaps. There are a number of other notable inconsistencies and gaps within the documentation which include the following

The Outline Construction and Environmental Waste Management Plan, Jennings O Donovan and Partners Ltd August is a generic document and does not address the specifics of the appeal site.

Other areas of omission within the NIS with regard to waste disposal, impact of processing of biomass on site, transport effects, measures to address the spread of invasive species on the site. The distribution of outputs from the site in terms of grid connection, battery storage, gas export, district heating are not addressed within the NIS. I also consider that there is a deficiency in terms of considerations with respect to other plans, projects and activities relating to potential in-combination effects.. Having regard to the numerous activities associated with the Garavogue Estuary I consider that the various development pressures on the European sites are not fully addressed within the NIS.

7.6.2.7 Conclusion

The proposed development has been considered in light of the assessment requirements of the Planning and Development Act 2000 as amended.

Having carried out screening for appropriate assessment of the project, it was concluded that it may have a significant effect on Cummeen Strand / Drumcliff Bay SAC and Cummeen Strand SPA. Consequently, an appropriate assessment is required of the implications of the project on the qualifying features of those sites in light of their conservation objectives.

I have noted a number of anomalies and omissions within the documentation. I submit that based on the information provided it is not possible to conclude that the project would not adversely affect the integrity of the Cummeen Strand / Drumcliff Bay SAC and Cummeen Strand SPA in view of the conservation objectives of these sites alone and in combination with other plans and projects. The Board is thereby precluded from considering a grant of permission.

7.7 Other Matters.

- 7.7.1 I have noted a number of discrepancies within the application documentation which require clarification. The planning report and public notices refer to use of forestry woodchip whereas the NIS and the revised NIS submitted with the appeal assert that "The project proposals will utilise forestry and agricultural waste such as woodchip, straw and energy crops." The precise nature of the development has implications in terms of the application of Waste Management regulation waste licensing and Environmental Impact Assessment Screening as set out at 5.4 above.
- 7.7.2 On the matter of emissions clarification is required on whether the development comprises or is for the purpose of an activity requiring an Integrated Pollution Prevention and Control License. (IPPC) or Industrial Emissions License from the EPA. I note The Industrial Emissions Directive, Directive 2010/75/EI on Industrial emissions (IED). Annex 1 Class 1.4 refers to "Gasification or liquefaction of (b) other fuels in installations with a total rated thermal input of 20MW or more." Consultation with EPA should be carried out in this regard.

- 7.7.3 Other anomalies identified within the application include discrepancies with regard to traffic movements arising. The Planning Report refers to 24 traffic movements per day for operational phase at 2.4.9 whereas at 6.4.4 operational phase traffic is predicted to be 54 traffic movements per day. I note that at Section 5 of Civil Works Design Report it is stated that a stage 1 / 2 Road Safety Audit has been undertaken for the proposed development and any recommendation from the audit will be taken into account in the final design. This road safety audit was not included within the application documentation to the Board. Inconsistencies are also noted within the application Planning report with regard to construction phase duration varying from 4 months (Para 6.4.1) to 15 months (Para 6.4.5.) There is reference within the civil works design report to an open land drain running through the site to be culverted which is not evident on plans. Japanese Knotweed is manifest on the site however the issue of invasive species is not addressed within the application. The submitted Syngas Safety Data Sheet (Attachment A4 Eqtec Technical Reports Storing Chemicals Act. 20211990 EQTA1105) refers to the proposed Shannon Gasification Plant. Regarding the matter of biomass sourcing I note that the application indicates that 100% of raw materials would be sourced from Sligo, Leitrim, Donegal, Mayo and Roscommon whereas letters of support with respect to forestry supply, submitted as Appendix D to the appeal, appear to suggest sourcing from outside the region.
 - 7.7.4 Regarding flooding and flood risk having regard to the nature and location of the site I consider that this requires further detailed flood risk assessment. The matter is briefly addressed at 2.3.11 of the Planning Report and 3.5 of the Civil Works Design Report, both Jennings O Donovan and Partners Ltd August 2021. It is noted that the site is defended by tidal embankments on the Garavogue River. It is asserted that there are no major flooding events in and around the site since the embankments were constructed. I note that, as referenced in the submission from the Department of Housing Local Government and Heritage, the location has been identified as vulnerable to waste overtopping in the Irish Coastal Wave and Water Level Modelling Study ICWWS 2018 Phase 2 Coastal Areas Potentially Vulnerable to Wave Overtopping. OPW 2020. Clearly the implications of flood risk should be taken

into account in terms of design and layout, emergency response and in the assessment of environmental sensitivities.

- 7.7.5 As regards the detail of the proposed site layout it is proposed to create a new site entrance from the Finisklin Road to the south. Alternative access from the roadway serving the wastewater treatment plant, which would enable retention of established landscaping and additional screen planting along the southern boundary, and in this regard, would be preferable. I note that no landscaping or landscape mitigation measures have been addressed within the application.
- 7.7.6 With regard to visual impact I also consider that in the absence of streetscape elevations, contextual drawings, cross sections and photomontage representations it is not possible to fully appreciate and assess the visual impacts of the proposed development.

Conclusions and Recommendation

Having regard to the foregoing I recommend that permission for the above described development be refused for the following reasons and considerations.

Reasons and Considerations

 Having regard to the information provided with the application and appeal, including the Natura Impact Statement, the Board is not satisfied that it has been demonstrated that the proposed development individually or in combination with other plans or projects would not adversely affect the integrity of the Cummeen Strand /Drumcliff Bay (Sligo Bay) Special Area of Conservation (SAC) and Cummeen Strand Special Protection Area SPA in view of the sites' Conservation Objectives. In such circumstances the Board is precluded from granting permission.

- 2. The proposed development is located within the former Finisklin landfill which is subject to remediation works and is regulated by the Environmental Protection Agency (EPA) under a Historic Landfill Certificate of Authorisation (CoA) issued to Sligo County Council in September 2018. Remediation measures are required to be implemented before any new buildings can be constructed. The appeal site encroaches on the site of approved remediation and restoration works and development of a public park, approved by An Bord Pleanála on 8th April 2022, (Ref ABP-311863-21) and which includes the provision of specific remediation measures on the appeal site. Accordingly, it is considered that development of the kind proposed would be premature pending the satisfactory completion of remediation measures required to address the environmental contamination risks associated with the closed landfill. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.
- 3. The Board is not satisfied based on documentation submitted with the application and appeal that the proposals for management of surface water during construction and operational phases of development are adequate. It is considered that the proposed development would pose an unacceptable risk of environmental pollution having regard to the potential of contaminated leachate discharging to surface waters, groundwater and marine waters. The proposed development would therefore be contrary to the proper planning and sustainable development of the area.

Bríd Maxwell Planning Inspector 29th November 2022