

Inspector's Report ABP-306136-19

Development	Seven-year planning permission for a continental cheese manufacturing plant. Retention of and alterations to the existing construction compound which will be removed on completion of the works. EIAR and a NIS submitted with planning application.
Location	IDA Ireland, Belview Science and Technology Park, Gorteens, Slieverue, County Kilkenny.
Planning Authority	Kilkenny County Council
Planning Authority Reg. Ref.	19668
Applicant(s)	JHOK Ltd
Type of Application	Permission
Planning Authority Decision	Grant with Conditions
Type of Appeal	Third Party
Appellant(s)	An Taisce
Observer(s)	None

Date of Site Inspection

Inspector

30th April 2020

Mary Crowley

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1.0 Site Location and Description

- 1.1. The appeal site with a stated area of 10.32 ha is located in the IDA Ireland Science and Technology Park in Belview, 3km east of Waterford City. The Park measuring 60.9 ha is on the Belview Port Road, thus providing direct access to Belview Port. The appeal site is accessed from the N29 via the L3412 local road.
- 1.2. The site is currently under agricultural use and is adjacent to the Glanbia Ireland Milk Processing Plant to the north. To the east of the site is an access road, with a local road forming the western boundary of the site. To the south is further vacant IDA land. The appeal site is undeveloped, save for an area at the eastern end that contains an existing construction compound and car parking area associated with the planning permission for the Milk Processing Plant (ABP PL10.241077 (Reg Ref 12/324)) on the neighbouring site and its subsequent expansion in 2018 - 2019 (Reg Ref 17/153).
- 1.3. The River Suir is ca 660m to the south. The Irish Water wastewater treatment plant serving Waterford is located adjacent to the River Suir, c.350m south of the site.
- 1.4. The applicant, JHOK Ltd; is a joint venture formed between Glanbia Ireland and Royal A-ware (Netherlands) to develop the proposed Continental Cheese Facility.
- 1.5. A set of photographs of the site and its environs taken during the course of my site inspection is attached. I also refer the Board to the photos available to view on the appeal file. These serve to describe the site and location in further detail.

2.0 **Proposed Development**

- 2.1. A seven-year planning permission is sought for a Continental Cheese manufacturing plant. The gross floor space of the proposed works is 27,836 sqm (6 no buildings).
- 2.2. The development will include a part single storey and part two storey production building approximately 14 metres high with intakes, processing plant and equipment, packing, stores, dispatch, offices, laboratories, utilities and personnel facilities; a 10 bay milk intake and cream dispatch building approximately 11 metres high and associated plant and equipment with office, milk testing and personnel facilities; storage silos up to 28 metres high for milk, whey and water; pipe and service bridges, salt silos and brine mixing; sprinkler storage tank and pumphouse; waste water

treatment plant comprising balancing, waste water treatment and sludge drying and a truck wash; waste recovery compound and store and a monitoring building.

- 2.3. Site development works will include earthworks; security fencing; traffic barriers; a new entrance; internal roads and paved areas; car, truck and bicycle parking; drains and services; connection to existing water main and foul drain in the Park and a treated wastewater outfall pipeline from the on-site wastewater treatment plant to the existing Irish Water outfall within the Waterford City Wastewater Treatment Plant at Gorteens; attenuation ponds; fire water retention pond; site lighting; signage and landscaping.
- 2.4. The scheme comprises the production of continental cheeses using predominantly milk with some salt as raw materials. It is estimated that the proposed development will produce 52,000 tonnes of cheese on an annual basis. The development will operate 24 hrs / day, 7 days / week, 40 weeks / year with 80 no employees. In terms of waste product whey and cream will be returned to Glanbia for further processing and effluent will be treated in the wastewater treatment plant. Domestic waste and packaging will be stored in bins and recycled or disposed of by licensed waste collectors.
- 2.5. Permission is also sought for the retention of and alterations to the existing construction compound which will be removed on completion of the works.
- 2.6. The development consists of an activity for which an Industrial Emissions Licence is required. It is stated that the applicant has applied for an IPCC License.
- 2.7. The application was accompanied by the following:
 - Environmental Impact Assessment Report (EIAR)
 - Natura Impact Statement (NIS)
 - Cover letter
 - Letter from IDA Ireland to Glanbia consenting to the making of a planning application
 - Letter from Irish Water giving the applicant permission to submit a planning applicant that includes lands owned by Irish Water at Waterford City Wastewater Treatment Plant.

3.0 Planning Authority Decision

3.1. Decision

3.1.1. Kilkenny County Council issued a notification of decision to grant permission subject to the following 15 no generally standard conditions. It is noted that Condition No 6 and No 9 are the same.

3.2. Planning Authority Reports

- 3.2.1. Planning Reports
 - The Senior Planner having considered the application documentation, the EIAR submitted, NIS submitted, the National and Regional policy objectives and the adopted Local Areas Plan for the area, considered that the development, subject to implementation of the required mitigation measures, would not have any significant impact on the immediate environment of the development or the conservation objectives of the River Suir SAC and therefore recommended that permission be granted subject to 15 no conditions. The notification of decision to grant permission issued by Kilkenny County Council reflects this recommendation.
- 3.2.2. Other Technical Reports
 - Road Design No objection subject to conditions relating to the agreement of a Road Maintenance Plan; implementation of a Traffic Management Plan for the construction and operational phase of the development, which prohibits HGV's turning west at the IDA Roundabout onto the LP412 Abbey Road when existing the IDA Science & Technology Park; delineation of all car parking spaces and all external lighting to be of an energy efficient lighting design.
 - Kilkenny Fire Services A fire Safety Certificate is required before works commence on site.

3.3. Prescribed Bodies

 Department of Culture, Heritage and the Gaeltacht – No stated objection subject to conditions relating to archaeological monitoring.

- Inland Fisheries Ireland Queries the suspended solids concentration of 50mg/l and seeks a maintenance contract for the oil interceptor.
- HSE Stated that mitigation measures outlined are adequate to protect public health with emphasis on the requirement to ensure that all mitigation measures proposed are implemented by the developer. Specific requirements are set out in the report.
- Irish Water No objection subject to conditions
- An Taisce It is considered that the application is premature pending review of CAP and that the EIAR and Natura Impact Assessment are systematically deficient. Reference is made to the Boards decision in relation to Shannonbridge Peat Power Plant, Co Offaly (ABP-303108-18 refers).

3.4. Third Party Observations

There are two third party observations recorded on the planning file from (1) The Friends of the Irish Environment and (2) the Belview Residents Association. The issues raised may be summarised as follows:

3.4.1. Belview Residents Association

 Revised EIAR and associated reports required based on the overall expansion of the current dairy processing site and not on the "stand alone" smaller site as detailed in the application.

3.4.2. Friends of the Irish Environment

- EIA Directive The EIAR does not meet the basic information provisions of the Directive with regard to direct and indirect impacts on the material supply source required for the project i.e. milk supply landholdings and the increase in milk production generated. There is a cumulative impact with the existing milk powder plant, and other existing and proposed milk processing plants, regionally and nationally that should be considered.
- Habitats Directive The milk supply source together with its cumulative impact taking into account the plant discharge at Belview including in the Barrow Nore and Suir SAC catchments requires AA.

 Nitrates Directive & Nitrates Derogation Impact – Map and landowner or operator name identification is required to establish the extent of existing and any additional Nitrates Derogations arising on the milk supply source for the project.

4.0 **Planning History**

- 4.1. There has been a number of developments on these IDA landholdings in recent years reflected in the planning history listed below. All these permissions relate to the Glanbia lands immediately north of the proposed site.
 - ABP PL10.241077 (Reg Ref 12/324) Glanbia Ingredients (Ballyragget) Ltd were granted permission in January 2013 for a new dairy processing and manufacturing facility for the manufacture and development of dairy products subject to 10 no generally standard conditions.
 - Reg Ref 14/19 Glanbia Ingredients Ireland DAC were granted permission in April 2014 for amendments to the previously approved development (Planning Ref.12/324 and An Bord Pleanála Ref: 241077.
 - Reg Ref 14/482 Glanbia Ingredients Ireland DAC were granted permission in January 2015 for amendments to two previous permissions; ABP PL10.241077 (Reg Ref 12/324) and Reg Ref 14/19.
 - Reg Ref 17/77 Glanbia Ingredients Ireland DAC were granted permission in June 2017 for an extension to the existing milk powder processing plant, extensions to the existing Administration Building and site works including roads and car parking. It is stated in the current appeal that this development has not commenced.
 - Reg Ref 17/153 Glanbia Ingredients Ireland DAC were granted permission in July 2017 for extensions to the existing Dairy Processing Facility.
 - Reg Ref 17/775 Glanbia Ingredients Ireland DAC were granted permission in March 2018 for a screening berm at the existing Dairy Processing Facility.
 - Reg Ref 19/378 Glanbia Ingredients Ireland DAC were granted permission and retention permission in August 2019 for various developments and amendments to permission Reg Ref 17/153.
- 4.2. The following appeal cases are referenced in the appeal:

- Glanbia Portlaoise ABP-302886-18 (Reg Ref 18/205) The Board granted permission in 2019 for a mozzarella cheese manufacturing facility at Togher National Enterprise Park, Portlaoise, Co Laois subject to conditions.
- ESB Shannonbridge ABP-303108-18 The Board refused planning permission in 2018 for the continued operation of the existing West Offaly Power Station beyond 2020 and the phased transition to operating solely on renewable biomass for the following two reasons as summarised:
 - The cessation of the use of peat as a fuel is essential in addressing the generation of excessive greenhouse emissions in meeting the states climate change obligations.
 - 2) Public safety by reason of traffic hazard and obstruction of road users.
- Dairygold Mogeely ABP PL.249108 (Reg Ref 16/7031) The Board granted permission in 2018 for a new cheese production facility and upgrade of the existing Dairygold Food Ingredients Facility subject to conditions.
- Edenderry Power Limited ABP PL.245295 (Reg Ref 15/129) The Board granted permission in 2016 for an extension of the continued uses and operation until 2030 of previously permitted peat and biomass co-fired power plant subject to conditions.

5.0 Policy Context

5.1.1. National Planning Framework

5.1.2. The *National Spatial Strategy 2002 – 2020* makes specific reference to Belview Port and its strategic importance for the continued development and enhancement of the critical mass of the South-East Region in particular the Gateway of Waterford, whilst facilitating the growth of Wexford and Kilkenny as hubs. The Plan states inter alia:

> Waterford, Kilkenny and Wexford will drive regional growth by providing a large and skilled population base, substantial capacity for additional residential and employment related functions and improving transport network.

> In the South East, there is substantial potential for the enhancement of critical mass through the further expansion of the existing designated gateway of Waterford, including the port at Belview

5.1.3. The *National Planning Framework (2018)* (NPF) acknowledges the importance of ongoing investment in the agri-food section, to underpin the sustainable growth of the sector, as set out in Food Wise 2025. The increase in agri-food exports, value added, primary production and creation of additional jobs are all encouraged. The NPF states that "the agri-food sector continues to play an integral part in Irelands economy and is our largest indigenous industry, contributing 173,400 direct jobs and generating 10.4% of merchandise exports in 2016". Policy objectives relevant to the proposed development include:

National Policy Objective 23 - Facilitate the development of the rural economy through supporting a sustainable and economically efficient agricultural and food sector, together with forestry, fishing and aquaculture, energy and extractive industries, the bio-economy and diversification into alternative on-farm and off-farm activities, while at the same time noting the importance of maintaining and protecting the natural landscape and built heritage which are vital to rural tourism.

- 5.1.4. **FoodWise 2025**, launched in 2015 and succeeding Food Harvest 2020 sets out a tenyear plan for the agri-food sector. It identifies growth opportunities for the Irish agrifood and fisheries sector that are expected to arise due to significant population increases and greater access to international markets. It identifies the following growth projections for the industry over the next ten years including:
 - 85% increase in exports to €19 billion;
 - 70% increase in value added to €13 billion
 - 65% increase in primary production to €10 billion and
 - The creation of 23,000 additional jobs all along the supply chain from producer level to high-end value-added product development.

5.1.5. Regional Planning Policy

5.1.6. The Southern Regional Assembly has prepared a Regional Spatial and Economic Strategy (RSES) for the Southern Region for the period 2019-2031 that came into effect on the 31st January 2020. The RSES provides a long-term regional level strategic planning and economic framework in support of the implementation of the National Planning Framework for the future physical, economic and social

development of the Southern Region and includes Metropolitan Area Strategic Plans (MASPs) to guide the future development of the Region's three main cities and metropolitan areas – Cork, Limerick-Shannon and Waterford. The RSES identifies Belview as a strategic employment location for the Waterford MASP and refers to the importance of enhanced access to Belview Port, with regards to the growth of the Waterford Metropolitan Area.

5.1.7. County Development Plans

5.1.8. The *Kilkenny County Development Plan 2014 – 2020* identifies Belview as a strategic location for enterprise and employment and as a strategic national, regional and county asset. It is a strategic aim to:

"To implement the provision of the Regional Planning Guidelines and to target the growth of Kilkenny City, Ferrybank / Belview, the District Towns, the other settlements in the hierarchy and rural areas to advance sustainable development."

5.1.9. The site is located within the IDA lands adjoining Belview Port that is identified as one of two regionally and nationally important strategic locations for enterprise and employment. The Plan commits to the continued development of the Waterford City environs, in particular the Belview Industrial Area:

"Substantial investment is taking place at Belview as a result of the infrastructural improvements, including the construction of a new milk processing plant at Glanbia"

5.1.10. As documented the lands are located on the edge of Waterford City, albeit that they are located in the jurisdiction of Kilkenny County Council. However, the *Waterford City Development Plan 2013 – 2019* includes an objective seeking to promote industrial development in the Belview areas, where the subject proposal is located, as follows:

"To promote and develop the national role of the Port of Waterford and Belview Industrial Zone (OBJ 3.0.7)

5.1.11. Local Area Plan

5.1.12. The *Ferrybank Belview Local Area Plan 2017* makes direct reference to the IDA Science and Technology Park and provides support for the further development of the area:

"The Industrial Development Agency (IDA) own a strategic site in Belview, which comprises 18 hectares of land, see Figure 5.1 Belview.

In 2013, Glanbia were granted permission for a new dairy processing and manufacturing facility, which opened in 2015. Glanbia now own their site. As part of the IDA strategy for the Belview area and building on the successful development of Glanbia Ingredients the Plan augments the IDA land bank in the area by zoning an additional 27 hectares of land as Industrial Technology Park adjacent to the Glanbia facility.

5.1.13. Further to this, it contains the Zoning Objective for the Ferrybank – Belview area. The application site is zoned **ITP Industrial / Technology Park**, with the following objective:

"To provide for industry, technology and the expansion of Belview Port"

5.1.14. The permissible uses encompassed within the Zoning Objective includes car park, **industry (general industrial use)** and ancillary office, industrial (light) silos and storage areas, storage tanks including bulk liquid storage and general warehousing. (emphasis added).

5.2. Natural Heritage Designations

5.2.1. There are no natural heritage designations within the appeal site. The Lower River Suir SAC is c 660m to the south of the appeal site. Other sites considered relevant to this appeal site include River Barrow & River Nore SAC, Bannow Bay SAC, Tramore Dues & Backstrand SAC, Bannow Bay SPA and Tramore Back Stand SPA.

5.3. EIA Screening

5.3.1. An EIAR was submitted with the application as it exceeds thresholds specified under Planning and Development Regulations 2001-2018 Schedule 5, 7(c) Part 1 which sets out the categories and scale of development that require mandatory EIA as follows: *"installations for manufacture of dairy products, where the processing capacity would exceed 50 million gallons of milk equivalent per annum".*

6.0 The Appeal

6.1. Grounds of Appeal

6.1.1. The detailed third-party appeal has been prepared and submitted by **An Taisce** and may be summarised as follows:

6.1.2. Environmental impacts of bovine agriculture and dairy production

- 6.1.3. The adverse environmental impacts of bovine agriculture are well documented. It is crucial that these impacts in relation to the milk supply for the proposed cheese plant are thoroughly assessed in line with the requirements of the EIA and Habitats Directive. Any increase in Irish dairy production is untenable.
 - Water quality The EPA report on Water Quality in Ireland 2013 2018 concludes that increased nitrogen runoff from agriculture is one of two primary drivers of this decline and that nitrogen pollution has worsened since 2013 as cattle numbers and fertiliser use have increased.
 - Biodiversity loss The last six yearly Article 17 (Habitats Directive) report (August 2016) to the European Commission on the status of EU protected habitats and species in Ireland found that over 70% of protected habitats are adversely impacted by agricultural pressures. Intensive grazing and overgrazing was the most prevalent pressure.
 - Greenhouse Gas Emissions (GHG) GHGs from agricultural account for one third of Irelands total emissions. The Irish bovine agricultural lobby repeatedly claims that Ireland is a world leader in carbon efficiency. Ireland is the most carbon-intensive beef producer in Europe, and ranks as Europe's third highest on emissions from its dairy sector (UN).
 - Air pollution Ireland is already in breach of the National Emissions Ceiling Directive and is legally obliged under the Directive to decrease its ammonia emissions by 2030. Intensifying bovine agriculture in Ireland will make achieving these targets extremely difficult.

6.1.4. **Details of the proposed milk supply**

- 6.1.5. The EIAR and NIS state that the milk for the proposed cheese plant will be primarily sourced from Glanbia's own milk suppliers, approximately 4,500 farms. The EIAR notes that the specific farms cannot be identified, but that all of Glanbia's suppliers are located in the eastern portion of the country.
- 6.1.6. The EIAR also noted that 75% of Glanbia dairy farms have a stream or other watercourses running through or adjacent to the farm. Despite this, only 57% of Glanbia's farms have nutrient management programmes to mitigate water quality deterioration (EIAR Section 7.8.3 refers).
- 6.1.7. The EPA Water Quality in Ireland 2013 2018 report (December 2019) states that increasing nitrogen levels are of particular concern in the southeast of Ireland, where the majority of these Glanbia dairy farms supplying the proposed plant are located and where most of the current dairy intensification is occurring.
- 6.1.8. According to the EIAR (Section 9.2), Glanbia's Milk Planning Census of 2019 2023 (which covers 86% of the company's milk pool) is projecting a 1.5% year on year productivity increase from the existing herd. They expect a supply increase from 2,347 million litres in 2018 to 3,014 million I 2023 (28% increase). The EIAR also states that a significant portion of the milk supply for the proposed cheese plant is already available and being sold to other processors. They therefore claim that the proposal will not require an increase in the dairy herd.
- 6.1.9. The EIAR has not provided any data to indicate that a productivity increase would not result in additional GHG and nitrogen emissions. Ultimately, regardless of whether the subject proposal will increase the dairy herd and intensify production, Ireland has an obligation to cut GHG emissions which will require *reducing* dairy production, not merely keeping it stable at current levels and certainly not increasing it.

6.1.10. Precedents

6.1.11. Edenderry – There are parallels between this appeal case and the High Court ruling on Bord na Mona's Edenderry Power Plant (ABP PL.19.245295) (An Taisce -v- An Bord Pleanála [2015] IEHC 633). In this case, it was ruled that there was "functional interdependence" between the power plant and the Bord na Mona bogs identified in the planning application. It was decided that the source of the fuel should have been considered as part of the application for the continued operation of the power plant and that you cannot "exclude completely the consideration of the indirect effects". Given the comparable relationship with the source of the milk and the proposed cheese plant, An Taisce submits that the source of the milk and environmental impacts associated with milk production must be considered when assessing the subject application.

6.1.12. Shannonbridge - In July 2019, An Bord Pleanála refused permission for the continued operation of the County Offaly Shannonbridge peat power plant (ABP PL.19.303108) with progressive biomass co-firing on a range of grounds; including inadequate assessment of the direct and indirect impacts of continued peat extraction from the supply bogs identified The Board also stated that the continued harvesting and burning of peat would run counter to national climate mitigation policy. It is considered that increased dairy production and processing would similarly run counter to national climate policy.

6.1.13. Legal requirements of the Habitats Directive

6.1.14. It is now well established in law that approval can only be granted for plans and projects when it has been established beyond all reasonable scientific doubt that the subject proposal will not adversely impact any Natura 2000 sites. Reference is made to Case C-258/11, Sweetman & Others v An Bord Pleanála & Others and the Kelly v An Bord Pleanála & Other [2013 No 802 J.R.]. If uncertainty exists regarding the potential impact of any proposed development full account should be taken of the precautionary principle, and the development should be refused.

6.1.15. Habitats Directive

- 6.1.16. In light of the above An Taisce submits that granting approval for the subject proposal would contravene Article 6(3) of the Habitats Directive for the following reasons.
 - It is stated multiple times in the application that although the milk will primarily be sourced from Glanbia farms, the exact farms and their locations are uncertain and would likely change year to year.
 - 2) Given, the known potential for adverse impacts of bovine agriculture on the environment, and the number of Natura 2000 sites, in the Glanbia dairy farm

catchment area, the majority of which are water based it is considered that the impacts of the dairy farms must be evaluated in the Appropriate Assessment. The fact that the localities of the farms from which the milk will be sourced are uncertain means that the potential impact on nearby Natura 2000 sites cannot be properly assessed and definitive findings cannot be reached.

- 3) It is considered that the lack of information on the milk source farms in the subject application is analogous to the lack of information on the biomass source in the Shannonbridge Power Plant and that it therefore cannot reasonably be determined that the indirect effects of the proposed cheese plant on the environemnt would be mitigated.
- 4) While completing an Appropriate Assessment for all 4,500 Glanbia farms may indeed be impractical, it is noted that *none* have been assessed, not even those in closest proximity Natura sites.
- 5) The NIS and EIAR outline the various sustainability programmes in which Glanbia farms participate and upon which the applicants claims of no adverse indirect impacts as a result of the milk supply are largely predicated. The fact that the NIS's conclusion that these programmes will mitigate any adverse impacts is made "in general terms" indicates a lack of definitive findings.
- 6.1.17. There is no data or other evidence to indicate that these programmes have actually made demonstrable environmental improvements in water quality, GHG and ammonia emissions reduction, biodiversity protection etc.

6.1.18. Other considerations

- 6.1.19. Cumulative impacts The EIAR has failed to adequately assess the cumulative impacts of the subject proposal in combination with other existing, proposed and expanded dairy-reliant projects such Glanbia at Togher, Portlaoise, Co Laois and the Norwegian TILE Cheese factory in conjunction with Dairygold at Mogeely, Co Cork. It should also be assessed against other plans and projects that fall under FoodWise 2025 in relation to dairy and beef expansion.
- 6.1.20. Greenhouse gas mitigation in a time of climate emergency In light of the intensification of dairy production required to meet the demands of the subject proposal (and in combination with other existing and proposed dairy developments),

An Taisce consider that a grant of permission would contravene the Climate Action and Low Carbon Development Act 2015.

- 6.1.21. The appeal was accompanied by the following:
 - "Look what happened in the Netherlands Hogan warns Irish dairy sector on environment" (Article Farming Independent)
 - Board Order ABP-303108-18

6.2. Applicant Response

- 6.2.1. The first party response has been prepared and submitted by Tom Philips & Associates in association with Malone O'Regan and Arthur Cox Solicitors and may be summarised as follows:
- 6.2.2. The environmental impacts associated with the proposal have been fully addressed in accordance with the EIA and Habitats Directive. The proposed development would result in proper planning and sustainable development, in accordance with national climate change legislation and the polices and objectives of the *Kilkenny County Development Plan 2014 2020* and the *Ferrybank-Belview Local area Plan 2017* (LAP) and other relevant considerations.

6.2.3. **Description of Development**

6.2.4. The description of development that appeared on the Statutory Notices for the planning application included reference to "retention" as follows:

"The application also seeks retention of an alterations to the existing construction compound which will be removed on completion of the works"

6.2.5. The construction compound is already in existence on the site and importantly was granted planning permission in July 2017 (Reg Ref 17/153) in respect of the extension to the Milk Processing Plant granted planning permission in January 2013 (ABP PL10.241077 Reg Ref 12/324). The compound supports the ongoing works associated with the neighbouring development and would cease once the associated works are complete.

6.2.6. Details of the milk supply source

- 6.2.7. The planning submission provides a sufficient amount of information surrounding the supply of milk in order for a sufficient level of assessment surrounding any potential related impacts, either direct or indirect, to be undertaken and robustly concluded. It is impossible to state definitively the exact number of farms that will supply the proposed development as some farms may change their structure in the future. Nevertheless, it is important to note that there will be no appreciable land-use change as a result of the proposed development.
- 6.2.8. As highlighted in Section 2.9 of the EIAR, in addition to the significant portion of milk that is already available within the system (but being sold to other industrial processors at present), an increase of 1.5% productivity gain, year on year, from the existing dairy herd, is expected across farms in Ireland, and also within Glanbia's milk pool. This will be coupled with a modest herd expansion on existing farms. Productivity increase is based on increasing efficiency at the farms, including more efficient grassland management. This would result in improved soil health and thus lower nitrogen emissions. Glanbia proactively promotes scientific-based mitigation measures, which are detailed in Section 8.8 "Indirect Impacts" of the EIAR. For clarity this increase in milk production would occur regardless of whether the proposed development takes places or not.
- 6.2.9. An Taisce has utilised the appeal as an opportunity to object to the intensification of dairy at a national level, for example, through its reference to FoodWise 2025 and Irelands obligation as a nation. An Taisce's position directly conflicts with the National Climate Change Action Plan 2029, which is based on the Teagasc Marginal Abatement Cost Curve (MACC) Report (refer to Section 10.8.2 "Measures for GHG Emissions Reduction") which allows for a modest increase in the national dairy herd size with implementation of mitigation measures. The National Climate Change Action Plan 2019 details targets for Green House Gas (GHG) emissions from agriculture, as well as mitigation measure that will enable the achievement of such targets.

6.2.10. Environmental Impacts of bovine agriculture and dairy production

 Water quality - The proposed development will not cause intensification of diary, nor will indirect impacts have significant effects after implementation of mitigation measures, as outlined in Section 8.8 "Indirect Impacts" of Chapter 8 of the EIAR. That section details numerous programmes and mitigation measures implemented by the Government and Glanbia to mitigate against nitrogen. The proposed development will not result in adverse impacts on water quality and the integrity and conservation status of the qualifying interests of SACs and SPAs will not be adversely impacted upon.

- 2) Biodiversity Loss Indirect impacts on biodiversity were assessed in the Chapter 6 "Biodiversity" where it was concluded there would be no significant impacts on biodiversity. In Chapter 8 "Water", Section 8.8 "Indirect Impacts", it was concluded that there would be no impact on water quality and no impact on biodiversity in aquatic habitats. Detailed mitigation measures will be incorporated within the development with long-term residual impacts on ecology being concluded to be insignificant. The NIS concluded that the proposed development "would not cause any adverse impacts on any European designated site or any of their designated features of interest given the proposed mitigation measures to be implemented" (Section 6, Non-Technical Summary of the EIAR).
- 3) Greenhouse Gas Emissions In February 2019 the UN Food and Agricultural Organisation (FAO) confirmed to the Department of Agriculture, Food and the Marine that their model *"should not be used for inter-country comparisons at this point"*. An Taisce has misapplied the GLEAM-I model in order to support its argument. It is submitted that the EIAR is based on a robust data set. Glanbia is fully committed to the Governments climate change policy and supports mitigation measures.
- 4) Air Pollution Ammonia emissions which are indirect impacts relating to air quality from dairy farming are robustly addressed in the EIAR Section 8 Air Quality 9.8 Indirect Impacts. The Government and Teagasc have programmes (*Code of Good Agricultural Practise* and MACC for ammonia emissions) in place to address these emissions with the projected dairy productivity and dairy herd size increase. As the milk supply for the proposed development is accounted for in the national projected milk supply in Ireland, the proposed development will have no impact on Ireland reaching these targets.

6.2.11. EIA & Habitats Directive

1) Habitats Directive – Impacts from dairy farming on air, water, soil and Natura sites are impacts that will arise at an operational level. The assessment of indirect

effects on an individual farm level is not only impractical and unreasonable but is also not in spirit of either the EIA Directive or the Habitats Directive. Glanbia also ensures that best agricultural practises are implemented to prevent and minimise emissions but responsibility for policing emissions from farms is a matter for both local authorities and Government Agencies. Further to this An Taisce submits that there is a functional interdependence between the proposed facility and the individual farms from which they source their milk. The identification of 4,500 individual farmers in a public document would raise data protection concerns under the *Data Protection Act 2018*.

- 2) Efficacy of the farm sustainability programmes Monitoring is built into the sustainability programmes, detailed in the EIAR Section 2.8 as mitigation for potential indirect environmental impacts. All of these programmes utilise similar mitigation measures to Teagasc's *Action Catchments Programme* (ACP) which was put into place to analyse the *Good Agricultural Practice* (GAP) measures that were implemented under the EU Nitrates Directive. The 2019 EPA Report on Water Quality showed that waterbodies in the ACP program study areas improved by 16% as opposed to the overall decline in water quality referenced by An Taisce.
- 3) Edenderry Power Plant In its appeal, An Taisce referenced to the above High Court ruling on Bord na Mona's Edenderry Power Plant in respect of "functional interdependence" between the power plant and the source of the fuel; peat extraction from Bord na Mona's bogs. In contrast the EIAR submitted with the subject planning application has regard to the source of milk and the impact associated with this (to the extent that it should) and therefore, it is submitted that An Bord Pleanála can fully assess any indirect effects arising as a result of the development.
- 4) Shannonbridge Peat Power Plant The Shannonbridge decision enforces a section of national policy, which related specifically to peat as a fuel in relation to a facility that seeks the continued use of peat as a source of fuel. National climate policy does not treat milk production or the dairy industry in the same manner. It is on this basis that no parallel exists between the two cases with regard to national climate policy.
- 5) **Completeness of the EIAR & NIS** Both the EIAR and the NIS have been completed in accordance with all relevant legislation, guidance documents and

best practise as detailed in Section 1.4 "Methodology" of the EIAR and in Section 2 "Methodology" of the NIS. All indirect and cumulative impacts have been fully assessed in accordance with these requirements. Cumulative impacts have also been robustly considered in each section of the EIAR. The conclusions of each section was that following implementation of mitigation measures, there would be no significant residual impacts associated with the proposed development.

6.2.12. National Climate Change Policy & Legislation

- 6.2.13. An Bord Pleanála is required to "have regard" to climate change under the Climate Change and Low Carbon Development Act 2015 and the Planning and Development Acts 2000 – 2019, particularly in the context of the National Planning Framework 2018.
- 6.2.14. The proposed development complies in so far as it can and in so far as is appropriate with the *National Mitigation Plan* and the *National Adaptation Framework* (2018) and with the Sectoral Mitigation measures adopted by the Minister for Agriculture included in the *National Mitigation Plan* as demonstrated in the EIAR and NIS.
- 6.2.15. The EIAR and NIS conclude that the proposed development would result in no significant adverse effects on the environment. By virtue of providing a full assessment of the proposed development with regards to its environmental impacts and proposing the implementation of mitigation measures, the planning application enables decision makers to comply with Section 15(1)(d) of the *Climate Action and Low Carbon Development Act 2015*.

6.2.16. Other Related Items

- 6.2.17. With regard to the movement of foreign investment into the Irish dairy industry it is submitted that both the Netherlands and Ireland are Member States of the European Union. EU policies aim to ensure the free movement of people, goods, services and capital within the internal market, including inter also common policies on trade, agriculture, fisheries and regional development.
- 6.2.18. The response was accompanied by the following:
 - 1) Planning permission for existing construction compound (KCC Reg RE 17/153)
 - 2) Dairy Sustainability Ireland response to Ag-Climatise Public Policy Consultation

- 3) Comments on Legal Aspects of the Appeal by Dr Yvonne Scannell that may be summarised as follows:
 - There is no legal requirement that any proposed or individual development must comply with the Climate Action and Low Carbon Development Act 2015.
 It is a principle of legal interpretation that if a statue expressly provides for an enforcement mechanism, that is the mechanism that ought to be applied.
 - In the turf cases, it was reasonable and practicable to assess the impacts of turf extraction because the extraction was always a new extraction from a few identified bogs directly necessitated by the proposed development. In this case the milk will "be mostly sourced from existing c 4,500 Glanbia farms. Any emissions to air, water or affecting biodiversity are currently occurring. It is impossible to predict emissions from potential new suppliers.
 - Glanbia itself seeks to enforce contractual measures that ensure compliance with best agricultural practises but it has no right, nor would it be practicable for it to police the environmental behaviour of its suppliers no more than any buyer or goods can police the environmental performance of the seller.
 - The EIAR and NIS should assess the indirect effects of the proposed development if they are likely and to the extent that is reasonable and practicable at the time the planning application is lodged. The Board has a discretion to ask for further information to remedy a failure to describe indirect effects adequately and its decision on this matter is one to which the courts will normally defer.
 - It would be manifestly unreasonable to require all manufacturing developers, for example, proposed shop, restaurants etc to ascertain, describe and assess the environmental impacts of their suppliers in NIS and EIARs.

6.3. Planning Authority Response

- 6.3.1. Kilkenny County Council in their response to the appeal set out the following as summarised:
 - The project has been assessed through the EIA process with the preparation of an EIAR and has also undergone an Appropriate Assessment Stage 2 NIS Report. It is the view of the Planning Authority that with the appropriate mitigation measures

outlined in the EIAR and NIS that the proposed development would accord with the proper planning and sustainable development of the area.

- In its appeal documents An Taisce suggests that there is a precedence set in the case of An Taisce -v- An Bord Pleanála (PL19.245295 Edenderry Power Limited) and PL19.303108 (ESB Shannonbridge) where the impact of peat extraction on the identified bogs was not considered as part of the application. There is critical difference in those applications as the source of the peat was spatially identifiable on selected bog areas with appropriate infrastructure and was therefore inextricably linked to the project as a whole.
- In this instance the source of the milk is not defined and indeed in a commercial world could come from different sources depending on supply and demand within the market at any given time. Therefore, the milk chain is not part of the project and does not require to be addressed directly as part of the EIAR. It is the view of the Planning Authority that at a National Food Level Food Harvest 2020 and Foodwise 2025 are overarching policies for the development of agri food. FoodWise 2025 has been the subject of its own Strategic Environmental Assessment and Appropriate Assessment.
- The milk supply for the proposed plant is not locationally tied to a particular source and could come from any milk supply source. It is therefore considered that the issue of milk supply does not form part of the project and therefore is not part of the EIAR.
- The Planning Authority respectfully requests An Bord Pleanála to grant permission subject to appropriate conditions.

6.4. **Observations**

6.4.1. There are no observations recorded on the appeal file.

6.5. Further Responses

6.5.1. The appeal was referred to the Environmental Protection Agency (EPA) for comment. A response was received on the 12th June 2020. It is stated that the development may require a licence but that no application has been received to date. Should a licence application be received by the EPA all matters to do with emissions to the environment from the activities proposed, the licence application documentation and EIAR will be considered and assessed by the Agency.

6.5.2. There are no other responses recorded on the appeal file.

7.0 Assessment

- 7.1. Having regard to the information presented by the parties to the appeal and in the course of the planning application and to my site inspection of the appeal site, I consider the key planning issues relating to the assessment of the appeal can be addressed under the following general headings:
 - Scope of Assessment
 - Policy Considerations
 - Other Planning Issues
 - Environmental Impact Assessment
 - Appropriate Assessment

8.0 Scope of Assessment

8.1. The appellant in their appeal and the applicant in their response have provided lengthy and detailed submissions all of which are available to view on the file and all of which have been noted and considered. The key issues raised relates to the assessment of the indirect effects of the dairy farms supplying milk to the proposed factory. EIA and AA are dealt with under separate headings below. This section deals with the specific matters raised in relation to the scope of the assessment under the following headings; Legislative Framework; Milk Supply; Other Cheese Factories; Government Policy on the Dairy Sector; FoodWise 2020 and Government Policy on Climate Change.

8.2. Legislative Framework

8.2.1. EIA Directive - The relevant legislation is Directive 2011/92/EU of the European Parliament and Council of 13th December, 2011, on the assessment of the effects of certain public and private projects on the environment. This directive is the codification of Council Directive 85/337/EEC of 27th June, 1985, which had been amended on a number of occasions. The relevant article is Article 3 which states:

The environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case and in accordance with Articles 4 to 12, the direct and indirect effects of a project on the following factors:

- (a) human beings, fauna and flora;
- (b) soil, water, air, climate and the landscape;
- (c) material assets and the cultural heritage;
- (d) the interaction between the factors referred to in points (a), (b) and (c).
- 8.2.2. This article is now incorporated in an Act of the Oireachtas, Part X, Section 171A of the Planning and Development Act 2000, as inserted by the Planning and Development (Amendment) Act 2010. Indirect effects are described as the impacts on the environment, which are not a direct result of the project, often produced away from the project site or because of a complex pathway. However, neither the scope nor limit of indirect effects are explicitly defined in the Directive or the Act.
- 8.2.3. Habitat Directive Council Directive 92/43/EEC of 21st May, 1992, on the conservation of natural habitats and of wild fauna and flora, has been transposed into Irish law by the European Communities (Natural Habitats) Regulations 1997 S.I. 94/97. The relevant article is as follows:

6.3 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. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.

8.2.4. Article 6.3 has been transposed into Irish legislation by Section 32, Part IV of SI 94/97. Part XAB of the Planning and Development Act 2000 (as amended) sets out the requirements of Articles 6(3) of the Habitats Directive in respect of Screening (Stage1) and Appropriate Assessment (Stage 2). While potential indirect effects may arise due to pathways or connections to a European Site neither the scope nor limit of such effects are explicitly defined in the Directive or the Act.

8.3. Milk Supply

- 8.1. An Taisce submits that there is an inextricable relationship between the proposed cheese plant and its supply of milk (c4,500 farms) and therefore, in order to carry out the Appropriate Assessment in accordance with the Habitats Directive and to meet the information provision requirements of the EIA Directive, the milk supply inputs for the proposed cheese plant must be fully assessed.
- 8.2. In requiring the impacts of the milk supply farms to be assessed the appellant refers to the High Court ruling on An Taisce vs An Bord Pleanála [2015] IEHC 633 (Edenderry Power Plant), 9th October 2015 where there are "crucial parallels" as the peat extraction for fuel for the generating station was held to be a "possible indirect effect" on the environment.
- 8.3. The Edenderry judgment found that the fact that the bogs from which the peat was to be sourced were identified in the EIS and the peat was transported by a private rail link from the bogs to the power plant, meant that there were possible indirect effects of the use of peat from these bogs on the environment that had to be assessed as such in the context of an EIA. It was also held the while the harvesting operations were governed by separate EPA licensing this did not justify exclusion from the EIA process. In essence, the judgement required the scope of the EIA to include the environmental effects of extracting the peat fuel source.
- 8.4. However, there are distinct differences between both the Edenderry case and the appeal case now before the Board as follows:
 - In the Edenderry case the High Court held that "the important word in the section applying the relevant Article is "indirect" and that in assessing indirect effects there has to be a limit or the effects will be too remote". The Court observed that "the section does put a limit on indirect by stating that it is "in the light of each individual case".
 - At Edenderry the peat bogs belonged to Bord na Mona and it had full legal control over how it was extracted whereby there was functional interdependence between both. While the proposed Cheese Factory is dependent on the supply of milk there is functional independence in that the raw material is coming from c4500 dairy

farms over which Glanbia has no legal right to oversee how these independent suppliers operate and any condition to do so would be ultra vires. It would not be reasonable or practicable for the environmental impacts of all these farms to be individually assessed for the purposes of an EIAR or an NIS.

- Mr Justice White also stated that the respondent excluded completely the consideration of the indirect effects, when considering the planning application for the extension of life of the power plant. Even if it were conceded that the effects of individual dairy supply farms are indirect effects it remains that the environmental effects of dairy farming have been addressed in the planning application and EIAR and have not been "excluded completely".
- The Edenderry plant was constructed, close to Midland bogs for the generation of electricity by burning peat, of which there was a plentiful supply. The peat was supplied directly by rail from a few defined and easily ascertainable bogs under the control of Bord na Mona. That is not the case for the c4500 dairy farms that are independently removed from the appeal site and where the raw material will be delivered using the national road network.
- 8.4.1. In addition to the foregoing the appellant also refers to the An Bord Pleanála decision to refuse permission to the ESB Shannonbridge (ABP-303108-18 ABP) in 2018 for the continued operation of the existing West Offaly Power Station beyond 2020 and the phased transition to operating solely on renewable biomass. In this case the Board found that "the cessation of the use of peat as a fuel is a key component within national climate and energy policy in helping to reduce the generation of excessive greenhouse emissions.....". The cessation of dairy farming is not a component of national policy on climate change or biodiversity or water pollution management. As documented below there is national policy in place for a modest increase in dairy farming (Food Wise 2025 refers).
- 8.4.2. Overall, I disagree with the appellant that there are parallels with both cases; Edenderry and Shannonbridge and the appeal case. The critical difference with the Edenderry Power Plant is that the source of peat was spatially identifiable on selected bog areas with appropriate infrastructure and was therefore inextricably linked to the project as a whole. This is not the case with the Cheese Factory and the expectation that the indirect effects of c 4500 independent dairy farm suppliers that are removed from the appeal site be assessed should be limited as the effects would be too remote.

With the Shannonbridge development it is national policy to cease the use of peat as a fuel. In the appeal case a modest increase in dairy farming is national policy.

8.5. Other Cheese Factories

- 8.5.1. Concern is raised that the EIAR has failed to adequately assess the cumulative impacts of the subject proposal in combination with other existing, proposed and expanded dairy-reliant projects, namely Glanbia at Togher, Portlaoise, Co Laois and the Dairygold Cheese factory at Mogeely, Co Cork. I have considered these cases and I note the following:
 - Glanbia, Portlaoise Based on publicly available information this plant will not process milk, as production will be based on curd. There will be no additional milk required or produced for this development.
 - Dairygold, Mogeely Annual milk intake for the proposed factory is reported to be a 245 million litre per annum (source EIAR Reg Ref 16/07031). The factory and the proposed development will cumulatively require 695 million litres of milk. Teagasc predicts that milk supply will increase by 2.6 billion litres between now and 2025 (Source: Teagasc Roadmap 2025). The combined milk input required for the two facilities represents only 27% of the predicted additional milk supply that will be available by 2015.
- 8.5.2. I am satisfied that no cumulative impacts arise in this case.

8.6. Government Policy on the Dairy Sector

- 8.6.1. One of An Taisce's main objection is to the Irish Dairy Industry, including criticism of Government endorsed policies / strategies such as FoodWise 2025 that support the growth of the agricultural industry within Ireland.
- 8.6.2. FoodWise 2025, under the auspices of the Department of Agriculture, Food and the Marine, set out a ten-year plan for the Irish agri-food sector, establishing growth projections for the industry including the intensification of dairy production. FoodWise 2025, which has been the subject of its own Strategic Environmental Assessment and Appropriate Assessment, states that the following growth projections are achievable by 2025:
 - Increasing the value of agri-food exports by 85% to €19 billion;

- Increasing the value added in the agri-food sector, fisheries and wood products sector by 70% to more than €13 billion;
- Increasing the value of primary production by 65% to almost €10 billion; and
- The creation of additional 23,000 direct jobs in the agri-food sector all along the supply chain from primary production to high-value added product development
- 8.6.3. The supply of milk to the proposed development will not result in any additional emissions beyond what is currently projected by the Government. I agree with the applicant that the appellant raises issues that present a fundamental challenge to issues of Government policy and principle that are out with the scope of this appeal.

8.7. Government Policy on Climate Change

- 8.7.1. It is submitted that intensive cattle farming is a major emitter of Green House Gases (GHG) and is contributing significantly to Irelands ongoing failures to reach its legally binding Paris Agreement targets.
- 8.7.2. Ireland has made a specific plan for dealing with climate change under the Climate Change and Low Carbon Development Act 2015. Under this Act a Climate Action Plan was made together with a National Mitigation Plan with certain Ministers (including Agriculture) required to prepare and report on sectoral plans for their areas of responsibility. In November 2019 following the National Climate Action Plan (refer to Section 2.5.3 of the EIAR) published on 1 August 2019, the Department of Agriculture, Food and the Marine (DAFM) published "Draft National Climate & Air Roadmap for the Agriculture Section to 2030 and Beyond", titled "Ag-Climatise". The consultation ended on 10th January 2020. The Ministry for Agriculture has assessed the effects of dairy farming on climate and the environmental and has concluded that compliance with its mitigation policies will ensure compliance with the states climate change obligations.
- 8.7.3. It is noted that in the Friends of the Irish Environment vs Government of Ireland [2019] IEHC 747 the High Court dismissed arguments that the adequacy of Irelands National Emissions Plan 2017 and National Adaptation Framework made pursuant to the Climate Change and Low Carbon Development Act 2015 can be questioned in judicial proceedings. It is reasonable to conclude that the same arguments apply to administrative authorities and that matters involving policy and political choices are matters for elected representatives.

- 8.7.4. As pointed out by Dr Yvonne Scannell implementation of climate change and biodiversity measures on an ad hoc basis for individual developments or activities is through requiring compliance with a great deal of legislation and not only by the planning system. Other controls include Industrial Emissions and IPC licensing, implementation of the Common Agricultural Policy, compliance with Water Pollution legislation, the introduction of the Agricultural Catchments Programme (for nitrates), compliance with the European Communities (Birds and Natural Habitats Regulations 2011-2019 and various other polices and requirements.
- 8.7.5. An Bord Pleanála is required to "have regard" to climate change under the Climate Change and Low Carbon Development Act 2025 and the Planning and Development Acts 2009 2019 particularly in the context of the National Planning Framework. That Framework envisages that the achievement of transitions to a low carbon climate resilient and environmentally sustainable economy by 2050 will be "in line with the National Mitigation Plan and the National Adaptation Framework".
- 8.7.6. I am satisfied that the proposed development complies in so far as it can and in so far as is appropriate with the National Mitigation Plan and the National Adaption Framework 2018 and with the Sectoral Mitigation measures adopted by the Minister for Agriculture included in the National Mitigation Plan as demonstrated in the EIAR and NIS and the response to the Appeal.

8.8. Conclusion

8.8.1. Overall, I agree with the general comments of An Taisce that the assessment of all 4,500 Glanbia farms is impractical. The EIAR and NIS should assess the indirect effects of the proposed development if they are likely and to the extent that is reasonable and practicable at the time the planning application is lodged. However as stated above there must be a limit or the effects will be too remote. Further it should be done *"in the light of each individual case"*. As documented by Dr Yvonne Scannell the indirect effects to be assessed in this case are those created by the proposed development not the impacts of c4500 existing dairy farms, not the impacts of some future supplier farms (which are impossible to predict) or the impacts of a sector generally (that have been addressed separately).

- 8.8.2. I agree with the applicant that the outcome of this appeal may have wide-ranging implications for the Irish agricultural sector. The proposed development would not of itself drive increased milk production and any reference to an expected increase of milk production on Glanbia's farms, or nation-wide, sits within a national policy context for a managed increase of dairy production in Ireland, subject to the implementation of mitigation measures. Further this national increase in milk production aligns with national climate change policy. Any objection to the principle of such national policy sits outside the scope of this appeal and relevant planning assessment.
- 8.8.3. I am satisfied that the planning application provides a sufficient level of information surrounding the source of milk / milk supply in order to allow for the assessment of the associated indirect impacts to the required extent. Accordingly, I am satisfied that the granting of approval for this application would not contravene the Habitats Directive, the EIA Directive or the Climate Action and Low Carbon Development Act 2015.

9.0 **Principle / Policy Considerations**

- 9.1. Belview Port and the surrounding lands have been identified as a strategic employment location and is an important element in building critical mass of the Waterford Metropolitan City Region. This objective is supported at National, Regional and Local Levels through the National Planning Framework, the Regional Spatial and Economic Strategy, the Kilkenny County Development Plan and the Ferrybank Belview Local Area Plan.
- 9.2. The appeal site is located within the 18 ha IDA lands adjoining Belview Port and is zoned ITP Industrial / Technology Park, where the objective is *to provide for industry, technology and the expansion of Belview Port*. The permissible uses encompassed within the zoning objective include industry (general industrial use). Taken together with the established Glanbia dairy processing and manufacturing facility adjoining the appeal site to the north the proposed scheme is considered acceptable in principle subject to the acceptance or otherwise of site specifics / other policies within the development plan and government guidance.

10.0 Other Planning Issues

- 10.1. Development Contributions Kilkenny County Council has adopted a Development Contribution scheme under Section 48 of the Planning and Development Act 2000 (as amended). The proposed development does not fall under the exemptions listed in Scheme. In line with Condition No 2 of the notification of decision to grant permission issued by Kilkenny County Council it recommended that should the Board be minded to grant permission that a similar suitably worded condition be attached requiring the payment of a Section 48 Development Contribution in accordance with the Planning and Development Act 2000.
- 10.2. EPA License The appeal was referred to the Environmental Protection Agency (EPA) for comment. In their response the EPA state that the development may require a licence and that should a licence application be received all matters to do with emissions to the environment from the activities proposed, the licence application documentation and EIAR will be considered and assessed by the Agency.
- 10.3. It is noted that there are six Integrated Pollution control (IPC) / Industrial Emissions (IE) licensed facilities located within 5km of the proposed development including the Glanbia Ireland Milk Processing Plant immediately to the north of the site. The proposed scheme will operate under an Industrial Emissions License that will be regulated by the Environmental Protection Agency (EPA) whereby all emissions from the proposed scheme will be controlled, licensed and monitored by the EPA in addition to any conditions arising from the planning process. The process for EPA Licenses is separate to the planning code. The EPA is the relevant authority in regard to wastewater discharge authorisation and the setting of emission limit values (ELVs) on EPA licensed activities. Accordingly, emissions arising from the operational phase of the development, will be avoided by the statutory requirement for the applicant to obtain and operate the proposed development in accordance with an Industrial Emissions licence, which will specify emission limits for all relevant parameters. Monitoring of compliance with emission limit values will fall to the EPA
- 10.4. Archaeology I refer to Chapter 13 Cultural Heritage of the EIAR. There are no known archaeological sites within the boundary of the site or within the immediate vicinity. The greatest potential impacts are likely to arise from the large-scale earthworks required to construct the development. I note the report from the

Department of Culture, Heritage and the Gaeltacht submitted to Kilkenny County Council recommending the attachment of conditions relating to archaeological monitoring. Condition No 5 of the notification of decision to grant permission refers. It is recommended that should the Board be minded to grant permission that the Boards standard Archaeological monitoring condition be attached.

- 10.5. Inland Fisheries I note the report from Inland Fisheries Ireland to Kilkenny County Council recommending the attachment of a condition relating to a maintenance contract for the oil interceptor / silt trap (Section 8.4.2.2 of the EIAR Vol 2 refers) to ensure it is emptied on regular basis. It is recommended that should the Board be minded to grant permission that this requirement be attached under the general Construction Management Plan condition.
- 10.6. **HSE** I note the report from the HSE to Kilkenny County Council recommending the attachment of conditions relating to the disposal of waste at a licensed facility; appointment of a designated member of the construction team to liaise with local sensitive receptors; water quality testing; wheel washing, construction traffic speed limits and the covering of all trucks transporting dry / loose materials with tarpaulin. I am satisfied that for the most part these matters can be dealt with by way of condition whereby the details of the CEMP can be agreed with the Planning Authority. However, I have concerns with regard to the requirement that the baseline water quality in wells identified as supplying drinking water to homes and businesses is tested against the parameter specified in the Drinking Water Regulations (S.I. No 122 of 2014) before work starts, biannually during the course of the work and once in the year following completion of the construction works. Having regard to the information made available with the application I am satisfied that there will be no negative impact to ground water quality. Further the requirement to carry out water testing outside the red line boundary of the site and on private property by way of condition would be unreasonable and difficult to enforce.
- 10.7. Retention of Construction Compound The application also seeks retention of and alterations to the existing construction compound which will be removed on completion of the works. The public notices refer. The existing construction compound was granted planning permission in July 2017 (Reg Ref 17/153) in respect of the extension to the Milk Processing Plant granted planning permission in January 2013 (ABP PL10.241077 Reg Ref 12/324). The construction compound therefore has planning

permission and its continued use is required to serve the construction phase of the proposed scheme. I agree with the applicant in that the planning application neither seeks, nor is required to seek, "retention permission for development" in so far as it related to unauthorised development. In addition, no "retention" planning application fees were paid on lodgement of the application. The existing compound is an authorised development. I am satisfied that the construction compound has planning permission and that the planning application seeks the continued use of this compound to serve the construction phase of the appeal development until the works associated with the proposed development are complete. Accordingly, no issues arise in relation to the consideration of this scheme under either the EIA or Habitats Directive.

- 10.8. Car Parking The Kilkenny County Council Road Design Section noted the shortfall in car parking and accepted the applicant's rationale for the 94 spaces proposed as reasonable. Likewise, the Case Planner raised no issue regarding the shortfall in car parking provision. I agree with the approach taken by the Planning Authority in this instance and based on the rationale put forward by the applicant there is no objection to the reduced provision of 94 no car parking spaces at this location.
- 10.9. Road Design Having regard to the report of Kilkenny County Council Road Design Section I recommend that a condition be attached requiring that developer agree a Road Maintenance Plan with the Ferrybank Municipal District Engineer and that a Traffic Management Plan is put in place for the construction and operational phase of the development, which prohibits HGV's turning west at the IDA Roundabout onto the L3412 Abbey Road when existing the IDA Science & Technology Park. This recommendation aligns with Condition No 10 and 11 of the notification of decision to grant permission issued by KCC

11.0 Environmental Impact Assessment

11.1. Introduction

11.2. The relevant classes of development that require EIA are set out in Schedule 5 of the Planning and Development Regulations 2001 (as amended). Schedule 5 transposes Annex 1 and Annex II of the EU EIA Directive (85/337/ECC as amended) into Irish Law as Parts 1 and 2 of the Schedule. Part 1 of Schedule 5 sets out the categories and scale of development that qualify for mandatory EIA. The most relevant activity class for the proposed Continental Cheese Faciality is listed under paragraph C, Class 7 (Food Industry), defined as follows:

"Installations for manufacture of dairy products, where the processing capacity would exceed 50 million gallons of milk equivalent per annum."

- 11.3. The proposed facility will process 450 million litres of milk per annum thereby exceeding the threshold of 50 million gallons and requiring a mandatory EIA.
- 11.4. Both the 2014 amending EIA Directive (Directive 2014/52/EU) and the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 are applicable in this instant case.

11.5. Compliance with Legislation

- 11.6. The EIAR consists of three volumes, grouped as follows:
 - Volume 1: Non-Technical Summary
 - Volumes 2 Environmental Impact Assessment Report
 - Volume 3 Appendices
- 11.7. In accordance with Article 5 and Annex IV of the EU Directive, the EIAR provides a description of the project comprising information on the site, design, size and other relevant features of the project. It identifies, describes and assesses in an appropriate manner, the direct and indirect significant effects of the project on the following environmental factors: (a) population and human health; (b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC; (c) land and soils, water (hydrology and hydrogeology), air quality, noise & vibration and climate; (d) material assets including waste, traffic & roads and wastewater discharge; cultural heritage and landscape & visual and it considers the interaction between the factors referred to in points (a) to (d).
- 11.8. It provides an adequate description of forecasting methods and evidence used to identify and assess the significant effects on the environment. It also provides a description of measures envisaged to avoid, prevent or reduce and, if possible, offset likely significant adverse effects. The mitigation measures are presented in each chapter and are summarised in Chapter 18 (Schedule of Commitments) of the EIAR where proposed, monitoring arrangements are also outlined. Environmental
Interactions are addressed in Chapter 17. Any difficulties which were encountered in compiling the required information are set out under the respective environmental topics.

- 11.9. I am satisfied that the information provided is reasonable and sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the project on the environment, taking into account current knowledge and methods of assessment. I am also satisfied that the information contained in the EIAR complies with the provisions of Articles 3, 5 and Annex (IV) of EU Directive 2014/52/EU amending Directive 2011/92/EU.
- 11.10.1 am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality. I note the qualifications and expertise demonstrated by the experts involved in the preparation of the EIAR which are set out in Table 1-9 (MOR In-House Project Team) and Table 1-10 (External Environmental Consultants) of the EIAR. The information contained in the EIAR and supplementary information provided by the developer, adequately identifies and describes the direct, indirect effects and cumulative effects of the proposed development on the environment and complies with Article 94 of the Planning and Development Regulations 2000, as amended.
- 11.11. I am satisfied that the information provided in the EIAR is sufficiently up to date and is adequate for the purposes of the environmental impact assessment to be undertaken.

11.12. Vulnerability to Risk of Major Accidents and / or Disaster

11.13. The requirements of Article 3(2) of the Directive include the expected effects deriving from the vulnerability of the project to risks of major accidents and/or disaster. The EIAR addresses the risk of accidents and unplanned events which may either caused by or have impact on the proposed development have been assessed. A risk-based approach has been employed and is detailed in the following chapters: biodiversity, land and soils, water, air quality and noise and vibration. As with all industrial facilities there is some risk that accidents at the site or disasters outside of the operator's control would result in a risk to the environment. Using a risk-based approach the primary accidents that have the potential to have an impact on land and soils in the vicinity of the site are set out in Table 7-1 Risk of Accidents Impacting Land and Soils; Table 8-6 Risk of Accidents Impacting Surface Water and Groundwater and Table 9-9 Risks of Accidents Impacting Air Quality. In terms of building fire, a fire water retention pond

will be constructed as part of the proposed development with sufficient capacity to accommodate water arising from a fire event. The SFRA indicates no potential risk of flooding within the site and the site is not located within an indicative flood zone.

- 11.14. The proposal is no more vulnerable than any other development of this type. In terms of fire the buildings have been designed to existing fire regulations requirements. The site is not connected to or close to any site regulated under the Control of Major Accident Hazards Involving Dangerous Substances Regulations i.e. SEVESO and so there is no potential effects from this source. Given the nature of and volumes of materials proposed to be stored on-site the Serveso Regulations would not apply.
- 11.15. It is considered that having regard to the nature and scale of the development itself, there are unlikely to be any effects deriving from major accidents and or disasters and I am satisfied that this issue has been addressed satisfactorily in the EIAR.

11.16. Alternatives

- 11.17. Chapter 4 addresses alternatives. The applicant reviewed a number of locations across Europe with Ireland being the preferred option due to the availability of quality raw materials; the availability of a skilled workforce and the government and regulatory environment. Within Ireland two location were considered; Glanbia, Ballyragget and Belview IDA Science and Technology Park.
- 11.18. The appeal site was the preferred option for reasons of availability of utilities, water, electrical and gas at the volumes required; better traffic access (local and national); existing infrastructure (truck access and security) at adjoining Glanbia site and receiving water capable of assimilating the wastewater discharge. In addition, the site is strategically located within the centre of the Glanbia milk pool, ensuring an adequate supply is available while also reducing transport emissions associated with the supply of milk from farm to facility. Three different design options were considered with the preferred option demonstrating an efficient placement of building and plant, vehicle access and drainage falls.
- 11.19. The site is located within the Belview IDA Science and Technology Park and has been undergoing significant investment with the provision of utility supplies and infrastructure. A "do nothing" scenario would have limited long-term environmental benefits.

11.20. The level of detail of the consideration of alternatives is reasonable and commensurate with the project. I am satisfied that the requirements of the Directive in terms of consideration of alternatives have been discharged.

11.21. Consultations

11.22. Details of the non-statutory consultation entered into by the applicant as part of the preparation of the application and EIAR and prior to the lodgement of the application are set out in Table 1-8 of the EIAR. Public Consultations are described in Section 1.6. Residents in the vicinity were invited to a consultation evening in September 2019. The concerns were considered as part of the EIAR process and are addressed in relevant chapters. I am satisfied that the participation of the public has been effective.

11.23. Likely Significant Effects on the Environment

- 11.24. The likely significant effects of the development are considered under the following headings, as set out in Article 3 of the EIA Directive 2014/52/EU:
 - population and human health;
 - biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;
 - land, soil, water, air and climate;
 - material assets, cultural heritage and the landscape;
 - the interaction between the factors referred to in points (a) to (d).
- 11.25. In total the main EIAR includes 19 chapters. Chapters 1 to 4 provide an introduction to the project, description of the proposed development, alternatives considered, and consultations undertaken. Chapter 5 addresses population and human heath, chapter 6 addresses biodiversity, chapters 7, 8, 9, 10 and 11 address land and soils, air quality, climate and noise and vibration, chapter 12 and 13 addresses landscape and visual and cultural heritage, chapter 14 addresses waste, chapter 15 addresses traffic and transport, chapter 16 addresses wastewater discharge and chapters 17 and 18 addresses interactions, mitigation and monitoring. Chapter 19 sets out references. Each of the above chapters are considered in detail below, with respect to the relevant headings set out in the Directive.

11.26. Chapter 5 deals with Population and Human Health

- 11.27. The CSO identifies the development site as within a "Small Area" where the population is relatively low and is reflected in the former agricultural lands' nature of the site. The site is located within lands of the IDA Ireland Science and Technology Park and is zoned for Industrial Technology Park. Within the Gorteens SA there are 149 households, 132 of which are occupied. Waterford City is located within 2km of the development. The closest residential development areas are located 430m to the north-west and south-west of the development. The nearest residence is located 160 metres east of the site boundary.
- 11.28. It is anticipated that the construction phase will take 20 24 months and that approx.
 300 400 jobs will be created during this period. The development once operational will provide up to 80 no new direct jobs on site. The plant will operate for nine months / year in 3 shifts, 7 days per week. There will also be an increase in indirect employment in areas such as transport, maintenance and supply of goods and services.
- 11.29. Potential impacts on human health, in particular, impacts on the residents at neighbouring properties is address in detail in Chapter 8 Water, Chapter 9 Air Quality, Chapter 11 Nosie and Vibration, Chapter 12 Landscape and Visual, Chapter 14 Material Assets – Waste and Chapter 15 Material Assets – Traffic and Transport. As with all industries there is a potential for workplace health and safety risks.
- 11.30. Glanbia's milk suppliers are located in the eastern portion of the country, with processing plants strategically located in Cavan, Kilkenny, Waterford and Wexford. There has been significant investment on farms in recent years that in turn has brought significant employment to rural Ireland. In 2018 Glanbia Ireland paid approx. €1 billion(incl VAT) to c4,500 milk farmers across rural Ireland boosting local economises. The indirect effect of the development will be a significant positive effect on the rural economy in the south east of the country.
- 11.31. In order to provide facilities that positively improve employee health and wellbeing the following have been provided as part of the proposed design:
 - The development will operate in accordance with all relevant Health and Safety legislation. A site-specific health and safety plan will be developed for both construction and operational phases.

- The developer will promote wellness programmes and schemes for employees and will adopt Glanbia's Sustainability Strategy that includes a group wide Health and Wellness Framework for employees.
- A bike shed to facilitate sustainable transport
- Planting and landscaping to improve the overall character of the site
- 11.32. On its own the development will have a significant positive impact on employment opportunities and economic activities in the region. In combination with future development in the IDA Park there is potential to have a positive impact on the local and regional population in terms of employment opportunities and economic activities.
- 11.33. The proposed development will create economic growth and will benefit the local and wider economy by creating direct and indirect local employment opportunities. Once operational the proposed development will have appositive, long term impact on the local economy and employment. The residual impacts with regards to health and safety will be neutral given the measures that will be put in place.
- 11.34. Having regard to the matters discussed above, I am satisfied that impacts that are predicted to arise in respect of population and human health can be avoided, managed and mitigated by the measures which form part of the proposed development, the proposed mitigation measures and through suitable conditions. I am satisfied, therefore, that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on human health.

11.35. Chapter 6 Biodiversity

- 11.36. The majority of the site is comprised of agricultural lands currently used for grazing livestock with tree / hedge lines bordering the site. The western boundary of the site is comprised of mixed broadleaved woodland. A drainage ditch is located adjacent to the northern boundary of the site. In the north eastern portion of the site, there is an area of hardstanding comprised of a construction compound and gravel-based car park. The Rathpatrick stream is situated to the west of the site boundary. The Gorteens stream is located to the east of the site.
- 11.37. No direct evidence of bats roosts, badger setts or otter holts were identified on the site during the field surveys. The survey did however note some bat species commuting and foraging along the tress and hedgerows located on the site.

- 11.38. An Appropriate Assessment Screening exercise was undertaken for the proposed development and it was concluded that the proposed development has the potential to cause adverse impacts on European Sites. Therefore, the AA progressed to Stage 2 of the assessment process and a Stage Two Appropriate Assessment Natura Impact Statement (NIS) was prepared. The NIS concluded that following the inclusion of appropriate mitigation measures that there would be no adverse effects on Natura 2000 sites. The NIS has been submitted as a standalone report as part of the overall application which includes full details of the Assessment undertaken.
- 11.39. Improved agricultural grassland is the principal habitat that will be lost by the proposed development. However, this habitat is not of significant conservation value and the loss is not considered to be significant. Removal of hedgerows / treelines / scrub does have the potential to support protected species / notable species such as nesting birds. The mixed broadleaved woodland area within the locality of the site have the potential to support protected species / notable species such as nesting birds. The Rathpatrick and Gorteens Stream is of high local value in terms of biodiversity and contributes to habitat diversity within the landscape. The Gorteens stream was identified as having the potential to support protected species such as crayfish and otter. Based on the bat surveys and the presence of suitable habitats within the wider landscape it is considered that the site is of high local value for this species. The inappropriate installation of lighting resulting in light spillage onto retained habitat suitable for bats has the potential to cause adverse effect on bats. During construction, excavating and earthmoving activities have the potential to release sediment and cementitious materials into nearby watercourses which discharge into the Lower River Shannon SAC.
- 11.40. The following mitigation measures will be incorporated and adhered to during the construction and operation phases of the overall site to ensure that the works do not result in contravention of wildlife legislation:
 - All activities will comply with all relevant legislation and best practise to reduce any potential environmental impacts. The mitigation measures detailed within the EIAR will be fully adhered to
 - The site manager shall ensure that all personnel working on-site are trained and aware of the mitigation measures detailed within the EIAR

- An Ecological Clerk of Works (ECoW) will be appointed for the duration of the project who will inspect the site in advance of works commencing and will undertake site inspections as required during the works to ensure that all of the works are completed in line with the CEMP and all wildlife legislation
- A CEMP will be prepared and submitted to the Planning Authority in advance of works commencing at the site. All personnel working on-site will be trained and aware of the measures detailed within the CEMP.
- During construction all boundary trees and treelines to be retained will be protected from unnecessary damage through a contrition exclusion zone together with other protection measures as outlined in Section 6.4.1.1.
- The loss of hedgerows / trees as part of the proposed development will be mitigated by the additional planting on site. A landscaping plan has been prepared as an integral part of the overall design and together with the ecological enhancement works that include a habitat management plan and provision of artificial bat roosts are in line with the recommendations as detailed in the County Development Plan.
- In order to ensure that the works do not have significant impacts on bats a number of measures will be implanted as set out in Section 6.4.1.3 that include inspection of the site by the ECoW; the systematic removal of trees; updated surveys confirming the absence of roosting bats and installation of sensitive night lighting.
- Given that terrestrial mammals are known to occur within the wider area that may inadvertently enter the site general construction procedures and mitigation measures which are in line with the NRA (now TT) guidance for otters and badgers will be undertaken.
- The management of vegetation (including tress and scrubs) will be restricted to outside the bird breeding season (typically between 1st March to 31st August).
- While no invasive species were noted within the study area protection measures for invasive species are set out in Section 6.4.1.6. These include washing and cleaning of vehicles, machinery and equipment prior to being used on site; visual inspection, imported materials will be sourced form a reputable suppliers and staff training.
- Surface water from the proposed development will discharge directly to the Gorteens stream via the existing IDA drainage system. The surface water will pass

through an attenuation pond and Class 1 interceptor. The flow rate will be controlled by a hydrobrake.

- 11.41. The raw material for the proposed new factory is coming from c 4500 dairy farms outside the legal control of the applicant. However to combat biodiversity loss within the dairy farming sector, Glanbia is committed to sustainable milk production and has an active Sustainability and Quality Assurance Programme in line with the Bord Bia Sustainable Dairy Assurance Scheme (SDAS) which also has a biodiversity element. The areas of biodiversity and ecology which are considered at farm level assessments include land management, environmental care and carbon footprint, quality and conservation of water, animal health, welfare and biosecurity and the safe storage and responsible usage of medicines, pesticides, anthelmintic and other chemicals. Glanbia Ireland is also a supporting partner of the BRIDE (Biodiversity Regeneration in a Dairying Environment) project 2018-2023 with the aim to design and implement a results-based approach to conserve, enhance and restore habitats in lowland intensive farmland. This scheme will reward farmers with higher payments for higher wildlife gains. The BRIDE project ecologist will provide participating farmers with farm habitat plans that identify the most appropriate and effective wildlife management options for individual farms. Glanbia is also a Business Supporter of the All-Ireland Pollinator Plan 2015-2020 which aims to reverse the decline of Irish pollinators. Appropriately designed measures targeted for intensive dairy systems will play an important role in halting the decline of biodiversity, along with reducing greenhouse gas emissions and achieving the goals of sustainable expansion. In addition, all farms are subject to environmental including controls in the Wildlife Act, 1976, as amended and the EU Habitats and Birds Directive which ensure that they do not significantly adversely affect the integrity of European (i.e. Natura 2000) and other protected sites and so as to ensure the protection of protected species. Glanbia also expects its supply farms to comply with all of the requirements of public authorities relating to biodiversity and the environment.
- 11.42. Overall, the majority of the site was considered to be of low ecological interest. The proposed development works are unlikely to have any significant impacts on valued ecological receptors. Further the residual impact associated with the proposed development on biodiversity will not be significant.

11.43. Having regard to the matters discussed above, I am satisfied that impacts that are predicted to arise in respect of biodiversity can be avoided, managed and mitigated by the measures which form part of the proposed development, the proposed mitigation measures and through suitable conditions. I am satisfied, therefore, that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on biodiversity.

11.44. Chapter 7 Lands and Soils

- 11.45. The site is elevated at its centre, slopping towards the eastern and western boundaries. The highest point of the site is at its centre; approx. 24.15 maOD. The soils beneath comprise of deep well drained mineral soils derived from mainly non-calcareous parent materials.
- 11.46. The proposed development will change the land at the site from agricultural to an industrial use and it will impact the entire 10ha site. The change will involve two distinct phases; (1) cut and fill operations at the construction phase and the (2) permanent removal of 10ha of land from agricultural to industrial use. In addition potential contamination of soils could occur as a result of spillages (such as waste oil, fuel, chemicals etc) resulting in a potential for a slight impact on the receiving environment.
- 11.47. General construction mitigation measures are outlined in Chapter 3 of the EIAR. Specifically, with regard to protection of soils, the migration measures will form part of the site-specific CEMP. Stockpiling of excavated material will be required on-site. A Soil Management Plan will be implemented to minimise the overall impact arising during the construction programme. Planting along the berm to improve stabilisation will be conducted. Mitigation measures for prevention of oil / fuel spillage that will be included in the CEMP are set out in Section 7.5.1.2. Measures related to the use of poured concrete are set out in Section 7.5.1.3. During the operation phase the facility will operate under an Industrial Emissions licence and as result a number of legally binding conditions will be adhered to and that will ensure that the risk to land and soils during the operational phase will not be significant.
- 11.48. It is expected that the 450 million litres of milk required for the proposed development will mostly come from the existing Glanbia milk supplied which comprise approximately 4,500 farms with standard year to year changes. The increase in milk supply will largely come from the increase in the productivity at the existing farm i.e. there will be

no significant increase in the number of new farms. The growth projections outlined in FoodWise 2025 places a demand on soils to support intensified agriculture. Effective nutrient management is vital to soil health, as impacts from agriculture on soils are mostly related to nutrient management which have a potential for a run-off into the aquatic environment and negative impacts on water quality. The EPA AgriBenchmark research programme is aimed at researching improvements to agricultural practises which would reduce nutrient losses through emissions and runoff and the quantifying impact of mitigation measures. In the dairy industry soil quality is closely linked to grassland management. Recommended actions to improve grassland management and reduce use of fertiliser include regular reseeding of pastures, selecting most suitable and efficient seeds and grass measuring and budgeting. As permeant grassland are a natural carbon store, implementing these management measures will not only improve air, soil and water quality but will also sequester carbon, further enhancing emissions reductions on Irish farms.

- 11.49. Improving soil health and fertility results absorbing nutrients more effectively, which is central to management of grasslands on farms. This can be achieved through:
 - Nutrient Management Plan for a farm
 - A tailored farm fertiliser plan and
 - Optimising soil pH level through application of lime
- 11.50. These measures necessitate soil sampling programme which is actively promoted by Glanbia's farm advisory team. Glanbia has also implemented an awareness programme to increase the usage of lime on farms which has been successful. Indirect effect of proposed development on land use will not be significant.
- 11.51. The cumulative impact of the proposed development and other existing and potential developments within the IDA Science & Technology Park has been subject to a SEA. The impacts to land and soils as stated within the SEA will not be significant in relation to the overall development of the Belview area, subject to implementation of relevant mitigation measures.
- 11.52. Having regard to the matters discussed above, I am satisfied that impacts that are predicted to arise in respect of land and soils can be avoided, managed and mitigated by the measures which form part of the proposed development, the proposed mitigation measures and through suitable conditions. I am satisfied, therefore, that

the proposed development would not have any unacceptable direct, indirect or cumulative impacts on lands and soils.

11.53. Chapter 8 Water

- 11.54. The closest hydrological features to the site are the Rathpatrick and the Gorteens streams, which are located approx. 30m to the wet and 30m to the east of the site boundary respectively. Both flow into the Lower River Suir Estuary south of the proposed facility. The Lower River Suir Estuary flows in a north-easterly direction before joining the Barrow Suir Nore Estuary and flowing into the Waterford Harbour.
- 11.55. The principle discharge into the River Suir at this location arises from the Irish Water Wastewater Treatment Plant located immediately to the south of the site. The available data would indicate that the average River Suir Water Quality at both monitoring points is compliant with the Environmental Quality Standards as per the Surface Water Regulations, 2009 for transitional water of good status. However as a result of the combination of pressures from agriculture, domestic and urban WWTP emissions, urban run-off and industrial point source emissions, the Lower Suir Estuary is currently classified by the EPA as "at risk" of not meeting its WFD objectives.
- 11.56. Under the Strategic Flood Risk Assessment for Ferrybank / Belview Local Area Plan 2017 the proposed facility is designated as being a "Flood Zone C". It is noted that Flood Zone C covers all aeras of the plan which are not in Zones A and B.
- 11.57. The aquifer beneath the site is classified as a regionally important aquifer which comprises fissured bedrock. The groundwater vulnerability rating beneath the majority of the site is moderate. Groundwater vulnerability is high in the western section of the site.
- 11.58. Construction and site development works in general can potentially impact on groundwater and surface water quality. Potential impacts include the following:
 - Silt run off and the incorrect handling of deleterious materials such as lubricants, waste oils, fuel spills from the onsite plant, cement etc and
 - Earthmoving activities have the potential to release sediment and additionally cement can enter waterbodies during construction works
 - The principle open waterway that will remain during the construction phase is the Rathpatrick and Gorteens streams. During the construction works

earthmoving activities will take place in the vicinity of these streams. The current design proposals would indicate that direct interaction with groundwater is not likely to occur during the construction phase.

- 11.59. The appointment contractor will be required to prepare a working draft of the CEMP in line with the requirements of this document. The CEMP will include the mitigation measures detailed in the EIAR. Control of Water Pollution from Construction, Guidance for Consultants and Contractors will be followed during the construction phase of the project.
- 11.60. The proposed measure to remove the risk from potential contamination and emergency procedure to be implement in the event of an accidental release or spill of potentially contaminating substances are outlined below. These procedures will be communicated to all relevant site staff.
 - Adequate spill kits including absorbent booms and other absorbent material will be maintained outside
 - All contractor workers will be appropriately trained in the use of the spill kits
 - Any spillage of cementitious materials will be cleaned up immediately and
 - Any sediments impacted by contamination will be excavated and stored inappropriate sealed containers for disposal offsite in accordance with all relevant waste management legislation
- 11.61. In addition, best practise guidelines based on Inland Fisheries Ireland and National Roads Authority guidance documents will be followed.
- 11.62. General measures for mitigation measures against spills and for protection of water and ground water will be stipulated in the sites IE license:
 - Materials on site will be stored and transferred on accordance with EPA Guidance and relevant BAT conclusion. This will include bunding, double lines tanks and pipelines where necessary.
 - Where possible all process lines will be above found to enable easy inspection and maintenance.
 - All bunds, tanks and pipelines will be inspected on a regular basis in accordance with the proposed development IE license
 - An EMS will be put in place as described in Chapter 3

- 11.63. Process drains will route the effluent to the on-site WWTP for treatment. Treated effluent from the on-site WWTP will discharge via a dedicated pipe that will connect into the IW outfall pipe in agreement with IW and in compliance with conditions stipulated by the EPA. The IW outfall pope will ultimately discharge the treated process effluent into the Lower River Suir. The foul drain will collect and direct all foul waters arising from toilets, shower and the canteen to the public sewer located on the IDA Access Road to the east of the site. The canteen will be fitted with a grease trap. Foul effluent will be treated in the IW urban WWTP, located to the south of the site.
- 11.64. Only clean uncontaminated rainwater from the site will discharge into the storm water drain. On site storm water drains will connect into the existing IDA storm water drain which ultimately discharges into the Gorteens Stream. Multiple design measures will be constructed to prevent potential impacts including:
 - SuDS design implemented ensuring greenfield discharge rates including attenuation tank and hydrobrake
 - Attenuation tank will also serve to settle solids and
 - Oil interceptor / silt trap will be installed for drainage form internal roads and yard
- 11.65. Storm water trigger level (i.e. emission limits) and monitoring requirements will be conditioned as part of the IE License and regulated by the EPA. A sampling chamber will be installed prior to the connection with the public storm water drain together with an automatic shut off valve will be installed.
- 11.66. In the event of a fire on-site all storm drains will be re-routed on the on-site fire-water retention pond. This will ensure fire water containment and monitoring can be completed prior to its release as per EPA guidance.
- 11.67. The facility will require c 4,000m3 of water per day with 2,000m3 per day recovered from the milk for re-use in the process. A maximum of approx. 2,000m3 per day of process and potable water will be taken directly from the mains supply and will be used for the canteen, showers, toilets and other welfare facilities. IW have confirmed that there is a sufficient supply available to meet the demands. There will be no significant impact on water supply in the area.
- 11.68. The on-site water treatment plant will provide necessary pre-treatment of the mains water supply which will comprise water softening and pH adjustment. A water holding

tank will be located on-site. Specific design measures to reduce water consumption and increase water re-sue include:

- An advanced whey processing plant which can recover up to 1,907 m3/day of water from whey using a membrane system and
- Three (3 no) pasteurisers allowing the cheese making process to continue in one while the other two are undergoing Clean-In-Place (CIP). This will avoid the need for a full line CIP, and therefore will use less water and energy. This would result in water savings of 13,200 m3/year in addition to significant energy savings.
- 11.69. Process effluent and potentially other contaminated discharge including milk intake, CIP bund and CIP process discharge, wash down discharge from the facility (internally), truck wash area, boiler blowdown and hard surface area of WWTP will be treated on the site WWTP prior to discharge into a dedicated discharge pipe which will connect with the Irish Water outfall pipe for ultimate discharge into the Lower River Suir. Mitigation meaures include:
 - The on-site WWTP will provide treatment of the process effluent. It will be designed to treat approx. 6,000 m3 of effluent per day. This will be a full biological WWTP capable of removing biochemical oxygen demand (BOD), chemical oxygen demand (COD) and nutrients characteristic of diary plant effluent to a level that complies with BAT limits. The main treatment will take place in an anoxic tank and an aeration tank. Biological phosphorus removal will also be included in the design. The WWTP will be automated, operated, monitored and controlled via a dedicated supervisory control and date acquisition (SCADA) system and in turn by a faciality wide Building Management System (BMS) with all alarms, levels, flow rates, sensors and motors monitored and recorded.
 - The discharge from the WWTP will be regulated by the EPA under the IE licence. The discharges will be a dedicated pipeline along the IDA Access Road which will connect into the IW outfall pipelines at the outfall chamber, that is located downstream of the IW WWTP. This proposed new discharge pipe will be built along the western side of the IDA Access Road underneath the footpath, as indicated in Chapter 8. Total length of this pipe will be c 1.2km however its length within the IDA lands will be 350m.

- Using the existing IW outfall will remove potential impacts associated with constructing another pipe into the Lower Suir Estuary. IW has agreed to this approach in principle.
- In addition to the design measures i.e. onsite WWTP a monitoring programme will be undertaken to ensure all discharges to public sewers are in compliance with the IE license. The frequency of monitoring and emission limit values will be outlined within the EPA authorised IE license.
- A firewater retention pond will be provided onsite for containment of contaminated water in case of a fire. The pond will have approximate capacity of 3,600 m3. It will also serve as containment in recent of spill or any contamination within the surface water system.
- 11.70. The discharge of the treated process effluent arising from the proposed development will be mixed with the treated IW discharges from the urban WWTP prior to discharging into the River Suir. IW upstream and downstream monitoring of the Lower River Suir indicates that current water quality is within the EQS-es for good quality surface waters (Table 8-7 refers). Average daily flow from the IW urban WWTP for 2018 was 37,752 m3. Allowing for a 20% increase in the volume of this flow to cater for future expansion would amount to 45,302 m3. The worst-case discharge from the proposed development will be c6,000m3/day or c13% of a predicted increased discharge from IW. The key quality parameters in the discharge arising from the proposed development will have the same or lower ELVs than the current IW discharges. It is reasonable to assume that the combined future effluent will have the same or lower concentrations of the key pollutants when compared to the current effluent concentrations discharging to the River Suir at this location. There will be no significant cumulative impact from the combined discharge of the proposed development and the IW urban WWTP on the Lower River Suir water quality.
- 11.71. The proposed development will not cause intensification of diary, nor will indirect impacts have significant effects after implementation of mitigation measures, as outlined in Section 8.8 "Indirect Impacts" of Chapter 8 of the EIAR. That section details numerous programmes and mitigation measures implemented by the Government and Glanbia to mitigate against nitrogen, including but not limited to

- The Nitrates Action Programme is designed to prevent pollution of surface waters and ground water form agricultural sources and to protect and improve water quality.
- Agricultural Sustainability Support and Advisory Programme (ASSAP) works with farmers in a free and confidential advisory service to help improve water quality, delivering strong practical sustainable measures on 23,000 farms
- Glanbia's Open Source Programme providing a network of farm advisors throughout the Country delivering one-on-one advice
- Low Emission Slurry Spreading Equipment scheme assists farmers purchase new equipment for the spreading of slurry which has distinct environmental advantages and
- Programmes to reduce the crude protein content in concentrate feeds
- 11.72. It can be concluded that the indirect effect of proposed development on water quality within the mitigation measures proposed will not be significant.
- 11.73. Having regard to the matters discussed above, I am satisfied that impacts that are predicted to arise in respect of water can be avoided, managed and mitigated by the measures which form part of the proposed development, the proposed mitigation measures and through suitable conditions. I am satisfied, therefore, that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on water.

11.74. Chapter 9 Air Quality

- 11.75. The proposed development was subject to a detailed air quality assessment. In addition, indirect impacts on air quality were assessed. Table 9-2 shows the baseline air quality data for Zone D, taken from the Air Quality Report 2017. There are six IPC / IE licensed facilities located within 5km of the proposed development, with licensed emissions to air point sources. These are outlined in Table 9-3. The only emissions that could potentially result in cumulative impacts on air quality and NOx emissions within 1km of the proposed development are listed in Table 9-4. Sensitive receptors (SRs) and their distance to the site are detailed in Table 9-5 and Figure 9-1. The nearest SR is located approx. 159m to the east.
- 11.76. During the construction phase dust emissions from the earthworks and construction works will potentially give rise to increase levels of dust in the planning application

area and in the general vicinity. Movement of diesel-powered plant during construction has the potential to lead to increased emissions to air. These emissions are not considered significant and would be short term.

- 11.77. Point sources at the proposed development include an industrial boiler for steam generation and a low pressure hot water, both powered by natural gas. The only air pollutant will be nitrogen oxides as a consequence of the combustion process. Predicted impact of the traffic resulting from the proposed development is imperceptible in comparison to both the background concentrations of the relevant air pollutants and also the relevant AQS. There will be no noticeable odours form the process outside the main production plant. The only potential source of odour at the site will be the WWPT and sludge removal.
- 11.78. Specific construction mitigation measures include the preparation of a CEMP that will include the following measures to reduce emissions to air during the construction phase:
 - Dust emissions from soil movements and stockpiles will be minimised by wetting down during dry, windy weather
 - Locating stockpiles away from sensitive receptors and
 - Minimisation of vehicle idling to reduce vehicle related emissions
- 11.79. Operational mitigations measures will include:
 - Regular maintenance of boilers to ensure efficient operation in accordance with manufacturers specifications and
 - Monitoring of emissions to air as per the sites IE License
- 11.80. All boilers at the proposed development will be powered by natural gas and emissions to air will not have significant impact on the air quality in the vicinity of the site or in the wider area. Regular monitoring of emissions to air from the boilers will be required by the IE License as well as regular odour assessments.
- 11.81. The WWTP will include both active and passive odour abatement measures. These measures will ensure that no significant odour emissions will arise from the proposed development.
- 11.82. Ammonia emissions to air from agriculture mainly arise form activities such as manure storage, slurry spreading and the use of inorganic nitrogen fertilisers. Glanbia fully

supports the implementation of the Code of Good Agricultural Practise (CGAP) as well as all measures recommended by the promotion of low-emission slurry spreading technology on farms through TAMS grant aid and other measures. Chapter 2 of the EIAR (as summarised above) details all Glanbia's sustainability programmes aimed at supply farms, which among other measures facilitate knowledge transfer and great target reduction of ammonia emissions at supply farms.

- 11.83. The indirect effect of proposed development on atmospheric ammonia emissions with the implementation of the proposed mitigation measures will be slight to moderate adverse, in the short term. However, in the medium term, as the mitigation measures become fully adopted and well established across the dairy farming sector, it is predicted that these indirect effects will become slight adverse.
- 11.84. Having regard to the matters discussed above, I am satisfied that impacts that are predicted to arise in respect of air quality can be avoided, managed and mitigated by the measures which form part of the proposed development, the proposed mitigation measures and through suitable conditions. I am satisfied, therefore, that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on air quality.

11.85. Chapter 10 Climate

- 11.86. Climate change is recognised as a serious global environmental challenge that requires both international co-operation and local / national action. One of the primary reasons that Belview was chosen as the preferred location for the proposed faciality is that is lies in the centre of the Glanbia milk pool limiting the distance milk supply trucks have to travel to get the milk from farm to factory significantly reducing transport emissions.
- 11.87. The construction phase of the proposed development will result in the following emissions of GHGs:
 - GHG emissions form construction related traffic and construction related plant on site. these emissions will be of limited duration and are considered insignificant in comparison to other GHG emissions related to this development
 - Carbon embedded in the material used for construction of the proposed development

- 11.88. During the operational phase GHG emissions resulting from the proposed development will be from the following:
 - Combustion of fossil fuels to generate steam and heat required for the process
 - Electricity used to power the WWTP and some parts of the process, refrigeration, lighting, canteen etc and
 - Transport emissions form deliveries of raw materials, dispatch of product and employee transport
- 11.89. A number of measures will be put in place to reduce the impact of greenhouse gas emissions form the site including:
 - State of the art energy efficient systems utilised throughout the proposed development allowing emissions reductions of at least 15,306 tonnes of CO2-eq per year when compared with s standard desing facility and
 - Placement of the site in the centre of the milk supply pool and adjacent to road and port infrastructure, minimising transport-related emissions
- 11.90. The design of the facility will include a bike shed and electric vehicle charging points to promote emission free transport for employees.
- 11.91. The production of 450 million litres of milk produces 513 megatons of CO2eq. However, this is expected to decrease due to the increase production efficiency of the existing dairy herd and implementation of mitigation measures as previously outlined. Further, a significant portion of this milk will already be in circulation or will be produced as part of an increased milk supply regardless of whether the proposed development is in existence. These emissions are already accounted for and regulated through the National Climate Action Plan as part of dairy sector emissions. The proposed development will not directly or indirectly result in an increase of CO2 emissions proportionate to the required milk input.
- 11.92. While the impact of the proposed development alone is considered to be insignificant, the indirect impact must be considered on a wider scale. One measure is the contribution of the proposed facility to Irelands industrial GHG emissions. The EPAs projection for manufacturing emissions in Ireland in 2022 is approximately 30,029 tonnes of CO2eq. It follows that emissions from the proposed facility would amount to 0.47% of predicted Irish Industrial GHG emissions for 2022.

11.93. Having regard to the matters discussed above, I am satisfied that impacts that are predicted to arise in respect of climate can be avoided, managed and mitigated by the measures which form part of the proposed development, the proposed mitigation measures and through suitable conditions. I am satisfied, therefore, that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on human health.

11.94. Chapter 11 Noise and Vibration

- 11.95. A noise assessment was conducted based on best practise guidance and the criteria outlined with the EPA Guidance document for noise assessments. Baseline noise monitoring conducted in 2019 found the locality to experience relatively low levels of noise, though human created noise, such as industry and road traffic were dominant. Baseline noise monitoring was undertaken at representative locations in the vicinity of the site; Figure 11-1 refers. The closest residential property to the site is located over 159m from the eastern boundary.
- 11.96. The sources and potential impacts arising from the scheme are as follows:
 - Construction Phase Use of plant operating in the external / open environemnt. Vibration can arise as an issue where heavy plant, pilling or drilling occurs near older buildings. Due to the distance between the sensitive receptors identified and the areas of construction vibration during the construction stage was not deemed a potential impact in relation to this project and no further assessment has been conducted.
 - Operational Phase The proposed development will bring new plant and equipment to the locality. These emissions can be broadly split into (1) mobile emission and fixed plan emissions.
- 11.97. Construction noise is unavoidable, though short term (c 18 months). They will be undertaken in accordance with all recognised best practise guidelines and the works will adhere to relevant noise limits stipulated for such construction works. All works will be undertaken incompliance with the detailed CEMP.
- 11.98. Noise monitoring will be conducted during the construction and commissioning phase. In the event of noise nuisance complaints arising, monitoring and investigation of such complaints will be instigated to enable appropriate response. Compliance with the IE license will be further implemented. Annual monitoring will be a requirement of the

sites IE license. The future soundscape will of an audible character similar to the existing ambient environment.

- 11.99. The estimated in-combination impact of fixed plant will be lower than the standard IE license noise limit values at all sensitive receptors. Utilising a worst case event of the site, incorporating all modelled plant and peal truck movements onsite, some sensitive receptors are predicted to experience an increase in noise above the current (2019) monitored values, albeit they will not be significant increases.
- 11.100. Proposed traffic movements associated with the proposed development will increase currently authorised HGV movements on the local road network by c45%. This will result in a negligible increase in overall road traffic noise. Overall, the sitespecific impact arising from noise associated with the entrance route will be negligible, arising from the predicted traffic along this route and the existing character of road traffic noise in the locality.
- 11.101. Having regard to the matters discussed above, I am satisfied that impacts that are predicted to arise in respect of noise and vibration can be avoided, managed and mitigated by the measures which form part of the proposed development, the proposed mitigation measures and through suitable conditions. I am satisfied, therefore, that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on climate.

11.102. Chapter 12 Landscape and Visual Impact

- 11.103. The site is of medium-low landscape sensitivity. It is located within the IDA Belview Science & Technology Park, with the surrounding area comprised of agricultural farmland, bounded by hedgerows and by industry and mostly in the form of Belview Port and ancillary / adjacent developments located within 800m of the site to the south east. These include the IW WWTP less than 400m to the south of the site as well as the Glanbia plant located immediately to the north of the site.
- 11.104. A Visual Impact Assessment (VIA) that involved assessing 10 no visual receptor zones, representing a range of viewing angles, distances and contexts was completed. The impact assessment incorporates any likely cumulative effects as an integral aspect of the assessment. A set of 10 photomontages were prepared form within and around the site to fully illustrate the proposed development. These images are presented in Volume 3 EIA Appendices.

- 11.105. The physical impacts to the existing site land cover and vegetation will be permanent and are not readily reversible. However, none of the affected land cover or vegetation features is rare of decisive in forming the overall landscape character of the area. Construction stage impacts will be short term.
- 11.106. The most notable landscape impacts will result from the construction of numerous 28m high silos, in tandem with a particularly long 14m high building, followed by a waste treatment plant, pump house and substation in the western end of the site. Following this will be the presence of a 60 no car park in the east of the site, and vast areas of concrete / hardscape surfacing across large areas of the site.
- 11.107. In half of these VP locations (5 no), the visual impact is judged to be "imperceptible". Only at VP1, VP4 and VP5 is the significance of visual impact considered to be "slight"; the highest significance of visual impact recorded in the VIA. Furthermore, the "slight" impact is considered to reduce to slight-imperceptible in a post mitigation establishment. These "slight" impacts are the result of either more open visibility of the proposed development when viewed form within the Industrial and Scientific Park (i.e. that of a "low" visual sensitivity), or else from local community views less than 1km from the site, where partial views of the proposed development can be attained. In two remaining viewpoints (VP2 and VP10), the significance of impact was deemed to be "slight-imperceptible".
- 11.108. The main mitigation by avoidance measure employed in this instance is the siting of the proposed development in a robust, industrial-zoned IDA Science and Technology Park that avails of topographic screening to minimise open visibility from within the study area, as well as availing of existing vegetative screening so that the proposed development will not be prominent within the surrounding landscape.
- 11.109. The initial landscape impact will occur during the construction phase of the proposed development. However, this will be "short-term" and it is considered that overall the construction phase of the proposed development will result in minimal impact on the landscape given the industrial fabric of the area.
- 11.110. A landscape plan has also been prepared that will add a high-quality landscape finish and incorporates Kilkenny County Development Plan objectives to incorporate a buffer of planting around industrial developments. There are no aspects of this landscape and visual appraisal that will rely on on-going monitoring.

11.111. Having regard to the matters discussed above, I am satisfied that impacts that are predicted to arise in respect of landscape and visual impact can be avoided, managed and mitigated by the measures which form part of the proposed development, the proposed mitigation measures and through suitable conditions. I am satisfied, therefore, that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on landscape and visual impact.

11.112. Chapter 13 Cultural Heritage

- 11.113. A desk-based assessment and site survey were undertaken by an experiences archaeologist to identify the likely significance and sensitivity of any known or any potential archaeological, architectural and cultural heritage sites. No known archaeological site (Recorded Monuments) occur either within the boundary of the proposed site or within the immediate vicinity of the proposed site. The closest recorded monument to the site is a castle located 580m east of the site boundary (RMP KK047-001).
- 11.114. The greatest potential impacts of the proposed development are likely to arise from the large-scale earthworks required to construct the proposed development. These potential impacts will be mitigated by pre-development archaeological testing. A geophysical survey of the site was carried out in 2004 and while no specific archaeological features were identified, geophysical anomalies identified in the survey required clarification by means of test trenching. The predevelopment testing strategy will involve comprehensive coverage of the site with specific emphasis on the anomalies (possible archaeological features) identified in the geophysical survey. The archaeological testing will be carried out under license to the National Monuments Service of the Department of Culture, Heritage and Gaeltacht.
- 11.115. Having regard to the matters discussed above, I am satisfied that impacts that are predicted to arise in respect of cultural heritage can be avoided, managed and mitigated by the measures which form part of the proposed development, the proposed mitigation measures and through suitable conditions. I am satisfied, therefore, that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on cultural heritage.

11.116. Chapter 14 Material Assets – Waste Management

- 11.117. On a regional level. Kilkenny is grouped with Carlow, Wexford, Waterford, Tipperary, Cork, Kerry, Clare and Limerick who together make up the new Southern Regional Waste Management Planning Region. The Southern Regional Waste Management Plan 2015 2021 aims to establish a framework which protects the health of the environment and its citizens through the sustainable management of wastes generated in the region by transitioning towards a more resource efficient and circular economy.
- 11.118. Due to the scale of the proposed construction works there is a potential for generation of waste material during the construction phase such as site clearance material, road works material and construction material. A small amount of canteen and domestic waste will also be generated during construction. Waste generated onsite during the construction phase will be recycled or reused where possible or disposed of off-site at an appropriate waste facility. Table 14-1 lists the projected annual waste quantities predicted to be generated on site in relation the operations phase of the development i.e. mixed municipal waste, engine, gear and lubricating oils, paper and cardboard packaging and plastic packaging.
- 11.119. It is proposed to maximise the reuse of all excavated materials arising during the construction works on the site, thereby significantly reducing offsite truck movements during the construction phase.
- 11.120. The main process waste generated by the proposed development will be a low-value dairy by-product whey which will be used as raw material for Glanbia's AgriChemWhey facility, which was recently granted planning permission. The proposed development will be operating as per the principles of the circular economy, whereby by-products and wastes from one process will be used to create valuable products.
- 11.121. The on-site wastewater treatment plant will produce up to 67.5 tonnes of organic sludge per week, which will be utilised for anaerobic digestion and generation of energy at an appropriately licensed facility. The waste produced and removed from site will be recorded and annually reported to the EPA in the AER as per the requirements of the facility's IE license. Therefore, there will be no significant impact associated with the proposed development on the existing waste management infrastructure.

11.122. Having regard to the matters discussed above, I am satisfied that impacts that are predicted to arise in respect of waste can be avoided, managed and mitigated by the measures which form part of the proposed development, the proposed mitigation measures and through suitable conditions. I am satisfied, therefore, that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on waste management.

11.123. Chapter 15 Material Assets – Traffic & Transport

- 11.124. The existing IDA Science and Technology Park access road will provide access to the site. It is proposed that all HGVs will enter and exit the site via the existing Glanbia entrance. A right of way access has been agreed between the applicant and Glanbia for this shared access. A separate access location will be provided for staff and visitors entering and exiting the proposed development. A total of 94 car parking spaces including 8 disabled spaces are to be provided on the site. Electric vehicle charging and a bike shed will be provided to promote emissions free for employees.
- 11.124.1. A Traffic Impact Assessment was carried out in accordance with the NRA Traffic and Transport Assessment Guidelines 2014. Field studies data analysis and forecast projections were carried out. There is a long-term objective to provide a roundabout on the N29 at its junction with the LP3412.
 - 11.125. During construction taking into consideration the normal intensity of on-site activity and the duration of the programme, it is expected that the construction schedule is likely to have a maximum of 300 400 staff in the site during the peak construction period. In order to assess a worst-case scenario, it is assumed that 33% of construction workers will arrive together in shared transport, albeit in reality this number will likely be higher. It is assumed that no construction workers will arrive by walking, cycling or use of public transport. Based on these numbers there could be in region of 500 600 vehicular trips per day.
 - 11.126. Once operational there will be c103 trucks arriving at the facility each operational day. The proposed development will employ approximately 80 staff. Of the 80 staff, 30 staff will be office staff and will be on site between the hours of 08.30 to 17.30. the remaining 50 staff will be shift staff distributed across three 8-hour shift periods with approximately 16 staff working per shift period.

- 11.127. The findings of a detailed traffic impact assessment confirmed that the surrounding road network will have capacity to cater for traffic associated with both the construction and operational phases of the proposed development.
- 11.128. Traffic management and monitoring measures will include but not necessarily limited to the following:
 - The design of the site will include a bike and electric vehicle charging points o promote emissions free transport for employees
 - The site operator will adhere to a routing policy to ensure HGV traffic journey route via the primary strategic road infrastructure wherever possible
 - GPS route planning will be implemented throughout the HGV fleet to optimise travel times and routes to raw milk supply sources and reduce overall fuel consumption
 - An engine no-idling policy will form part of the overall environmental management for the site
- 11.129. Having regard to the matters discussed above, I am satisfied that impacts that are predicted to arise in respect of traffic and transport can be avoided, managed and mitigated by the measures which form part of the proposed development, the proposed mitigation measures and through suitable conditions. I am satisfied, therefore, that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on traffic and transport.

11.130. Chapter 16 Material Assets – Wastewater Discharge

- 11.131. The Urban WWTP serving Waterford City is located adjacent to the Lower River Suir, c 350m from the proposed facility and is operated by Irish Water and is regulated by the EPA, in accordance with EPA License D0022-01. The capacity of the UWWTP is 190,600 PE. The treatment comprises preliminary screening and grit removal, primary settlement tanks, secondary aeration, and final settlement tanks. The UWWTP discharges treated effluent via an outfall into the Lower River Sir, which is routed underneath the Irish Rail line. Public foul sewer also runs along the IDA access Road and connect to the UWWTP.
- 11.132. There will be no wastewater emissions during the construction phase of the project that will directly impact on the adjoining public infrastructure. Treated effluent

from the on-site WWTP will discharge via a dedicated pipeline which will connect into the IW outfall pipe, before discharging into the Lower River Suir. The treatment plant will have sufficient capacity to cater for the foul effluent loadings arising from the proposed development. Based on preliminary consultation with IW this outfall pipe has sufficient capacity to cater for the estimated c4500 m3/day of treated effluent that will arise from the proposed development will be treated differently to process effluent. All agreements with IW will be formalised as part of a pre-connection agreement that will be finalised during the detailed design phase.

11.133. Having regard to the matters discussed above, I am satisfied that impacts that are predicted to arise in respect of the discharge pipe and urban WWTP can be avoided, managed and mitigated by the measures which form part of the proposed development, the proposed mitigation measures and through suitable conditions. I am satisfied, therefore, that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on wastewater discharge.

11.134. Chapter 17 deals with the interaction of the foregoing.

- 11.135. Table 17.1 summarises the interaction of the factors discussed in the preceding chapters. Generally, the negative impacts relate to the construction phase of the project and are slight. There are some positive impacts largely related to population. I consider that this summary of the potential for interacting impacts is reasonable.
- 11.136. **Chapter 18** provides a schedule of mitigation measures which have been discussed above.

11.137. **Reasoned Conclusion.**

- 11.138. Having regard to the examination of environmental information contained above, and to the submission by the planning authority it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:
 - Impacts to biodiversity are likely to arise during construction works due to the removal of agricultural grassland and hedgerows / treeline and shrubs in preparation for the construction of the factory. The impacts arising from the removal of habitat and disturbance would be mitigated by additional planting, appointment of an Ecological Clerk of Works, a CEMP, provision of artificial bat

roosts, management of vegetation to outside the bird breeding season, attenuation of surface water and following best practice and procedures during the construction phase. Regarding the dairy farms supplying the factory, impacts arising would be mitigated though compliance with both the Government and Glanbia's sustainability programmes as outlined in the EIAR which I have reviewed and consider reasonable.

- Potential environmental impacts arise from wastewater discharge and surface water runoff. Having regard the EIAR submitted and the mitigation measures contained in same that include the development of a WWTP that will treat effluent on site prior to discharge to the Lower River Suir via the IW outfall pipe, surface water management, SuDS and attenuation tanks it is considered that all potential discharges, both those governed by the Industrial Emissions license from the EPA and discharges that may result from spillage or firewater, can be adequately contained and subject to full compliance with all mitigation measures listed in the documentation, by virtue of this development there is no potential for significant adverse impact on the receiving environment proximate or removed from the site, either from this development alone or in combination with other developments.
- Impacts on climate are likely to arise in the production of 450 million litres of milk which produces 513 megatons of CO_{2eq}. While the impact of the proposed development alone is considered insignificant, there is an indirect impact. This impact is expected to decrease by virtue of the production efficiency of the existing dairy herd and implementation of mitigation measures as outlined in the EIAR. Further these emissions are already accounted for and regulated through the National Climate Action Plan as part of dairy sector emissions. The proposed development will not directly or indirectly result in an increase of CO₂ emissions proportionate to the required milk input. The impacts arising would be mitigated though compliance with both the Government and Glanbia's sustainability programmes as outlined in the EIAR which I have reviewed and consider reasonable.
- Construction phase impacts in the form of short term increases in the traffic (private cars and HGVs) on the local road network are recognised, addressed in the EIAR and, specifically in the construction and environment management plan. The

mitigation measures are reasonable and practicable. Noise and vibration levels would be within acceptable emissions limits during normal operation.

- The proposed development entailing a series of large modern industrial design buildings would have an impact on the visual character of the area. This impact is considered acceptable given the location of the site within the IDA Belview Science & Technology Park on land that is zoned for ITP Industrial / Technology Park in the Development Plan.
- There are potential positive impacts for employment opportunities and economic activities in the region. Impacts arising from noise, dust, traffic, and construction will be mitigated by a Construction Management Plan including traffic management measures. There will be no negative impacts subject to mitigation measures outlined or otherwise addressed by condition.
- 11.139. I am satisfied that the proposed development would not have any unacceptable direct or indirect effects on the environment.

12.0 Appropriate Assessment

12.1. Stage 1 Screening for Appropriate Assessment

12.2. The application included a Natura Impact Statement to evaluate the potential impacts(s) of the proposed development on European Sites located within 15km radius. While 15km is not a statutory requirement I am satisfied that it is a reasonable parameter and that the sites identified in Stage 1 of the AA are acceptable. The appeal site is not located within a designated Natura 2000 site. However, the Lower River Suir SAC is c 630m to the south of the appeal site. Other sites considered relevant to this appeal site include River Barrow & River Nore SAC, Bannow Bay SAC, Tramore Dues & Backstrand SAC, Bannow Bay SPA and Tramore Back Stand SPA. Details are summarised as follows:

Site Name	Code	Dist. (km)	Direction from site
Special Areas of Conservation (SAC)			
Lower River Suir SAC	002137	40m	South
River Barrow & River Nore SAC	002162	2.9km	North

Bannow Bay SAC	000697	14.1m	South East
Tramore Dunes & Backstrand SAC	000571	9.7km	South West
Special Protection Area (SPA)			
Bannow Bay SPA	004033	14.5km	South East
Tramore Back Strand SPA	004027	9.7km	South West

- 12.3. Given the distance, the lack of hydrological connectivity and lack of impact pathways the Bannow Bay SAC, the Tramore Dunes & Backstrand SAC, the Bannow Bay SPA and the Tramore Back Strand SPA have been screened out from further consideration.
- 12.4. The boundaries of the Lower River Suir SAC and River Barrow & River Nore SAC are located within 3km from the application boundary and given the current hydrological connection between the site and Lower River Suir SAC and River Barrow & River Nore SAC, further consideration will be given to these Natura 2000 sites to assess potential adverse effects resulting from the proposed development.
- 12.5. Lower River Suir SAC (Site Code 002137) The Lower River Suir SAC is an extensive site, which covers the freshwater stretches of the River Suir from south of Thurles, Co Tipperary to the Barrow-Suir confluence east of Cheekpoint, Co. Waterford. The SAC is comprised of a number of Annex I habitats, including priority habitats alluvial forest and Yew woodland. Other habitats within the SAC include wet and dry grassland, marsh, swamp, improved grassland, tidal river, deciduous woodland and mudflats. The qualifying interests are as follows:

Natura 2000 Site &	Qualifying Interest
Conservation Objective	
Lower River Suir SAC	Annex I
Site Code 002137	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)
	Mediterranean salt meadows (Juncetaliea maritimi)

Water courses of plain to montane levels with the
Ranunculion fluitantis and Callitricho-Batrachion
vegetation
Hydrophilous tall herb fringe communities of plains
and of the montane to alpine levels
Old sessile oak woods with Ilex and Blechnum in the
British Isles
Alluvial forests with Alnus glutinosa and Fraxinus
excelsior (Alno-Padion, Alnion incanae, Salicion
albae)
Taxus baccata woods of the British Isles
Annex II
Annex II Freshwater pearl mussel (Margaritifera
Annex IIFreshwaterpearlmussel(Margaritiferamargaritifera),
Annex IIFreshwaterpearlmussel(Margaritiferamargaritifera),White-clawed crayfish (Austropotamobius pallipes)
Annex IIFreshwaterpearlmussel(Margaritiferamargaritifera),White-clawed crayfish (Austropotamobius pallipes)Sea lamprey (Petromyzon marinus)
Annex II Freshwater pearl mussel (Margaritifera margaritifera), White-clawed crayfish (Austropotamobius pallipes) Sea lamprey (Petromyzon marinus) Brook lamprey (Lampetra planeri)
Annex II Freshwater pearl mussel (Margaritifera margaritifera), White-clawed crayfish (Austropotamobius pallipes) Sea lamprey (Petromyzon marinus) Brook lamprey (Lampetra planeri) River lamprey (Lampetra fluviatilis)
Annex II Freshwater pearl mussel (Margaritifera margaritifera), White-clawed crayfish (Austropotamobius pallipes) Sea lamprey (Petromyzon marinus) Brook lamprey (Lampetra planeri) River lamprey (Lampetra fluviatilis) Twaite shad (Alosa fallax fallax)
Annex IIFreshwaterpearlmussel(Margaritifera)margaritifera),white-clawed crayfish (Austropotamobius pallipes)Sea lamprey (Petromyzon marinus)Sea lamprey (Petromyzon marinus)Brook lamprey (Lampetra planeri)River lamprey (Lampetra fluviatilis)Twaite shad (Alosa fallax fallax)Atlantia colmon (Solmo color)
Annex II Freshwater pearl mussel (Margaritifera margaritifera), White-clawed crayfish (Austropotamobius pallipes) Sea lamprey (Petromyzon marinus) Brook lamprey (Lampetra planeri) River lamprey (Lampetra fluviatilis) Twaite shad (Alosa fallax fallax) Atlantic salmon (Salmo salar)
Annex IIFreshwaterpearlmussel(Margaritifera)margaritifera),white-clawed crayfish (Austropotamobius pallipes)Sea lamprey (Petromyzon marinus)Sea lamprey (Petromyzon marinus)Brook lamprey (Lampetra planeri)River lamprey (Lampetra fluviatilis)Twaite shad (Alosa fallax fallax)Atlantic salmon (Salmo salar)Otter (Lutra lutra).

- 12.6. The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. The site specific conservation objectives are to **maintain** the favourable conservation condition of
 - Water courses of plain to montane levels
 - Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels

- White-clawed Crayfish
- Otter
- 12.7. And to restore the favourable conservation condition of
 - Atlantic salt meadows
 - Mediterranean salt meadows
 - Old sessile oak woods
 - Alluvial forests
 - Taxus baccata woods
 - Freshwater Pearl Mussel
 - Sea Lamprey
 - Brook Lamprey
 - River Lamprey
 - Twaite Shad
 - Salmon
- 12.7.1. River Barrow & River Nore SAC (Site Code 002162) The River Barrow and River Nore SAC consists of the freshwater stretches of the Barrow and Nore River catchments extending from the Slieve Bloom Mountains to the estuary and tidal elements in Creadun Head, Waterford. Species rich habitats (Annex I of the EU Habitats Directive) including estuaries, alluvial forests, petrifying springs and intertidal mudflats and sandflats can be found within this SAC. The qualifying interests are as follows:

Qualifying Interest
Annex I
Estuaries
Mudflats and sandflats not covered by seawater at
low tide
Salicornia and other annuals colonising mud and
sand

Atlantic salt meadows (Glauco-Puccinellietalia
maritimae)
Mediterranean salt meadows (Juncetalia maritimi)
Water courses of plain to montane levels with the
Ranunculion fluitantis and Callitricho-Batrachion
vegetation
European dry heaths
Hydrophilous tall herb fringe communities of plains
and of the montane to alpine levels
Petrifying springs with tufa formation (Cratoneurion)
Old sessile oak woods with Ilex and Blechnum in
the British Isles
Alluvial forests with Alnus glutinosa and Fraxinus
excelsior (Alno-Padion, Alnion incanae, Salicion
albae)
Annex II
Otter Lutra lutra
Freshwater Pearl Mussel Margaritifera
Margaritifera
Nore Freshwater Pearl Mussel Margaritifera
durrovensis
Desmoulin's Whorl Snail (Vertigo moulinsiana)
White-clawed Crayfish (Austropotamobius pallipes)
Atlantic Salmon (Salmo salar)
Atlantic Salmon (Salmo salar) Sea Lamprey (Petromyzon marinus)
Atlantic Salmon (Salmo salar) Sea Lamprey (Petromyzon marinus) Brook Lamprey (Lampetra planeri)
Atlantic Salmon (Salmo salar) Sea Lamprey (Petromyzon marinus) Brook Lamprey (Lampetra planeri) River Lamprey (Lampetra fluviatilis)
Atlantic Salmon (Salmo salar) Sea Lamprey (Petromyzon marinus) Brook Lamprey (Lampetra planeri) River Lamprey (Lampetra fluviatilis) Twaite Shad (Alosa fallax fallax)
Atlantic Salmon (Salmo salar) Sea Lamprey (Petromyzon marinus) Brook Lamprey (Lampetra planeri) River Lamprey (Lampetra fluviatilis) Twaite Shad (Alosa fallax fallax) Killarney Fern (Trichomanes speciosum)

- 12.8. The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. The site specific conservation objectives are to **maintain** the favourable conservation condition of:
 - Desmoulin's whorl snail
 - White-clawed crayfish
 - Estuaries
 - Mudflats & Sandflat's not covered by seawater at low tide
 - Salicornia and other annuals colonizing mud and sand
 - Killarney fern
 - Water courses of plain to montane levels
 - European Dry Heaths
 - Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
 - Petrifying springs with tufa formation
- 12.9. And to restore the favourable conservation condition of
 - Sea Lamprey
 - Brook Lamprey
 - River Lamprey
 - Twaite Shad
 - Atlantic Salmon
 - Atlantic salt meadows
 - Otter
 - Mediterranean salt meadows
 - Nore freshwater pearl mussel
 - Old sessile oak woods
 - Alluvial forests

12.10. The qualifying interests that could be affected in the **Lower River Suir SAC** are summarised as follows:

Qualifying Interest	Potential Impacts
Atlantic Salmon	Direct effects from water discharge
	Decrease in water quality
	Decrease in food availability
	Pollution
Sea Lamprey	As above
Brook Lamprey	As above
Twaite Shad	As above
Otter	Disturbance / displaced during construction
	Decreased water quality
	Decreased prey availability
	Pollution

12.11. The qualifying interests that could be affected in the **River Barrow and River Nore SAC** are summarised as follows:

Qualifying Interest	Potential Impacts
Atlantic Salmon	Direct effects from water discharge
	Decrease in water quality
	Decrease in food availability
	Pollution
Sea Lamprey	As above
Brook Lamprey	As above
River Lamprey	As above
Twaite Shad	As above
Otter	Disturbance / displaced during construction

Decreased water quality
Decreased prey availability
Pollution

- 12.12. Atlantic Salmon, Sea Lamprey, Brook Lamprey and Twaite Shad are known to use the Lower River Suir. These species together with the River Lamprey are also known to be present within the estuary during parts of its lifecycle. Given the hydrological connection to the River Suir and River Barrow through the Rathpatrick stream, the Gorteens stream and the discharge of the treated effluent, there is potential for construction and operational works to impact on this species. Further assessment is required.
- 12.13. Otters are also known to occur within the area. It is considered that the risk to the species resulting from the proposed construction works is very low, given that no works will take place within habitats that are suitable for the species. However due to the hydrological connection between the site and the River Barrow and River Suir there is potential for construction and operational adverse effects to this species in the absence of mitigation. Further consideration is required.

12.14. Stage 2 Appropriate Assessment

- 12.15. The Screening process above has examined the potential for the proposed development to cause adverse effects on Natura 2000 European Sites and qualifying features of interest. A number of species have been identified which require to be brought forward for further consideration due to potential for adverse effects as a result of the proposed development in the absence of appropriate mitigation measures.
- 12.16. The following impacts with potential to adversely affect the conservation objectives of the identified Natura 2000 sites were considered in the NIS.
- 12.17. Potential impairments of water quality during construction phase The Rathpatrick and the Gorteens streams are the closest hydrological feature in the vicinity of the site. Due to the fact that the River Suir is considered "at risk" should runoff of potential pollutants from the construction area reach the surface water, groundwater or flow into either the Rathpatrick or the Gorteens streams, this could
adversely affect the water quality within the River Suir and further downstream in the River Barrow and Barrow Suir Nore Estuary.

- 12.18. Potential impairment of water quality during operation phase Given that both surface water discharges and treated trade effluent discharge arising from the site will be discharged to the Lower River Suir there is potential for adverse effects in the absence of appropriate mitigations measures.
- 12.19. **Potential Indirect Impacts** The raw material, milk (450 million litres / year) will be mostly sourced from the existing Glanbia farms (c 4,500 farms). The specific farms supplying milk to the proposed facility cannot be identified and are likely to change from year to year.
- 12.20. **Mitigation measures** to prevent possible impacts arising from the proposed project are as follows:
- 12.21. **Construction Procedures** The construction works will take approximately 20 24 months to complete. An ecological clerk of works (ECoW) will inspect the sites in advance of works commencing and will undertake site inspections as required the works, to ensure that they are completed in line with the mitigation measures detailed within the Construction Environmental Management Plan (CEMP). A detailed CEMP will be prepared and submitted to Kilkenny County Council for approval in advance of the works.
- 12.22. Potential impairments of water quality during construction phase The Rathpatrick and the Gorteens streams are separated from the sites boundaries by roads and mixed broadleaved woodlands. Sections of the Gorteens Stream are within the Irish Water lands and are also separated by a berm. It is considered highly unlikely that there would be adverse effects to these waterbodies as the roads and woodlands will act as buffers between them.
- 12.23. The proposed measures to remove the risk from potential contamination and emergency procedures to be implemented in the event of an accidental release or spill of potentially contaminating substances are outlined in Section 7.1 of the NIS and include:
 - Adequate spill kits will be maintained onsite;
 - All contractor workers will be appropriately trained in the use of spill kits

- Any sediments impacted by contamination will be excavated and stored in appropriate sealed containers for disposal off site
- 12.24. In addition, best practise guidelines will be followed, which are based on Inland Fisheries Ireland (2016) and National Roads Authority (2005) guidance documents and include
 - If not used directly all materials shall be stored at the main contractor compound and transported to the works zone immediately prior to construction
 - Weather conditions will be considered when planning construction activities to minimise risk of run off from site
 - Excavation will be left open for minimal periods to avoid acting as a conduit for surface water flows
 - Only emergency breakdown maintenance will be carried out on-site. emergency
 procedures and spillage kits will be available and construction staff will be familiar
 with emergency procedures
 - Washout of concrete trucks will not be permitted on the site
 - Cabins, containers, workshops, plant, material storage and storage tanks shall be located no more than the minimum distance allowed to any surface water channel
 - Fuels, lubricants and hydraulic fluids for equipment used in the construction site will be carefully handled to avoid spillage, properly secured against unauthorised access or vandalism and provided with spill containment according to current best practise
 - No vehicle or equipment maintenance work will take place within the site
 - Prior to any works commencing, all construction equipment will be checked to ensure that they are mechanically sound, to avoid leals of oil, fuel, hydraulic fluids and grease and
 - Measures will be implemented to minimise waste and ensure correct handling storage and disposal of waste
- 12.25. Measures will also be put in place to prevent suspended solids in any runoff entering the watercourses from the appeal site boundary and to ensure works are in line with the Inland Fisheries Ireland guidelines. These measures will include the following:
 - Existing vegetation will be retained where possible

- No construction works will occur within 20m of any watercourse
- No discharges to the surface water drainage system will be made until all drains are fully connected to the proposed oil / water interceptor and attenuation pond;
- Until the surface water drainage system is fully operational drainage during the Construction Phase will be manged through infiltration
- 12.26. Following the implementation of the above-mentioned mitigation measures, it can be concluded that the construction phase of the proposed development will not have any adverse effects on water quality within the Lower River Suir SAC and River Barrow & River Nore SAC or species for which they are designated.
- 12.27. Potential impairment of water quality during operation phase Mitigation meaures that will form part of the proposed development to ensure that adverse effects in the surface water and treated trade effluent discharge arising from the site can be avoided are set out below.
 - Surface Water / General Mitigation Measures Only clean uncontaminated rainwater from the site will discharge into the storm water drain. On-site storm water i.e. uncontaminated rainwater from the roof and clean paved areas of the site will be directed to an attenuation pond in the south eastern corner of the site. Water from the attenuation pond will then be directed via underground pipes to Irish Waters storm drain, eventually discharging into the Gorteens Stream to the east of the site. The hydro brake and fuel / oil separator will be installed downstream of the attenuation pond. The flow to the attenuation pond will be monitored for contaminants with automatic diversion into the firewater retention pond if trigger levels are exceeded. Drainage will be designed to Sustainable Drainage System standard, ensuring the greenfield discharge rates. Storm water trigger levels (i.e. emission limits) and monitoring requirements will be conditioned as part of the IE License and regulated by the EPA. Given the above drainage design, no impacts on water quality or the flow in the Gorteens Stream or Lower River Suir are expected.
 - Further general mitigation measures are detailed below in relation to measure to protected water quality on site.

- Materials on-site will be stored and transferred in accordance with EPA Guidance (2014) and relevant BAT conclusions (2006). This will include bunding, double lines tanks and pipelines where necessary
- 2) Where possible, all process lines will be above ground to enable easy inspection and maintenance
- All bunds, tanks and pipelines will be inspected on a regular basis in accordance with the proposed developments Industrial Emissions (IE) license
- 4) In the event of a fire on-site, all storm drains will be re-routed to the on-site fire-water retention pond. This will ensure fire water containment and monitoring can be completed prior to its release as per EPA Guidance.
- 5) Preventative maintenance will be undertaken in accordance with manufacturers and IE License requirements and
- 6) An Environmental Management System (EMS) will be put in place
- Process Water Discharge Process effluent and potentially other contaminated discharge milk intake, CIP bund and CIP process discharge, wash down discharge from the facility (internally), truck wash area, boiler blowdown and hard surface area of WWTP will be treated in the outside WWTP prior to discharge into a dedicated pipe which will connect with the IW pipe for ultimate discharge into the Lower River Suir. The on-site WWTP will provide treatment of the process effluent. It will be designed to treat approximately 6,000 m3 of effluent per day. This will be a full biological WWTP capable of removing biochemical oxygen demand (BOD), chemical oxygen demand (COD) and nutrients characteristic of a dairy plant effluent to a level that complies with BAT limits. The main treatment will take place in an anoxic tank and an aeration tank. Biological phosphorous removal will also be included in the design.
- Following complete treatment in the on-site WWTP to a standard that meets with the approval of the EPA, process water will discharge via a dedicated pipe which will connect into the Irish Water outfall pipe. The treated process effluent will at that point be mixed with the IW treated effluent, before the combined effluent will discharge into the Lower River Suir. The location of the proposed new pipes and the location of the outfall are shown in Figure 3-2 of the NIS. Average discharge

from the proposed development will amount to >0.09% of the average flow of the Lower River Suir. Based on this flow, together with the BAT limits, which will be applied to the discharge from the proposed development and the current water quality in the Lower river Suir (refer to table 7-2 of the NIS) it can be concluded that the treated process effluent that will discharge from the proposed development will not have an adverse impact on the water quality in the Lower River Suir or the River Barrow & River Nore SAC or species for which they are designated.

- 12.28. Potential indirect impacts In order to combat adverse effects within the dairy farming milk supply sector, Glanbia is committed to sustainable milk production and has an active Sustainability and Quality Assurance Programme, which is in line with Bord Bia Sustainable Dairy Assurance Scheme (SDAS). The areas of biodiversity and ecology which are considered at farm level assessments include land management, environmental care and carbon footprint, quality and conservation of water, animal health, welfare and biosecurity and the data storage and responsible usage of medicines, pesticides, anthelmintics and other chemicals. Glanbia Ireland is also a supporting partner of the BRIDE (Biodiversity Regeneration In a Dairying Environemnt) project which aims to design and implement a results based approach to conserve, enhance and restore habitats in lowland intensive farmland. All farms are subject to environmental controls including controls in the Wildlife Acts and the Habitats and Brids Directive which ensure that they do not significantly adversely affect the integrity of European and other protected sites and so as to ensure the protection of protected species.
- 12.29. The planning application provides a sufficient level of information surrounding the source of milk / milk supply in order to allow for the assessment of the associated indirect impacts to the required extent. There is no evidence of potential for direct habitat loss or fragmentation within designated areas associated with the project or for significant effects on the conservation objectives of any Natura 2000.
- 12.30. While it is not practicable to assess potential indirect effects on all Natura sites, it can be concluded in general terms that the continued implementation of the above mentioned programmes and mitigation measures on dairy farms that will supply milk to the proposed development will mitigate potential indirect adverse effects on Natura 2000 sites.

- 12.31. Otter There are no suitable habitats for otter identified within the appeal boundary, however otters are known to occur within the wider area and have the potential to use the watercourses within close proximity to the appclaiton boundary. The site is separated from watercourses by local roads and areas of woodland. Furthermore, given the presence of the existing faci;oty, WWTP and road infrastructure, any otters utilising these watercourses would have become habituated to elevated levels of human activity. It is therefore considered that works within the site will not adversely impact on otters. However, in line with best practise and taking a precautionary approach, the following mitigation measures will be included, therefore preventing any potential disturbance / adverse effect on otters:
 - An Ecological Clerk of Works (ECoW) will be appointed to the project and will undertake supervision works and inspections as required to ensure that the measures detailed in the NIS and EIAR will be fully implemented
 - Protected species posters will be erected on the site notice board and be maintained throughout the duration of the works
 - In advance of works all site personnel will receive a site induction or toolbox which will include reference to measures detailed in the CEMP and
 - Should construction work for the pipeline be required outside of daylight hours the appointed project ECOW will be consulted as required.
- 12.32. Due to the large size of the Lower River Suir SAC and River Barrow & River Nore SAC, there are numerous projects and activities which have the potential to affect the conservation interests of these sites. However, there is no evidence that there are any development works currently taking place or are planned to be take place within close proximity to the site that have the potential to have an in-combination impact with the proposed development in terms of construction activities.
- 12.33. The key quality parameters in the process effluent discharge arising from the proposed development will have the same or lower ELVs that the current Irish Water discharges. The combined future effluent will have the same or lower concentrations of the key pollutants when compared to the current effluent concentration discharging to the River Suir at this location. Therefore, it can be concluded that there will be no significant cumulative effects from the combined discharge of the proposed development and the IW Urban WWTP on the Lower River Suir SAC water quality.

- 12.34. I am satisfied that an examination of the potential impacts has been analysed and evaluated using the best scientific knowledge. Significant effects on Natura 2000 sites were identified. Where potential adverse effects were identified, key design features are prescribed to remove risks to the integrity of the European sites. I am satisfied based on the information available that if the key design features are undertaken, maintained and monitored as detailed in the NIS, adverse effects on the integrity of Natura 2000 sites will be avoided.
- 12.35. I consider it reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the Lower River Suir SAC (002137) and River Barrow & River Nore SAC (002162) or any other European site, in view of the site's Conservation Objectives.

13.0 Recommendation

13.1. On the basis of the above planning assessment, environmental impact assessment and appropriate assessment, I recommend that the Board approve the application for the proposed development for the reasons and considerations and subject to the conditions set out below.

14.0 **Reasons and Considerations**

- 14.1. Having regard to:
 - (i) The written submissions made in respect of the application
 - (ii) The established nature of the existing Glanbia Development on the adjoining site, the detailed nature, scale and form of the development and its location relative to nearby sensitive receptors,
 - (iii) Mitigation measures which are proposed for the construction and operation phases of the development,
 - (iv) The provisions of the Kilkenny County Development Plan 2014-2020 and the Ferrybank/Belview Local Area Plan 2017 including the zoning of the subject lands under the latter plan for Industrial / Technology Park (ITP)

- (v) The nature of the landscape and the absence of any specific conservation or amenity designation for the site,
- (vi) The pattern of development in the area including the proximity to the existing Glanbia facility and the separation distance of the site from existing dwellings,
- (vii) The submissions on file including those from prescribed bodies and the Planning Authority
- (viii) The documentation submitted with the application, including the Environmental Impact Assessment Report and Natura Impact Statement

It is considered that, subject to compliance with the condition set out below, the proposed development would be in accordance with the Development Plan policies, would not seriously injure the visual or residential amenities of the area, would not be prejudicial to public health and would be acceptable in terms of traffic safety. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

15.0 Conditions

- 1. The development shall be carried out and completed in accordance with the plans and particulars, lodged with the, except as may otherwise be required in order to comply with the following conditions. Where such conditions require points of detail to be agreed with the planning authority, these matters shall be the subject of written agreement and shall be implemented in accordance with the agreed particulars. In default of agreement, the matter(s) in dispute shall be referred to An Bord Pleanála for determination. Reason: In the interest of clarity.
- 2. All environmental mitigation measures set out in the Environmental Impact Assessment Report and associated documentation submitted by the developer with the application shall be implemented in full except as may otherwise be required in order to comply with the conditions of this order.

Reason: In the interest of clarity and to protect the environment during the construction and operational phases of the development.

3. Monitoring of the construction phase shall be carried out by a suitably qualified competent person to ensure that all Environmental mitigation measures contained in the documentation which accompany the application are fully implemented. A designated member of the company's staff shall interface with the Planning Authority or members of the public in the event of complaints or queries in relation to environmental emissions. Details of the name and contact details and the relationship to the operator of this person shall be available at all times to the Planning Authority on request whether requested in writing or by a member of staff of the Planning Authority at the site.

Reason: To safeguard the amenities of the area.

- (a) Prior to the commencement of development, the developer shall enter into a connection agreement with Irish Water.
 - (b) Drainage arrangements, including the disposal of surface water, shall comply with the requirements of the planning authority for such works and services.

Reason: In the interest of public health and to ensure a proper standard of development.

5. Lighting shall be provided in accordance with a scheme, which shall include lighting along pedestrian routes, details of which shall be submitted to, and agreed in writing with the planning authority prior to commencement of development. The scheme shall minimise obtrusive light outside the boundaries of the development at all times.

Reason: In the interest of amenity and public safety.

- 6. The developer shall facilitate the planning authority in preserving, recording or otherwise protecting archaeological materials or features that may exist within the site. In this regard, the developer shall
 - a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development,

- b) employ a suitably qualified archaeologist who shall monitor all site investigations and other excavation works, and
- c) (c) provide satisfactory arrangements for the recording and removal of any archaeological material which may be considered appropriate to remove.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation of any remains which may exist within the site.

- 7. The construction of the development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including:
 - (a) hours of operation,

(b) location of the site and materials compound(s) including area(s) identified for the storage of construction refuse,

(c) location of areas for construction site offices and staff facilities,

(d) details of site security fencing and hoardings,

(e) details of car parking facilities for site workers during the course of construction,

(f) details of the timing and routing of construction traffic to and from the construction site and associated directional signage, to include proposals to facilitate the delivery of abnormal loads to the site,

(g) measures to obviate queuing of construction traffic on the adjoining road network,

(h) measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network,

(i) alternative arrangements to be put in place for pedestrians and vehicles in the case of the closure of any public road or footpath during the course of site development works, (j) details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels,

(k) containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained. Such bunds shall be roofed to exclude rainwater,

(I) means to ensure that surface water run-off is controlled such that no silt or other pollutants enter local surface water sewers or drains,

(m) a maintenance contract for the oil interceptor to ensure it is emptied on a regular basis shall be submitted

(n) details of construction lighting, and

(o) details of key construction management personnel to be employed in the development.

The plan shall include measures for monitoring dust, noise, groundwater and surface water and shall include a proposal for periodic reporting to the planning authority.

A record of daily checks that the works are being undertaken in accordance with the Construction Management Plan and monitoring results as appropriate shall be kept for inspection by the planning authority.

A Construction Manager shall be appointed to liaise directly with the Council for the duration of the construction of the scheme.

Reason: In the interest of amenities, environmental protection, public health and safety.

8. Construction and demolition waste shall be managed in accordance with a construction waste and demolition management plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall be prepared in accordance with the "Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects", published by the Department of the Environment, Heritage and Local Government in July 2006.

Reason: In the interest of sustainable waste management.

9. A noise management plan which shall include a monitoring programme shall be put in place by the developer in respect of the construction phase of the development. The nature and extent of the plan and the monitoring sites shall be agreed in writing with the planning authority prior to commencement of the development. The results of the programme shall be submitted to the planning authority on a monthly basis.

Reason: To protect the residential amenities of the area.

10. During construction the wheels of all trucks shall be washed prior to their exit from the site in a wheel wash facility. Details of the construction, installation and operation of this facility shall be agreed in writing with the Planning Authority prior to commencement of any development.

Reason: To safeguard the amenities of the area.

11. All solid wastes arising on the site shall be recycled as far as possible. Materials exported from the site for recovery, recycling or disposal shall be managed at an approved facility and in such a manner as is agreed with the Planning Authority. In any case no such wastes shall be stored on the site except within the confines of the buildings on site. Adequate on-site arrangements for the storage of recyclable materials prior to collection shall be made to the satisfaction of the Planning Authority.

Reason: To safeguard the amenities of the area

- 12. (a) The site shall be landscaped and planted in accordance with a scheme to comprise predominantly native and naturalised hedgerow, shrub and tree species reflecting those species naturally occurring in the locality. This plan shall be prepared with input from an ecologist. Full details (including drawings) shall be submitted in a landscape plan to be agreed in writing with the Planning Authority prior to commencement of development. It is desirable that the plan will reflect the principle of no net loss of native trees or hedgerows.
 - (b) Prior to commencement of development, the applicant shall submit the exact details of the type and location of a sturdy fence to be erected to

protect the trees and hedgerows on the site to be retained. The design and location of this protective fence should be determined by taking into account the recommendations of BS 5837:2012 with particular regard to the calculation of the Root Protection Area (RPA). This fence is to be erected prior to the commencement of development works on site and retained in place until all construction works are completed

Reason: In the interests of proper planning and sustainable development and protecting the biodiversity value of the site.

- 13. (a) The applicant shall put in place a Traffic Management Plan for the construction and operational phase of the development, which prohibits HGV's turning west at the IDA Roundabout onto the L3412 Abbey Road when exiting the IDA Science & Technology Park. All HGV traffic must utilise the available national and regional road network.
 - (b) The developer shall agree a Road Maintenance Plan with the Ferrybank Municipal District Engineer which shall be implemented during the construction phase. This plan shall ensure to keep public roads clean with roads swept using a suction sweeper. No debris, and/or dust/dirt associated with the proposed development shall be deposited on the public roads.

Reason: In the interest of development control and traffic safety

14. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall

be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission

Mary Crowley Senior Planning Inspector 15th June 2020