

# Inspector's Report ABP313586-22

Development	Amend an existing WWTP at Dawn Meats Meat Processing Plant and provide a new 7.5km outfall pipeline to the River Boyne.	
Location	Painstown, Senschalstown, Dollardstown, Hayestown, Carnuff Little and Ardmulkchan, Navan, County Meath.	
Planning Authority	Meath County Council	
Planning Authority Reg. Ref.	21/424	
Applicant(s)	Dawn Meats Ireland Ltd.	
Type of Application	Permission	
Planning Authority Decision	Grant Permission.	
Type of Appeal	Third Party V Grant. Applicant v Condition 8.	
Appellant(s)	1) Peter Whelan	
	2) Inland Fisheries	
	3) Dawn Meats Ireland Ltd	
	4) Slane Bridge Anglers	

- 5) Gillian Toole
- 6) Bobby McCormack
- Ciaran Maguire Canoeing Ireland
- 8) Sustainability 2050
- 9) Sonairte
- 10)Save the Boyne
- 11)Silver Bridge Kayakers

#### Observer(s)

- 1) Darren O'Rourke
- 2) Veronica Brady
- 3) Fergus O'Dowd
- 4) Bectiev Anglers Club
- 5) Claire Ryan & Joe Kinsella
- 6) An Taisce
- 7) Geraldine Stout
- 8) Ged Nash TD
- 9) Solas 21 Shannon Smith
- 10) Development Perspectives
- 11)Christopher Barrett
- 12)Boyne Valley Walking.
- 13) Jack Rogers (withdrawn).

Date of Site Inspection

Inspector

28<sup>th</sup> May & 9<sup>th</sup> June 2024 Hugh Mannion

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# 1.0 Site Location and Description

- 1.1. There are two elements to this application (1) a revised WWTP and (2) a pipeline connection to the river Boyne.
- 1.2. The first element, the revised WWTP, is sited within an existing slaughtering facility which processes meat for the restaurant trade. The site is surrounded by agricultural land and is located at Painestown, County Meath. The site is accessed from Windmill Road and is set well back from the public road. There is a mettled access and parking area. Adjoining the parking area are two buildings associated with the meat processing and a security/office/reception building. Immediately to the northwest are two effluent lagoons, a primary and secondary lagoon, between which effluent is exchanged as part of the treatment process. Adjoining these lagoons to the northwest is the permitted treatment plant (LB180300) which at present treats effluent under an industrial emissions licence from the EPA. Beyond these structures is open pasture within the ownership of the applicant.
- 1.3. At present the treated effluent is taken by tanker to a public WWTP whereas if this proposed development receives planning permission the effluent would be discharged to the river Boyne along the proposed pipeline. The proposed pipeline is about 7.2kms long and exits the application site on to Windmill Road and turns south towards the L1013. At the junction of the L1013 with Yellow Furze Road the route of the pipeline continues north and passed through Yellow Furze village. About 1.5kms from Yellow Furze village the pipeline will join Boyne Road (L1600) and after about 350m it turns left into a poorly metalled single carriage way road. This road continues under Stackallen bridge which carries the Dublin/Belfast railway. About 300m from the railway bridge the pipel would enter the Boyne.

# 2.0 **Proposed Development**

- 2.1. The proposed development comprises.
  - Demolish existing storage building (17.50m<sup>2</sup>) and construction of a new single storey industrial type building to enclose a DAF (dissolved air flotation) unit granted planning permission under reference number LB18/0300 and to provide new enclosed storage and control rooms (total floor area of 119m<sup>2</sup>).

- 2) Install new sludge press at intake to WWTP, change aeration tank to anoxic tank, install 2 additional aeration tanks, alteration to perimeter berm to increase footprint of WWTP by 539m<sup>2</sup> to that granted planning permission under reference LB 18/0300.
- 3) Treated wastewater rising mains from the site of the proposed development to a new discharge point at the River Boyne (distance 7.2kms) where pipeline will be laid along a section of Windmill Road, the L1013, Yellow Furse Road the L1600 (Boyne Road) and an unnamed local road leading from the L1600 to the private lands abutting the River Boyne at the discharge point.
- 2.2. All at the existing meat processing plant at Greenhills, Beauparc, Navan, County Meath and through the townlands of the Painstown, Senschalstown, Dollardstown, Haystown, Carnuff Little and Ardmulchan, Navan, County Meath.

# 3.0 Planning Authority Decision

# 3.1. Decision

Grant permission subject to conditions.

Condition 2 required implementation of the mitigation measures set out in the EIAR and the NIS submitted with the application.

# 3.2. Planning Authority Reports

- 3.2.1. Planning Reports
- 3.3. Initially the planning authority sought further information in relation to the EIAR as follows;
  - A revised vegetation survey (including any Annex 1 habitats) for the period May – September.
  - Mammal surveys (including bats, otters and badgers).
  - An assessment of the likely direct and indirect and in combination effects of the proposed development.
- 3.4. The applicants should add to the NIS the following:

- Provide a detailed description and construction plan with mitigation measures for the mains route and outfall for the discharge of treated effluent within the SAC, evidence of mitigation measures implementation, evidence as to the likely success of these measures, timescale for the implementation of the mitigation measures, monitoring of these measures and remedial measures in the event of failure of the mitigation measures.
- The applicant should clarify the standard to which phosphorous is being treated and relate that to the EPA's BAT standards.
- Measures to mitigate plant infrastructure failures should be submitted, these measures can include retention tanks/lagoons, measures to prevent untreated effluent getting into water courses, and measures to treat effluent in the event of treatment plant shut down.
- Details of the outfall into the river should be submitted.
- Comment on the submissions by prescribed bodies.
- Comment on the third-party submissions.

# 3.4.1. Other Technical Reports

- 3.4.2. The Heritage Officer reported that the information in the EIAR ad NIS were inadequate and recommended that:
  - Additional vegetation surveys be undertaken ay the optimum time of year (may to September) and habitats mapped in accordance with best practice guidelines.
  - A mammal survey (including bats, otters and badgers) should be undertaken in accordance with best practice principles.
  - A full assessment of the of likely direct and indirect and in-combination effects should be submitted.

- Supplementary information for the NIS should establish if there are Alluvial forests with Alnus glutinosa and Fraxinus excelsior within the zone of influence of the development.
- Clarity on the possible existence of Otters within the zone of influence of eth proposed development should be provided.
- The proposed development includes a crossing of the Dollardstown Stream inadequate information has been submitted of the potential impacts of works associated with this element of the application. Details of the rising main to be constructed within the River Boyne and River Blackwater SAC/SPA including mitigation measures, who will be responsible for these measures, evidence of the degree of confidence that mitigation measures will succeed, a time scale of implementation, monitoring arrangements, methods of mitigation failure and how such failures would be rectified.
- 3.5. **Transport Department** reported that the proposed development would give rise to additional traffic movements on the local road network in the construction phase but that these would not be unacceptable. The applicant can be asked to submit a construction management plan, apply for road opening licences and complete a preand post-construction survey of the local road network.
- 3.6. The Health Service Executive /Environmental Health Officer reported that.
  - The rationale for the increased capacity the WWTP from an original 230m<sup>3</sup> per day to 400m<sup>3</sup> per day should be provided by the applicant.
  - The alternatives to treatment and discharge have not been adequately explored in the application.
  - The application does not demonstrate that adequate public consultation has been carried out by the applicant in the preparation of the application.
  - Construction related noise is predicted to be elevated. A construction phase noise management plan should be submitted to the planning authority.
  - The water quality in the river Boyne in the vicinity of the discharge point is 'at risk' which is down in the 'good' status it had in 2012. The WFD requires that member states improve water quality in all waters to 'good' by 2015 or 2027 at

the latest. The impact of the proposed discharge on the achievement of that status should be carried out.

- The potential impacts of climate change in reducing river flows and thereby its assimilative capacity have not been assessed in the application.
- The planning authority should access the impact of the proposed development on the recreational value of the Boyne River valley.

# 3.7. **Inland Fisheries Ireland** objected to the application on the following grounds.

- The ECJ decision in C461/13 requires that permission be refused where a project may cause deterioration in the status of a surface water body.
- The exact construction methodology is not set out in the NIS and therefore it is not possible to conclude that the proposed development would not on the qualifying interest of the SAC and permission should therefore be refused.
- The exact nature of the discharge pipe into the river is unclear. It is unclear if any alarms are in place to alert in the event of lethal wastewater discharges.
- There are concerns in relation the impact of in-stream works.
- The integrity of the riverbank at the discharge point could be impacted by the proposed construction of a stone wall.
- Tributaries of the Boyne (including Dollardstown stream) have not been properly assessed for their ecological importance.
- The application does not address the potential presence of the common frog which is a food source for fish.
- Flow data presented for the Boyne is vague and only up to 2018. It should be presented for the period 2018-2021.
- The average background figures used to calculate treated wastewater concentrations. The higher figure of 21.8 degrees C, 4.0mg/I BOD, 0.11mg/I ortho-P and 0.13mg/I Total Ammonia should be used.
- The area where the discharge pipe is proposed is a very valuable habitat for salmon – in the event of a pollution event all the salmon breeding stock could be wiped out.

- The lower section of the Boyne below Navan is probably the only suitable habitats for sea lamprey to spawn any extra nutrient would damage the river's capacity in this regard.
- Viruses, bacteria or pathogens can negatively impact on fish stocks in the river.
- 3.8. **An Taisce** made a submission making the following points.
  - The design detail of the outfall to the river are inadequate.
  - The quality of the discharged effluent is unclear and is not related to the standards required by the WFD.
  - The impact of the development has not been properly assessed for its impact on quality of the water which would be abstracted down river at Staleen which serves the Drogheda/East Meath agglomeration.
  - The conclusion in the EIAR and NIS that no in-combination water quality impacts can arise if there are no individual impacts is flawed.
  - The application has not established beyond all reasonable scientific doubt that the proposed development would not adversely affect a European site.
- 3.9. The **Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media** made a submission requesting that, in the event of a grant of permission, an archaeological assessment of the site should be carried out.
- 3.10. The EPA made a submission to the planning authority stating that the existing facility was subject to an Industrial Emissions licence which had originally issued to Dunbia (Slane). That licence was subsequently transferred to Dawn Meats Ireland Ltd. The licence application was considered in conjunction with an EIAR.

# 4.0 **Planning History**

4.1. **ABP318854-24** Referral to the Board by Meath County Council on the question if the sub-surface distribution of treated effluent from the permitted WWTP at Dawn Meats meat processing factory at Painestown, Navan, County Meath within a 7ha site is or

is not development or exempted development. This file has not been reported on to date.

- 4.2. Reference number LB/18 0300 The proposed development comprised the construction of an extension to an existing WWTP, accompanied by an EIAR. The activity subject to an Emissions Licence but did not include discharge to the Boyne. This plant has been constructed and is operational at Painestown, Navan, County Meath.
- 4.3. Reference number LB/181444 The proposed development comprised a two-storey extension to the existing plant including offal processing areas, chill areas, toilets, changing rooms, canteen, offices, additional works at existing the meat processing plant at Painestown, Navan, County Meath.
- 4.4. PL 17.244473 (reg reference number LB140803) intensification of livestock slaughtering within the plant, demolition of existing offices, construction of new offices, change of use of existing cottage to office use, extension to lairage facilities, construct offal processing room, new pumphouse all at the existing meat plant at Painestown, Navan. County Meath. Grant permission subject to conditions.
- 4.5. Other elements of the planning history are detailed in the planning authority's planner's report on file.

# 5.0 Policy and Context

#### 5.1. National Planning Framework

- 5.2. The National Planning Framework seeks to provide an overall strategic planning framework for the Country in the period to 2040. In relation to waste management the NPF states that "while the aim is to decouple, as much as possible, consumption from waste generation over time, additional investment in waste management infrastructure, and in particular different types of waste treatment, will be required.
- 5.3. **National Policy Objective 56** seeks to sustainably manage waste generation, invest in different types of waste treatment and support circular economy principles, prioritising prevention, reuse, recycling and recovery, to support a healthy environment, economy and society.

- 5.4. **National Policy Objective 57** seeks to enhance water quality and resource management by ensuring that River Basin Management Plan objectives are fully considered throughout the physical planning process.
- 5.5. **National Policy Objective 63** seeks to ensure the efficient and sustainable use and development of water resources and water services infrastructure in order to manage and conserve water resources in a manner that supports a healthy society, economic development requirements and a cleaner environment.

# 5.6. Regional Spatial and Economic Strategy

- 5.7. The Eastern and Midland Regional Spatial Economic and Strategy 2019 to 2031 sets out a number of regional policy objectives including.
- 5.8. Water Quality RPO 7.10: Support the implementation of the Water Framework Directive in achieving and maintaining at least good environmental status for all water bodies in the Region and to ensure alignment between the core objectives of the Water Framework Directive and other relevant Directives, River Basin Management plans and local authority land use plans.

**RPO 7.11:** For water bodies with 'high ecological status' objectives in the Region, local authorities shall incorporate measures for both their continued protection and to restore those water bodies that have fallen below high ecological status and areas 'At Risk' into the development of local planning policy and decision making any measures for the continued protection of areas with high ecological status in the Region and for mitigation of threats to waterbodies identified as 'At Risk' as part of a catchment based approach in consultation with the relevant agencies. This shall include recognition of the need to deliver efficient wastewater facilities with sufficient capacity and thus contribute to improved water quality in the Region.

# 5.9. **Development Plan**

- 5.10. The Meath County Development Plan 2021 to 2027 is the relevant county development plan for the area.
- 5.11. In relation to biodiversity the plan sets out relevant policies.
- 5.12. **HER POL 27** To protect, conserve and enhance the County's biodiversity where appropriate.

- 5.13. **HER POL 32** To permit development on or adjacent to designated SPAs, SACs, NHAs, Statutory Nature Reserves or those proposed to be designated over the period of the plan, only where the development has been subject to the outcome of the Appropriate Assessment process and has been carried out to the satisfaction of the Planning Authority, in consultation with National Parks and Wildlife.
- 5.14. **HER OBJ 7** To work in partnership with the community and all other relevant stakeholders to promote, understand, conserve and sustainably manage the UNESCO World Heritage Site of Brú na Bóinne.
- 5.15. HER OBJ 33 To ensure an Appropriate Assessment in accordance with Article 6(3) and Article 6(4) of the Habitats Directives (92/43/EEC) and in accordance with the Department of Environment, Heritage and Local Government Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities, 2009 and relevant EPA and European Commission guidance documents, is carried out in respect of any plan or project not directly connected with or necessary for the management of the site but likely to have a significant effect on a Natura 2000 site(s), either individually or in-combination with other plans or projects, in view of the site's conservation objectives.
- 5.16. Water Framework Directive was adopted in 2000 with the overall objective of improving water quality in rivers, lakes, estuaries, coastal waters and groundwater. The process is cyclical, and the improvements envisaged to occur in six-year cycles the current cycle is 2022 to 2027. Groundwater quality is classified as one of two statuses; good and poor while all surface waters are classified at high, good, moderate, poor and bad. Originally all waters were expected to achieve good status by 2015. 'Good Status' means good ecological status and good chemical status. Good ecological status of surface waters is assessed against biological quality elements (fish, aquatic flora and macroinvertebrates and phytoplankton). Good chemical status is based on environmental quality standards for annual average and maximum allowable concentrations of certain 'priority substances'<sup>1</sup>.
- 5.17. The implementation of the Directive in Ireland is given effect in the European Communities (Water Policy) Regulations, 2003. These regulations, *inter alia*,

<sup>&</sup>lt;sup>1</sup> The substances include certain pesticides (atrazine, simazine, tributyltin), solvents (dichloromethane, toluene, xylene), metals (arsenic, chromium, copper, lead, nickel, zinc) and certain other ions (cyanide and fluoride). Priority substances (PSs) are of particular importance in surveillance monitoring.

established the 7 river basin districts, required local authorities to make river basin management plans, establish environmental objectives and adopt measures to achieve the objectives. The EU Environmental Objectives (Surface Waters) Regulations 2009 and 2015 establish, *inter alia*, legally binding quality objectives for all surface waters and environmental quality standards for pollutants, review of licenses by local authorities and the EPA to ensure adherence to relevant standards, classification of water bodies by the EPA, establish inventories of priority substances, and making pollution reduction plans by local authorities.

# 5.18. Natural Heritage Designations

- 5.19. There is a single NHA Jamestown Bog 14.3m distant from the site. This site is located upstream of the application site and has been screened pout for potential impacts arising from the proposed development.
- 5.20. The EIAR (see chapter 8 Biodiversity) records a single Area of Scientific Interest –
   Painestown Quarry within the potential zone of influence defined as being within
   15km of the propose development. The recorded pNHAs are:

Site name	Distance from rising main discharge
	point to site.
Boyne Woods	Discharges within the pNHA
Slane Riverbank	3.8km
Crewbane Marsh	4.3km
Balrath Woods	4.5km
Rosnaree Riverbank	5.1km
Thomastown Bog	5.4km
Duleek Commons	8.7km
Dowth Wetland	9.5km
King William's Glen	10km
Boyne River Islands	11.6km
Mellifont Abbey Woods	13.2km

5.21. Apart from the Jamestown Bog NHA the EIAR and the application as a whole does not adequately address the potential impacts on the Area of Scientific Interest or the pNHAs listed above. In so far as some of these natural heritage areas overlap with European sites it may be possible to exclude the potential for significant environmental impacts but the EIAR and other material submitted with the application is not adequate to make a sound assessment.

# 5.22. EIA Screening

5.23. The proposed development includes amendments to wastewater treatment plant with a capacity greater than 10,000 pe which exceeds the threshold set out in Class 11, Part 2 of Schedule 5 of the Planning and Development Regulations 2001, as amended. Therefore, an EIAR was submitted with the application.

# 6.0 The Appeal

# 6.1. Grounds of Appeal

# • Third Party Appeals.

- The river Boyne downstream of the proposed discharge is an important Habitat for brown trout, seatrout, and salmon if stocks recover. Low flow and higher than normal temperatures can stress fish which in turn raises demand for dissolved oxygen.
- The proposed discharge may have a serious negative impact on fish stocks because of the discharge concentration. Adult salmon will have to pass the discharge point to reach spawning grounds further upstream. There is a good density of Atlantic fry in the river.
- The Boyne is an important habitat for European eels and any point source discharge would require careful consideration.
- The catchment of the river Boyne is almost entire within two SACs the River Boyne and River Blackwater SAC and the Boyne Coast and Estuary SAC. The proposed development will negatively impact on these European sites. The river lamprey and Brook lampreys are significant species in these river

systems. The planning system should ensure maintenance and restoration of the ecological status in all subrace waters. The exact construction details of the pipeline are not clear. In-stream works, damage to the integrity if the riverbanks, the Dollardstown tributary and other tributaries may provide spawn grounds and may be impacted by the proposed development. The application does not address the importance of frogs, the flow data is for 2018 and may be out of date.

- The applicant may not have the agreement of the landowner of the location for the outfall and therefore the development cannot be carried out.
- The NIS is inadequate and cannot be relied on to remove reasonable scientific doubt in relation to impacts on European sites.
- The EIAR may not accurately reflect the current environmental conditions within the study area and there its conclusions are unsound. There is a risk of pollution discharges both in the construction and operational phases of the development. The EIAR did not properly address alternatives to the proposed development and insufficient consideration was given to other methods of wastewater disposal such as constructed reed beds.
- There is a risk of faecal coliforms and other pathogens and nutrients entering the water undermining the objectives of the Habitats and Water Framework directives. The assimilative capacity of the river has been estimated at Slane

   several kms downstream of the discharge point - is not properly estimated in the EIAR. Changing flow patterns have not been factored into the EIAR conclusions.
- Pollution will negatively impact swimmers/boaters/rowers who use the river for recreational purposes. The Boyne is already poor-quality water, the proposal envisages diluting waste with scarce water to prepare it for flushing into the river.
- The proposed development will give rise to additional carbon emissions undermining Development Plan objectives in relation to climate change.
- The risks associated with the development are to be borne by the environment and community while profits accrue to the applicant. If the water discharged is of a such a high quality, why not recycle it within the process

and thereby comply with the advice of the County Development Plan at 6.17 in relation to the waste hierarchy.

- The proposal contravenes the NPF policy to comply with the WFD.
- The proposed development will negatively impact on the Boyne Valley.
   UNESCO world heritage site thereby contravening the County Development Plan.
- The Boyne is a source of drinking water for a number of towns but EPA reports state that water quality is compromised – before the discharge of additional wastewater proposed in this application.
- Applicant's Appeal
- The applicant appealed against condition 8 in relation to noise emissions.
   Dawn Meats is subject to licencing for emissions (including noise emissions) by the EPA. It is *ultra vires* the planning authority (or the Board) to impose noise conditions where a project is already licenced by the EPA.

### 6.2. Applicant Response

- In relation to the assimilative capacity calculations adopted in the application and the variety in flow levels claimed in the appeals the application has had regard to the environmental quality standards set out in the EU (Surface Water) Regulations 2009. The standard methodology for estimating flows is the use of the EPA's flow estimating tool which is used to provide an estimated 95 percentile flow in rivers for which no gauged flow data exists. This is the best practice guidance on the permissibility of discharge. The material submitted with the application demonstrates that the proposed development will not cause a deterioration in the chemical or ecological status of the river and will not endanger the attainment of good surface water status in a manner to undermine the objectives of the WFD.
- The Industrial Emissions Licence under which the plant operates requires that it does so in accordance with the principle of Best Available Techniques. The

WWTP has been designed in accordance with this principle and details in relation to the appropriate processes<sup>2</sup> are set out in detail in the EIAR.

- The appeals make the point that faecal coliforms, other pathogens, veterinary products, and chemicals used for water treatment purposes released into the river will negatively impact on water quality generally and specifically on drinking water quality. Suspended solids (including coliform bacteria and phages) will be removed in the MBR (the membrane bioreactor designed to filter out suspended solids) and additional UV treatment will remove 99.9% to 99.99% cryptosporidium. Any chemicals used in the overall process are readily biodegradable. Thus, the effluent in the pipes, in contrast to municipal raw sewage, has very limited odour generating capacity.
- In relation to the absence of clear data in relation the quality of discharged effluent claimed in the appeals the final effluent quality standards are set out in the EIAR, the assimilative capacity report and the Mixing Zone Model Report but these will be open to review in the EPA licensing process. The treated effluent will emission limits published by the EPA in BAT Guidance note on best Available Technologies for the Slaughtering Sector" (EPA 2008).
- The NIS concluded based on the scientific information and subject to the mitigation measures set out in the NIS that the proposed development will not adversely affect the integrity of any European Site.
- The Inland Fisheries Ireland appeal reproduces the observation made to the planning authority and appears not to consider the further information submitted to the planning authority on its request.
- In relation to the choice of effluent discharge to waters over an enclosed system the alternatives are addressed in the EIAR. In fact the possibility of treatment to drinking water standards is being considered by the applicant and most of the infrastructure included in this application could be used in such a proposal. Other options set out in eth appeals are not reasonable and/or would give rise to greater environmental impacts.

<sup>&</sup>lt;sup>2</sup> Floatation, equalisation, activated sludge process, nitrification and/or denitrification, coagulation and flocculation, neutralisation and filtration.

- The application does not provide for an increase in processing capacity or generation of effluent at the existing facility. The investment in new plant seeks to improve environment management mitigate risk arising from the existing development.
- There was accident on site in 2016 when the facility was in a different ownership. The current application carried out infrastructure improvements and better management processes in accordance with the EPA's Industrial Emissions Licence.

# 6.3. Planning Authority Response

• The planning authority stated that it has no further comment.

#### 6.4. **Observations**

- 6.5. Observations were received from:
  - 1. Darren O'Rourke
  - 2. Fergus O'Dowd
  - 3. Bectiev Anglers Club
  - 4. Claire Ryan & Joe Kinsella
  - 5. An Taisce
  - 6. Geraldine Stout
  - 7. Ged Nash TD
  - 8. Solas 21 Shannon Smith
  - 9. Development Perspectives
  - 10. Christopher Barrett
  - 11. Boyne Valley Walking.
  - 12. Jack Rogers (withdrawn).
- 6.6. These submissions may be summarised as follows;
  - This case raises significant local and national issues.

- The proposal will negatively impact the recreational amenity value of the Boyne Valley. Walking trails, mussel fishing industries, Brú na Bóinne will be negatively impacted upon.
- The proposed development will negatively impact on archaeological remains in the area.
- The in-combination effects are not properly considered in the NIS or the EIAR.
- The proposal will negatively impact European sites and their qualifying interests. The proposed development will give rise to effluent entering the river when it is at is lowest flow and highest temperature this endangering water dependent qualifying interests. The Boyne is an important Salmonid fishery which will be negatively impacted by the proposed development.
- The NIS and EIAR submitted with the application are deficient.
- The proposed development will negatively impact the proposed Navan/Oldbridge greenway.
- The Boyne is a source of drinking water for public supplies which will be negatively impacted by the proposed discharge of trade effluent.
- The proposed development undermines the objectives of the Climate Act in that it will undermines objectives in relation to climate change. The proposal should be subject to an WFD assessment.

# 6.7. Further Responses

- The period for submissions was not closed before the Board refused the oral hearing.
- The NIS is deficient. The mitigation measures outlined for the operational phase of the development are inadequate.
- Consultation by the applicant with relevant authorities was inadequate.
- Ireland is in breach of EU water quality targets.
- The water quality status of the River Boyne is good but the aim is for high despite the points made in the application the proposed development will work against achieving high status for water quality.

- It would be better if the system were recycling water rather than discharging it.
- The overall project seeks to facilitate an expansion of the number of animals slaughtered (1,000 I's per animal for a discharge of 400,000 I's of effluent) but this is not a sustainable approach to the expansion.

# 7.0 Assessment

7.1. Planning Assessment.

# 8.0 Planning Assessment.

- 8.1. This assessment will address the:
  - Background.
  - applicant's appeal against condition number 8.
  - the matter of legal interest in relation to the location of the outfall to the river Boyne.
  - water quality.
  - Carbon emissions.

# 8.2. Background

8.3. This appeal relates to an application for permission by Dawn Meats, who operate a cattle slaughtering plant at Painestown, Navan, County Meath, for amendments to an existing permitted WWTP and the laying of a pipeline from the application site to an outfall in the Boyne River. The existing WWTP is permitted under register reference number LB180300 and this application proposes amendments to existing facilities within the site to improve the quality of the final effluent amendments to the berm surrounding the existing WWTP to increase the area enclosed by the berm. The proposed pipeline is about 7.2kms and generally runs along the public road network between the application site and the outfall in the riverbed of the Boyne in the townland of Ardmulchan. At present the effluent is treated on site in accordance

with an industrial emissions licence and then taken by tanker to municipal WWTP at either Navan or Drogheda.

## 8.4. Applicant's Appeal.

- 8.5. The applicant appealed against condition 8 in the grant of permission which sets limits on noise emissions. The applicant makes the point that it is *ultra vires* the planning authority to impose conditions controlling emissions to the environment in relation to activities that require licences under the EPA Act.
- 8.6. The Board sought the comments of the EPA in relation to the matter of any applicable licence for the activity being carried out on-site. The EPA responded to the Boards letter stating that the site is subject to an industrial emissions licence issued on the 27<sup>th</sup> of June 2017 (a copy of that licence is on file). The Agency further states that should an application for reviews of the existing licence be received that regard will be had to an EIAR which covers the matters which are properly within the remit of the Agency which are "all matters to do with emissions to the environment from the activities proposed".
- 8.7. Section 99Fof the EPA Act 1992, as amended, provides that the planning authority or the Board shall not apply conditions to a grant of permission for development which requires a licence or revised licence under the Act controlling emissions from the operation of the activity, including the prevention, elimination, limitation, abatement, or reduction of those emissions, or controlling emissions related to or following the cessation of the operation of the activity.
- 8.8. It follows, therefore, that were the Board minded to grant planning permission that conditions controlling emissions to the environment during the construction phase may be appropriate but that such conditions would not be appropriate during the operational phase.
- 8.9. The Board sought the comments of the EPA in relation to the matter of any applicable licence for the activity being carried out on-site. The EPA responded to the Boards letter stating that the site is subject to an industrial emissions licence issued on the 27<sup>th</sup> of June 2017.

#### 8.10. Legal Interest

- 8.11. The appeal makes the point that the applicant may not have sufficient title to carry out the proposed development as the does not own the riverbank at the point where the outfall pipeline enters the river.
- 8.12. The Development Management Guidelines for Planning Authorities (DoEHLG 2005) advises that where the issue of legal interest is raised by a third party "further information may be sought" from the applicant under the Regulations. In the present case the planning authority did not specifically raise the issue of legal interest in its request for further information. The appeals were circulated for comment to the applicant, but the applicant did not specifically address this point.
- 8.13. I have recommended refusal on the basis of an inadequate EIAR as set out below. If the Board are minded, notwithstanding the recommendation, to grant permission in this case it may consider if the applicant should be requested to submit evidence of sufficient legal interest to carry out development on the riverbank at the location of the outfall pipeline.

### 8.14. Water Quality

- 8.15. The appeals raise the issue of water quality from a number of perspectives which may be distinguished as follows:-
  - 1. The information in the EIAR is outdated.
  - 2. There are risks to water quality during construction phases.
  - 3. The assimilative capacity of the river has been estimated at a point several kms downstream of the outfall and is therefore not a true reflection of the capacity of the river to assimilate effluent.
  - There is a risk of pollution faecal coliforms and other pathogens discharging during the construction and operational and phases of the development.
  - 5. Negative impact on fish stocks (brown trout, sea trout and salmon and eels). The Boyne is a significant habitat for the river lamprey and the Brook lamprey. The in-stream and bankside pipeline outfall construction work and woks which impact on the stream network in the area (including the Dollarstown stream) will negatively impact on water quality and thereby on these species.

- 6. The discharge of polluted waters has the capacity to interfere with the recreational uses of the river by swimmers/boaters/rowers.
- 7. The proposed development undermines then provisions of the WFD.
- 8. The Boyne is a source of drinking water that will be impaired by the proposed effluent discharge.
- 8.16. The appeals and observations make point that the EIAR may not accurately reflect the current environmental conditions within the study area and therefore its conclusions are unsound. There is a risk of pollution discharges both in the construction and operational phases of the development.
- 8.17. The planning authority (see PA Heritage Officer's Report) sought further information in relation to aspects of the EIAR including additional details on vegetation within the study and the proposed water quality standards for the treated effluent. I conclude on the basis of the material submitted with the application and appeal that the baseline description and assessment of the receiving environment were reasonably accurately set out in the EIAR and accompanying information and sufficient to allow the planning authority and/or the Board to come to a adequately informed view of the environmental conditions applying within the study area.
- 8.18. The appeal makes the point that the EIAR did not properly address alternatives to the proposed development, that insufficient consideration was given to other methods of wastewater disposal such as constructed reed beds and that a closed recycling system would have been preferable from an environmental protection point of view.
- 8.19. On this point the applicant responded that the EIAR complies with the requirements set out in the EIA Directive and that alternatives were ruled out on the basis that there is an existing WWTP on the Dawn Meats site for which the proposed amendments would provide additional capacity. The route of the rising main was chosen to minimise impacts on existing architectural and archaeological features. Alternative outfalls to the Dollardstown and Roughgrange streams were ruled out on the grounds of lack of assimilative capacity in these water courses. In relation to the point of treating the effluent to drinking water standard the works/processes included

in the application largely achieves this objective, but adoption of this strategy would require additional direction from other agencies and is not part of this application.

- 8.20. I have considered these points and had regard to the discussion of alternatives set out in chapter 3 of the EIAR. Having regard to the existing and permitted meat processing facility already on site since the 1980's, to the existing and permitted WWTP which will be supplemented by the proposed works on site and the present necessity of taking treated effluent for treatment to public WWTP in the wider area I conclude that there is a reasonable rationale for the location and type of development in that it will serve an existing use and can lead to improvements in water quality.
- 8.21. In relation to the vulnerability of the water environment to pollution during construction phases I consider that the application adequately addresses this issue. I note the mitigation measures that form part of both in the EIAR and NIS in relation to the protection of surface water and groundwater. The application details measures to prevent the release of suspended solids including training for all construction personnel, provision of otter-proof and badger proof fences along boundary of the pipeline outfall and other required locations, exclusion of suspended solids through the placing of silt fencing along water courses close to working areas, managing soil excavations to avoid silt escape. Ground water will be protected by ensuring that hydrocarbons are stored within designated areas and in accordance with the EPA guidance on the storage of materials, spill kits would be readily available onsite and pre-cast concrete would be used preferentially over uncured concrete.
- 8.22. Having regard to the detailed measures to protect ground and surface water from pollution in the construction phase set out in the application I conclude that no unacceptable direct significant impacts will arise for these two resources in the construction phase of the proposed development.
- 8.23. In relation to the determination of assimilative capacity of the receiving waters the basis for this work is set out in the McCloy Effluent Dispersion Mixing Zone Analysis submitted as attachment 8.4 to the EIAR. The EIAR acknowledges that the Boyne has experienced extremely low flows in 2018 and 2019. The model is based on a worst-case scenario of extremely low flow in the river with a maximum discharge of treated effluent from the outfall. The hydrometric gauge is about 5kms downstream of the outfall and has recorded river flows for 81 years. The impact of climate

change has been factored into the assessment following consultation with the EPA and Irish Water and a reduction of flow of 45% was chosen as a conservative estimate which to base predictions. Table 4.1 in the Effluent Dispersion Mixing Zone Analysis gives figure for BOD, COD and Total Suspended Solids. The analysis conceded that the environmental quality standards (EQS) were exceeded for molybdate reactive phosphorus (MRP) unionised ammonia (UiA) nitrogen (N) immediately adjacent to the outfall but were below the EQS within 6m of the outfall due to dispersion in the river water. The overall conclusion of the EIAR is that the proposed development will not lead to any significant adverse impacts on the water quality in the Boyne and accordingly will not impact on the ecological status of the river.

- 8.24. The applicant's response to the appeal makes the point that material submitted with the application demonstrates that the proposed development will not give rise to a deterioration in the chemical or biological status of the Boyne or other water courses and will not inhibit the water environment from achieving the water quality objectives set out in the relevant river basin management plans. Having regard to the material submitted with the application I conclude that the assessment of the assimilative capacity of the river was robust and reasonable and that in relation to this aspect of the proposed development that no unacceptable significant environmental impacts will arise.
- 8.25. In relation to the risk of pollution from faecal coliforms and other pathogens during the construction and operational phases the EIAR (section 8.7 and following) makes the point that the proposed WWTP provides primary, secondary and tertiary effluent treatment. At all points of the process pathogens would be removed from the effluent but specifically in the tertiary stage a UV filtration unit will kill off micro-organisms and viruses prior to discharge of final treated effluent. The planning authority's Heritage Office and the HSE considered the EIAR on this point but made no adverse comments.
- 8.26. The application has adopted the industry standard in relation to the provision of tertiary effluent treatment and the final effluent quality and in relation to faecal coliforms and other pathogens. The EIAR predicts that the system will "remove any potential pathogens that could impact on aquatic species".

- 8.27. Having regard to the foregoing I conclude that the treatment process will give rise to an acceptable quality of effluent which will not significantly deteriorate the water quality in the Boyne.
- 8.28. The appeals, especially the Inland Fisheries Ireland (IFI) appeal, references potential impact on fish stocks (brown trout, sea trout and salmon, sea lamprey, eels).
- 8.29. The applicant's response to the appeal makes the point that the revised EIAR and associated documents address the issue of water quality generally and specifically in relation to fish. The EIAR (see section 8.7.3 and following) lists various fish surveys in the River Boyne and in the estuary including an IFI 2009 survey three fish species, 23 species were recorded in a 2012 IFI survey. In 2005 Lamprey populations were surveyed in the Boyne catchment and the survey concluded that these populations are at a favourable conservation status in most areas, with the exception of some of the tributaries of the middle Boyne. A survey in 2015 River recorded Brook Lamprey present in the River Boyne catchment however Sea Lamprey were not found. The highest densities of lamprey recorded were in the lower River Boyne, which was also the most polluted area surveyed. It is clear that lamprey ammocoetes are fairly tolerant to moderate levels of organic pollution. The IFI noted the River Boyne has aquatic invertebrates that indicate good water quality such as Caddisfly, Mayflies, Stoneflies and Olives. Salmon figures of between 2,000 and 3,000 were recorded in the Boyne in the years between 2016 and 2020 while no sea trout were recorded.
- 8.30. The planning authority's Heritage Section reported on the application and in particular Chapter 8 (Biodiversity) (see report 21/4/21) where additional clarifications were requested in relation to the impact on water quality and details of the mitigation measures that would be employed. The revised EIAR was submitted, *inter alia*, in response to these concerns.
- 8.31. I would identify two basic categories of impacts which could arise for water quality; the first the release of hydrocarbons and suspended solids during construction and the second the quality of effluent entering the water environment during the operational phase. The mitigation measures set out in the application cover the major sources of pollution (open earth works, careful storage of fuels and lubricants and avoidance of spills, managing herbicide use, preventing windblown grit/dirt escape, prevention of silt escape into the water environment, managing concrete pours/avoiding this through use of pre-cast where possible) in a manner which I

conclude can reasonably be relied on to avoid pollutants reaching the water environment and specifically the River Boyne in the construction phase of the project.

- 8.32. The second category of impact arises in the operational phase and relies largely on the quality of the effluent discharged from the in-stream outfall. Although not specifically raised by the planning authority in the request for additional information the Effluent Dispersion Mixing Zone Analysis deals with the quality of the discharged effluent (measured through defined control factors) and informs Chapter 8 of the EIAR. There are 7 water quality parameters/controlled factor established by regulatory framework<sup>3</sup> for which there are environmental quality standards EQs. Table 4-2 in the Effluent Dispersion Mixing Zone Analysis summarises the predicted qualities of the controlled factors in the effluent (BOD, COD, MRP, TA, UiA, TSS and N). For 4 of these factors (BOD, COD, UiA, and TSS) are below the threshold values and therefore comply with the regulations. The remaining three pollutants (MRP, TA and N) do not meet the threshold value when existing the pitfall but with a maximum mixing at the exit point from the outfall, but all meet the standard at a maximum of 6m distant in the mixing zone.
- 8.33. Having regard to the material set out in the application I conclude that there is no identifiable risk of significant water pollution in the river Boyne, or the wider water environment arising from the proposed development.
- 8.34. In relation to the concerns expressed in the appeals and observations made to the Board in relation to negative impacts on recreational uses of the Boyne I consider that in the absence of any significant negative water quality impacts and the location of the outfall under the water and therefore not visible I conclude that there will be no significant negative impact on the recreational uses of the river.
- 8.35. In relation to negative impacts on the River Boyne as a source of drinking water raised in the appeal it is reasonable to conclude that if the proposed development does not give rise to a deterioration in water quality that that no negative impact will arise on the river as a source of drinking water.

<sup>&</sup>lt;sup>3</sup> Salmonid Water Regulations 1988, EU Habitats Directive, Surface Water (Amendment) Regulations 2019, Surface Water (Drinking Water Regulations) 1989, Urban Wastewater Treatment Directive 1991, Urban Wastewater Treatment (Amendment) Regulations 2010, Urban Wastewater Treatment (Amendment) Regulations) 2004.

#### 8.36. Carbon Emissions

- 8.37. The appeal makes the point that proposed development will give rise to additional carbon emissions thereby undermining Development Plan objectives to tackle climate change. The County Development Plan (chapter 10 Climate Change Strategy) makes the point that the main source of greenhouse gases generated from the industrial and commercial sectors arises from the combustion of fuels used in manufacturing, industrial process emissions and the release of fluorinated gas emissions. The County Plan seeks to increase in the uptake of low-carbon and energy efficient technology and encourage a transition to low carbon energy supplies. The EIAR makes the point that the reduction of road traffic associated with the removal by tanker of effluent from the WWTP to municipal wastewater plant in the wider area would reduce the use of fossil fuels related to the proposed development.
- 8.38. I consider that the removal of a small number of tankers from the local road network is would be a factor in reducing carbon emission wither within County Meath or nationally. Nevertheless, considering the application as a whole and in particular the EIAR and the NIS I conclude that any additional carbon emission arising from the proposed development would not be on a scale such as to materially contravene an objective set out in the Meath County Development Plan.

# 9.0 Environmental Impact Assessment.

- 9.1. This section of the report comprises an environmental impact assessment of the proposed development. A number of the matters to be considered are also addressed in the Planning Assessment section of the report. This section of the report should therefore be read, where necessary, in conjunction with relevant sections of the said assessment.
- 9.2. The EIA Directive (Directive 2014/52/EU) is applicable. There were two EIARs submitted with the application. The first was submitted with the application on the 5<sup>th</sup> March 2021 and was accompanied by an Outline Construction Environmental Management. The second EIAR was submitted to the planning authority on the 4<sup>th</sup> February 2022 which was accompanied by folder of EIAR attachments giving background information to the chapters in the EIAR and a second folder addressing some of the issues raised in the request for additional information. My assessment

will largely rely on the second EIAR lodged but I have read and considered all of the documents ledged with the application on this subject.

- 9.3. Schedule 5 of the Planning and Development Regulations 2001, as amended, sets out classes of development and thresholds within those classes for which an EIAR is required. Since this application is one for a WWTP with a pe capacity of 28,000 it falls into Class 11(c), Part 2 of Schedule 5 of the Planning and Development Regulations 2001, as amended whereby a "wastewater treatment plants with a capacity greater than 10,000 population equivalents as defined in Article 2, point (6), of Directive 91/271/EEC not included in Part 1 of this Schedule. Submission of an EIAR is therefore mandatory.
- 9.4. An EIAR was submitted with the application which was amended in response to the request for further information in a revised EIAR submitted on the 4<sup>th</sup> February 2022.

# 9.5. Content and Structure of the EIAR

- 9.6. The EIAR comprises a non-technical summary and main report and additional background material. 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. It identifies, describes and assesses in an appropriate manner, the direct and certain indirect significant effects of the project on the following environmental factors:
  - (1) population and human health;
  - (2) air quality and odour,
  - (3) noise,
  - (4) landscape and visual environment
  - (5) biodiversity,
  - (6) land soil, geology and hydrogeology,
  - (7) climate
  - (8) material assets (natural and agricultural resources),
  - (9) material assets (utilities and transport network),
  - (10) archaeological, architectural and cultural heritage, and
  - (11) the interaction between the factors referred to in points (1) to (10).

- 9.7. Where proposed, monitoring arrangements are also outlined. No difficulties were encountered in compiling the required information.
- 9.8. I am satisfied that the information provided is reasonable, but I am not satisfied that indirect and cumulative effects have been identified 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 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 and Article 94 of the Planning and Development Regulations 2000, as amended. I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality. I note the qualifications and expertise of the persons involved in the preparation of the EIAR are set out in section 1.5 of Chapter 1 - Introduction and Methodology of the EIAR. 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. I have carried out an examination of the information presented by the applicant, including the EIAR, and the submissions made during the course of the application and the appeal. A summary of the submissions made have been set out elsewhere in this report.
- 9.9. Details of the consultations entered into by the applicant as part of the preparation of the project are set out in table 8.6 of the EIAR entailing consultation with prescribed bodies. I consider that the requirements in terms of consultation have been adequately met by the applicant.
- 9.10. 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 this issue in section 4.5 and states that the proposed development is not one to which the Seveso III Regulations or the EU (Control of Accident Hazards involving Dangerous Substances) Regulations 2015 apply. Furthermore, the applicant, has responsibilities under the applicable Industrial Emissions Licence to undertake an Environmental Liabilities Risk Assessment which addresses the potential impacts of accidents or unforeseen events. During the construction and operational risks are identified whereby the proposed development has the potential to cause a release of contaminants and these risks and appropriate mitigation measures are set out in the EIAR and in particular at sections 4.5, 4.6, 9.8, 10.6 and in the Construction and Environmental Management Plan (CEMP).

#### 9.11. Alternatives

- 9.12. Chapter 3 outlines alternatives.
- 9.13. Article 5 (1) (d) of the 2014 EIA Directive requires: "(d) a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment;" and additionally Annex (iv) (Information for the EIAR) provides more detail on 'reasonable alternatives': "2. A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for electing the chosen option, including a comparison of the environmental effects."
- 9.14. The EIAR makes the point that there has been a meat processing plant on the site since the 1980s and the business as acquired by Dawn Meats in 2018.
- 9.15. The option to construct a WWTP on an alternative site would require transport of potential contaminating material over longer distances giving rise to additional environmental risks. The upgrading of the existing WWTP and the improvement of the quality of effluent which can be discharged to the river was chosen because it will allow the re-use of some existing plant infrastructure, existing plant electricity and water supply and avoiding the necessity to construct an entire new plant and connections to electricity and water supplies elsewhere. In terms of landscape impacts the industrial use of the site has been on-going since the 1980s and the existing use is viewed as part of the existing landscape of the area. An extension to that use will be less visually intrusive that siting a new plant elsewhere. The route for the rising main was chosen to follow the public road to avoid open water courses, unaltered habitats and because more direct routes through lands not in the applicant's ownership were not available. The roadway route allows the main to avoid impacts on the Dublin/Belfast rail line but following the public road under the line at Stackallen bridge. Additionally, a number of architectural and archaeological features of importance are avoided by following the road. Closer possible outfalls to the Dollardstown and Roughgrange streams were discounted because the lack of assimilate capacity in these streams.

9.16. The BAT principle has been adopted in relation to the processes proposed in the application and these are set out in Table 3.1 in the EIAR. The aim of this application is to ensure consistent effluent treatment standards under varying conditions to avoid impacts on fish, drinking water utility or recreational uses on the Boyne River.

#### 9.17. Conclusion on this chapter.

9.18. Having regard to the Guidelines for carrying out Environmental Impact Assessment 2018 which states that the type of alternatives will depend on the nature of the project proposed and the characteristics of the receiving environment I consider that the requirements of the Directive in terms of consideration of reasonable alternatives have been discharged.

### 9.19. Population and Human Health Chapter 4.

### 9.20. Economy and employment

- 9.21. The receiving environment is described largely referencing the available census figures for the period up to 2016. The age groups are set out in table 4.1 and table 4.2 records a population growth in all the towns in the area including Slane, Navan, Kenstown, Duleek and Donore. Economic activity is focused on agriculture and industrial/retail/commercial uses. Dawn meats employs 77 people full time in addition to sourcing cattle locally and supplies within the area.
- 9.22. Impacts are summarised under the headings of economy and employment, air, dust and odour, noise, traffic landuse, landscape and visual amenity, water, major accidents and natural disasters and these impacts and appropriate mitigation measures are considered in greater detail in the following chapters.
- 9.23. In relation to economy and employment the EIAR states that it is not considered that the proposed development would have any significant impact upon the population of the surrounding area. While the applicant employs 77 full time employees the proposed development would have a positive impact upon the local economy by providing temporary employment for the duration of the construction phase (approximately nine months). The provision of employment would further contribute to the economy of the area through direct spending of goods and services in the Painestown area and surrounds. The proposed mains between the application site and the river outfall will eliminate the daily tanker movements transferring wastewater to municipal WWTPs for further treatment. The main remaining tanker

movements would be for sludge removal. The proposed development would therefore improve the economic viability of the meat processing plant and its contribution to the area.

#### 9.24. Conclusion on this chapter

9.25. I have considered this chapter of the EIAR and relevant the written submissions made in relation to economy and employment. I am satisfied that potential effects have been identified and that no unacceptable direct effects on economy and employment will arise from the proposed development. However, I am not satisfied that indirect or cumulative effects on economy and employment are addressed in accordance with schedule 6 of the Planning and Development Regulations. will arise from the proposed development.

# 9.26. Air Quality and Odour – Chapter 5.

- 9.27. The air quality area of the proposed development is classed as 'good' by the Environmental Protection Agency. This is the second highest category for air quality. The index is based on information from monitoring instruments at representative locations in the region and may not reflect local incidents of air pollution. The nearest air quality monitoring station is about 8kms distance in Navan and Table 5.1 in illustrates the annual mean air quality standards for NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> which show that for east of the monitored years these pollutant levels were below the annual mean limit value.
- 9.28. The potential impacts to air quality related to the operational phase of the proposed development would be associated with the biological treatment of wastewaters. The main potential impacts to air quality from the proposed biological treatment of wastewaters would therefore be emissions of methane, carbon dioxide and nitrous oxide emissions to the atmosphere. The proposed development would not be anticipated to generate significant methane emissions because this arises in anaerobic conditions which will be avoided in this case by the application of aeration. Therefore, only carbon dioxide and nitrous oxide emissions are potentially significant.
- 9.29. The proposed WWTP would be estimated to generate 226,000 kg/year of fugitive carbon dioxide emissions and about 1 kg/year of fugitive nitrous oxide emissions

(although this is more difficult to estimate) which is similar to any municipal WWTP which, in the absence of the proposed development would treat the effluent from the plant. Consequently, no mitigation measures in relation to air quality from the release of carbon dioxide and nitrous oxide are proposed. Additionally the proposed WWTP and discharge of treated effluent from the site to the Boyne River avoids 7/8 tanker movement per day between the application site and the municipal WWTP.

- 9.30. Odour arising from the on-site uses is controlled in accordance with a Odour Management Plan and in compliance with an Industrial Emissions licence from the EPA. In the nine years previous to compiling the EIAR only 2 odour related complaints were received. Activities that give rise to odours at the existing facility include the transport and storage of waste and animal by-products, the storage of blood, lairage activities and the treatment of wastewater at the existing WWTP.
- 9.31. Currently wastewater is screened and then pumped to an, from there it passes through a Dissolved Air Flotation tank to a second effluent storage lagoon from where is tinkered off site to a municipal WWTP. The proposed development WWTP development would comprise of the construction and operation of a new drum screen, DAF unit, balance tank, sludge holding tank, anoxic tank, aeration basins, membrane bioreactor (MBR), UV filter and odour abatement unit. Therefore, the there would be no odour arising from the rising main linking to the river outfall because this discharged effluent would be treated effluent.
- 9.32. Odour management for the on-site processes is set out in the odour management plan. Mitigation measures will include;
  - Odour perimeter checks will continue at least weekly up to one month after commissioning of the new WWTP.
  - Operators should receive training in the management of the biological wastewater treatment system.
  - Plant and equipment should be installed to manufacturer's specification and maintained to ensure high efficiency. Backup critical equipment should be available onsite.
  - All drains should be flushed regularly and persistent build-up of organic matter should be avoided by design.

- Anaerobic conditions should be minimised especially in the balancing tank to prevent the formation of odorous compounds and wastewater should be adequately mixed to avoid anaerobic conditions.
- Empty and clean DAF unit with hot water at least monthly. Monitor chemical addition to ensure on-going treatment efficiency. Keep DAF unit lid closed as practical.
- In the aeration tank maintain Dissolved Oxygen levels > 1 mg/l. Calibrate DO probe annually and the operator should trained to check DO daily.
- In the sludge tank ensure sludge is kept adequately mixed to avoid anaerobic conditions. Avoid exposure of treated sludge to the atmosphere. Ensure odour scrubber is working efficiently and the operator should be trained to inspect daily.
- In the sludge tank ensure all trailers and skips used to transport sludges offsite are sealed and adequately covered to prevent any potential odours in transit.
- In the yard area yard should be cleaned as required and washed into yard sump. Spills and washdown water should be cleaned as required to prevent the build-up of organic material on surfaces.
- 9.33. Construction related impacts in the construction phase will arise from operation of plant and construction related traffic and moving topsoil to facilitate earth earthworks. The construction phase air quality impacts will be managed in accordance with the Construction Environmental Management Plan lodged as part of this application and in accordance with the industrial emissions licence issued in relation to the application site. Locally sourced building materials will reduce construction related traffic in the area and dust emissions will be reduced in accordance with appropriate mitigation measures. These will include;
  - Prolonged storage of materials on-site will be avoided and material handling/stockpiling of materials will be designed and laid out to minimise exposure to wind. Stored materials, such as stockpiled excavated soils, will be located as far as possible from adjacent residential properties.
  - A 15kph speed limit would be implemented for all traffic on-site to reduce the potential for dust generation.

- When transporting materials to and from the site, vehicles would be fitted with covers where possible to prevent material loss.
- Public roads outside the site would be regularly inspected for cleanliness and cleaned as necessary. A road sweeper would be used where required.
- Any un-surfaced roads would be restricted to essential construction site traffic only.
- While the natural recolonisation of exposed areas of soil during reinstatement activities is preferred, re-seeding would be undertaken where required to promote the rapid stabilisation of soils,
- Regular visual inspections would be undertaken around the proposed site boundary to monitor the effectiveness of dust control measures.
- During particularly dry weather, dust suppression measures would be undertaken, including water misting plant, such as bowsers and sprays would be used as required and where necessary.
- Wheel-wash facilities would be provided for vehicles exiting the site to reduce the level of dust travelling offsite.

# 9.34. Conclusion on this chapter.

9.35. I have considered this chapter of the EIAR and relevant the written submissions made in relation to air quality and odour. I am satisfied that potential effects have been identified and that no unacceptable direct impacts will arise from the proposed development. However, I am not satisfied that the no unacceptable indirect or cumulative effects on air quality and odour will arise from the proposed development as these matters are not adequately addressed in the EIAR.

# 9.36. Noise Environment

9.37. Chapter 6 in the EIAR addresses noise. The EIAR sets out the existing noise environment generated by the existing industrial use as it affects five noise sensitive receptor (NSR) locations illustrated in Table 6.5 of the EIAR and mapped in Appendix A.1. The current noise emissions are controlled in accordance with an Industrial Emission licence (ref P0811-02) and therefore are acceptable.

- 9.38. The new noise environment will arise in the context of the new WWTP and the outfall pipe. A new set of NSR locations have been chosen and are set out in Table 6.7 of the report.
- 9.39. Noise modelling for the construction and operational phases for WWTP and the outfall pipe in accordance with international best practice and predicted results for the identified NSR locations are set out in Table 6.10. The study anticipates that during the construction phase of the pipeline construction related noise will exceed the limits set out in the NRA guidance<sup>4</sup>. In relation to the operational noise from the WWTP (including lorries, equipment and baseline daytime, evening and nighttime noise) the modelling predicts (see figure 6.3) that the noise output will not exceed the industrial emissions licence limits.
- 9.40. The construction phase mitigation measures can be summarised as;
  - Plant and machinery used on-site would comply with the EC (Construction Plant and Equipment) Permissible Noise Levels Regulations, 1988 (S.I. No. 320 of 1988). All noise producing equipment would comply with S.I. No 632 of 2001 European Communities (Noise Emission by Equipment for Use Outdoors) Regulations 2001,
  - Cognisance would be taken of the National Roads Authority's "Guidelines for the Treatment of Noise and Vibration in National Road Schemes" and British Standard 5228-1 "Code of practice for Noise Control on Construction and Open Sites".
  - The works related to the WWTP compound and pipeline route be carried on between 7am to 7pm and noise be limited to 70 LAeq (1hr) dB.
  - Works outside these time or noise limits be notified in advance to the EPA/PA and local residents.
  - Construction works would be phased to maximize the noise screening benefit from boundary structures, noise screens and huts should be used as appropriate,
  - Construction plant would be selected for low noise emitting characteristics, maintained in good working order, sound proofed,

<sup>&</sup>lt;sup>4</sup> Guidelines for the treatment of Noise and Vibration In National Roads Schemes

- Construction plant would be switched off or throttled back to a minimum when not in use; • Ensure any compressors required would be silenced or of sound reduced models fitted with acoustic enclosures; • Ensure all pneumatic tools required would
- Deliveries/loading/unloading would be limited to daytime hours. Where required, screens or barriers would be installed to shield particularly noisy activities.
- Noise should be included in a Construction Environmental Management Plan (CEMP) be prepared by the construction firm prior to beginning works (reflecting the draft CEMP submitted with the application.
- 9.41. The operational phase mitigation should include;
  - Maintaining a setback distance from the site boundary with an intervening berm between the plant and NSR locations.
  - The existing Noise Action Programme operating at the facility should be updated and continue in operation.
  - Noisy operations, such as the removal of effluent and sludge, would be conducted during normal working hours to mitigate any additional noise impacts. Any additional operations likely to give rise to noise should be notice to the EPA, local council and local residents.
  - Contractors and staff would be informed of site noise controls as part of the existing environmental management system.
  - Plant and equipment would be sited, as far as is practicable, to benefit from the noise screening effects of local barriers, such as the lie of the land and buildings, to achieve optimum benefit.
  - Acoustic barriers to absorb noise would also be installed where deemed necessary.
  - Plant and machinery will be regularly maintained to minidome noise emissions.
  - Machinery/alarms testing will be carried out during normal working hours.

9.42. The Report concludes having regard to the standards adopted and the modelled predictions that no significant noise impact on the NSR locations and no additional noise impact on the surrounding area.

## 9.43. Conclusion on this chapter.

9.44. I have considered this chapter of the EIAR and relevant the written submissions made in relation to air quality and odour. I am satisfied that potential direct noise effects have been identified and that no unacceptable direct impacts will arise from the proposed development. However, I am not satisfied that the no unacceptable indirect or cumulative noise effects will arise from the proposed development as these matters are not adequately addressed in the EIAR.

### 9.45. Landscape and Visual Impacts

- 9.46. Chapter 7 addressers landscape and visual impacts. The assessment of likely impacts will be addressed with regard to the following criteria;
  - Landscape character, value and sensitivity.
  - Magnitude of likely impacts; and
  - Significance of landscape effects.
- 9.47. The study area will be a 2kms radius from the site with particular emphasis on 500m. The Meath County Development Plan has designated landscape character types (LCTs) within the County - the WWTP is within a LCT2 Lowland Areas while the portions of the pipeline are within LCT3 – River Corridors and Estuaries. In addition to landscape classifications there are views of recognised scenic value designated in the County Development Plan. One such view is located within the 2km radius of the study area in the vicinity of the WWTP.
- 9.48. The Report describes the baseline landscape characteristics which include landform and drainage, vegetation and land use, centres of population and houses, transport routes, tourism, heritage and public amenities. Table 7.5 lists the viewpoints selected to underpin the impact assessment as follows;

Viewshed Reference	Location	Direction of view
point		
VP1	Broadboyne Bridge at	East
	Stackallan	
VP2	Local road south of the	North
	River Boyne at	
	Ardmulchan	
VP3	Local road northeast of	Southwest
	site at Painstown	
VP4	Local road at Painstown	West
	east of site	
VP5	Local road southwest of	North
	site at Seneschalstown	
VP6	L1013 south of site at	North
	Painestown	

9.49. The Report finds that due to the location of the pipe underground between the outfall in the Boyne to the WWPT that there will be no visual or landscape impacts arising from that element of the proposed development. The main identified visual impact arises from the additional tanks and ancillary equipment surrounded by a raised berm immediately to eth north of then existing Dawn Meats factory. The tallest of the existing tanks will have a maximum height of 5.7m, whilst the tallest proposed tanks (the balance tank) will rise to c. 7.05m. This is an extension of an existing modest scale industrial facility that will not disrupt the existing field pattern and its tanks and metal-clad control hut will not appear out of place in this working rural landscape. Additionally visibility within the 2km study area is limited by the dense intervening tree-lined hedgerows, which will be augmented by the proposed mitigation screen planting, which will cloak the embankments to the north, east and west of the site, and further restrict visibility of its built elements. The detailed mitigation measures are set out in section 7.3 of the report and include retention of existing hedgerows and additional perimeter planting.

9.50. In conclusion the Report finds that main built elements of the proposed development are located adjacent to an existing industrial unit in a rolling lowlands landscape differentiated from the highly sensitive Boyne River corridor and will not give rise to significant landscape impacts. In relation to visual impacts the proposed outfall and rising main are depicted in VP2 and this demonstrate a minimal visual impact on the Boyne corridor. The additional built elements adjacent to the existing meat plant after the mitigation measures will have low-negligible impacts.

### 9.51. Conclusion on this chapter.

9.52. I have considered this chapter of the EIAR and the relevant written submissions made in relation to landscape and visual impacts. I am satisfied that potential direct landscape and visual impacts have been identified and that no unacceptable direct impacts will arise from the proposed development. However, I am not satisfied that the no unacceptable indirect or cumulative landscape and visual impact will arise from the proposed development as these matters are not adequately addressed in the EIAR.

## 9.53. Chapter 8 – Biodiversity.

9.54. Chapter 8 addresses Biodiversity impacts. The Report identifies 3 designated sites within 15kms of the proposed development these are;

Site	Designation	Separation Distance.
River Boyne & River	SAC	Rising Main discharges
Blackwater SAC 002299		into the SAC
River Boyne & River	SPA	Rising Main discharges
Blackwater SPA 004232		into the SPA
Jamestown Bog	NHA	14.3km

9.55. There are a further 12 proposed NHAs and an area of scientific interest within 15kms of the application site as follows;

Site & Site Code	Designation	Distance
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Painstown Quarry 789	Area of Scientific Interest	300m NE
Boyne Woods 001592	pNHA	Rising main discharges
		intio Boyne within pNHA.
Slane Riverbank 001591	pNHA	3.8km NE
Crewbane Marsh 000553	pNHA	4.3km NE
Balrath Woods 001579	pNHA	4.5km SE
Rossnaree Riverbank	pNHA	5.1km NE
001589		
Thomastown Bog 001593	pNHA	5.4km SE
Duleek Commons 001578	pNHA	8.7km E
Dowth Wetland 001861	pNHA	9.5km NE
King William's Glen	pNHA	10km NE
001804		
Boyne River Islands	pNHA	11.6km NE
001862		
Mellifont Abbey Woods	pNHA	13.2km NE
001464		

- 9.56. In addition to the European and nationally designated sites in the vicinity of the application site the Report identifies the habitat types in the immediate area of the WWTP site and the outfall pipe between the WWTP and the outfall point in the Boyne River. The habitats for the WWTP site are mapped figure 8.3 of the Report and in the habitats along the path of the pipeline are illustrated on figure 8.4<sup>5</sup>.
- 9.57. The Report is based on a number of surveys of flora, fauna and aquatic life. Mammals identified on site include fox, American mink, rabbit, Irish hare, brown rat and wood mouse. Deer faeces were also found. No badger sets were identified long the pipeline route or within the WWTP site. No signs of otters (holts, slides or couches) were identified within the application site. A desktop study and survey were

<sup>&</sup>lt;sup>5</sup> These figures are misnumbered in the Report.

carried out for bats. The following bat species were confirmed in the area of the application site: Daubenton's Bat (Myotis daubentoniid), Natterer's Bat (Myotis nattereri), Common pipistrelle (Pipistrellus pipistrellus), Soprano Pipistrelle (Pipistrellus pygmaeus), and Leisler's Bat (Nyctalus leisleri).

- 9.58. The Report records the bird species found within the set of the WWTP and along the pipeline to the river outfall in table 8.14 of the report. The invertebrates identified within the river are listed in table 8.17 and the fis species within the rive are set out in tables 8.22 and 8.23.
- 9.59. Terrestrial invertebrates included bumble bees, hover flies, wasps and butterflies (including Orange-tip, Peacock, silver-washed fritillary, common blue, meadow brown and small tortoiseshell). Midge and Moth activity was high from dusk into the night. The development site is located outside the current distribution, current range and favourable reference range of Marsh Fritillary and does not contain any Devil's-bit Scabious (this is the main larval foodplant of the Marsh Fritillary). The development site is located outside the current distribution, current range and favourable reference range of Narrow-mouthed Whorl Snail (Vertigo angustior) and Desmoulin's Whorl Snail (Vertigo moulinsiana) and Geyer's Whorl Snail (Vertigo geyeri) (NPWS, 2019c).
- 9.60. The closest EPA records for White-clawed Crayfish (Austropotamobius pallipes) in the Boyne is approximately 16km upstream from the proposed outfall location there are no records downstream of the proposed outfall location. The Common Frog is likely to be within watercourses along the proposed route such as drainage ditches. The development site is located outside the current distribution, current range and favourable reference range of the Natterjack Toad (Epidalea calamita). Smooth Newt (Lissotriton vulgaris) is recorded within Tetrad N97 as part of AFF Mammals, Reptiles & Amphibians Distribution Atlas 1978 however there are no recent records for this species within Tetrads N97 or N96. There are recent records downstream of the proposed outfall, but they are not within the River Boyne (Newt Survey 2010-2014). The development site is located outside the current distribution, current range and favourable reference range of Freshwater Pearl Mussel (Margaritifera margaritifera) (NPWS, 2019c), and is the proposed outfall is not located within a river catchment identified as supporting Freshwater Pearl Mussel populations (DoEHLG, 2010). The development site is located within the current distribution, current range and favourable reference range of Brook Lamprey, downstream of the proposed

outfall is within the current distribution and current range of Sea Lamprey (Petromyzon marinus). The development site is located within the current distribution, current range and favourable reference range of Atlantic Salmon (Salmo salar). Other fish species recorded within the 10km Tetrads (N96 and N97) by the NBDC in which the development site and rising main are located, include European Eel and Stone Loach and further downstream are an additional species – Minnow.

- 9.61. The construction phase water quality impacts are identified as arising from, *inter alia*, the laying of the pipeline at a depth of about 1m below existing ground levels from the new WWTP to a point on the riverbank at Ardmulchan. From a bankside terminal manhole, a 225mm pipeline will be laid under the riverbed to a discharge point in the centre of the river. The discharge point will be fitted with a diffuser so the treated effluent will mix evenly with the river water. The working area within the riverbed for the laying of the pipeline will be kept dry using a cofferdam which will direct the water flow away from the working area. The risk to water quality during this phase arises from the potential spill of uncured concreate, release of suspended solids and the release of hydrocarbons.
- 9.62. The construction phase for impact on habitats and flora will not result in a permanent loss of these features. The pipeline will be laid mainly on road verges, grassland and artificial surfaces a minor temporary loss of these habitats is not considered significant. There will be some loss of habitat where hedgerows are impacted but these will be replaced/replanted and therefore there is a predicted slight impact on fauna. Impact on bats will be mitigated by confining construction activity to daytimes when bats are not active. Badgers and otters will be prevented by barriers from entering the river outfall points.
- 9.63. Construction phase mitigation measures will include confining construction works to the development footprint, maintain all plant and machinery in good working order to minimise hydrocarbon leakage, all construction works will be conducted outside of normal working hours and works close to the River Boyne and River Blackwater SAC / Dollardstown Stream will be managed by a project ecologist. Specific mitigation measures will include:
  - All relevant construction personnel would be trained in identification and control of invasive flora species (main species of concern, including Indian Balsam (Impatiens glandulifera), Giant Hogweed (Heracleum

mantegazzianum) and invasive aquatic species), *inter alia,* in accordance with the of NRA Guidelines on "The Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads";

- The removal of hedgerow should be and not carried out during the bird nesting season. The licencing procedures governing interference with flora or fauna required by the NPWS will be followed.
- Otter-proof and badger proof will be used along boundary of the pipeline outfall and other locations to be determined the onsite project ecologist. The: Guidelines for the Treatment of Badgers Prior to the Construction of National Road Schemes NRA 2005: Guidelines for the Treatment of Bats during the Construction of National Road Schemes NRA 2008.
- Additional measures set out in the CEMP will be adhered to.
- Check and remove of any plant and animal matter from machinery before leaving a site and again before entering a new site;
- Pre-used sandbags must not be used within the development site for adjoining water courses.
- An invasive species management plan must be put in place with particular reference to Indian Balsam, Japanese Knotweed and Rhododendron.
- Herbicide application should only be carried out by suitably qualified persons in compliance with the - European Communities (Sustainable Use of Pesticides) Regulations 2012 (S.I. No. 155/2012).
- Daily visual inspections for suspended solids should be undertaken of the River Boyne and Dollardstown Stream during construction works to guard against deterioration in water quality. Detailed water quality protection measures are set out in the CEMP.
- Regard will be had to the IFI's "Guidelines on Protection of Fisheries During Construction Works in and adjacent to Waters".
- Silt fencing (comprising of a porous filter fabric which detains sediment) and silt mats would be provided at times and locations (including the River Boyne or Dollardstown Stream, other watercourses and soil storage areas) determined by the project ecologist.

- Soil excavations will be managed to avoid the escape of silt bearing water. Excavations/earth-moving activities would be planned outside periods of heavy rainfall, to limit the potential for suspended solids to become entrained within surface water run-off.
- Works in outfall area at the Boyne River will be surrounded by a sandbag cofferdam and the pump will be designed to filter out aquatic fauna.
- Hydrocarbons will be stored within a designated area, in accordance with the EPA guidance on the storage of materials, with adequate bund provision to contain 110% of the largest drum volume or 25% of the total volume of containers. Construction plant equipment would be placed on drip trays.
- Spill kits would be readily available onsite. Where re-fuelling of construction plant is required onsite, re-fuelling would take place within yards draining to the site by-pass interceptor.
- Pre-cast concrete would be used preferentially over uncured concrete. The use of uncured concrete works would be supervised and would be scheduled outside of periods of expected heavy rainfall.
- 9.64. **Operational phase** will continue to be undertaken in accordance with the existing Environmental Management System and in accordance with the facility's Industrial Emissions (IE) Licence (P0811-02). Impact mitigation measures in the operational phase of the development will include:
  - Noise emissions are monitored and increased noise levels will be identified and addressed.
  - All chemicals, oils and fuels are stored within designated, bunded areas and undertake bund integrity testing every three years. An adequate supply of spill clean-up materials will be maintained om site.
  - The WWTP will be monitored for physical changes (i.e. flow, pressure, temperature) and chemical changes (i.e. pH, turbidity, Dissolved Oxygen) changes, which may indicate plant malfunction.

- Invasive species will be subject to an Invasive Species Management Plan, treated and disposed of, in accordance with Regulation 49 of the European Communities (Birds and Natural Habitats) Regulations 2011.
- Hedgerows will be replaced as necessary,
- The treated effluent will be monitored to ensure compliance with the relevant Industrial Emissions licence.
- Discharge monitoring would be undertaken (to be agreed with the EPA as part of the license review).
- The WWTP has the capacity for shock loads but storage lagoons with an impermeable lining are available in the event of surcharging of the WWTP and or alternatively, wastewaters would be taken by tanker to a municipal WWTP.

### 9.65. Residual impacts post mitigation.

- 9.66. Residual risk is the risk that remains after all mitigation measures are implemented. The applicant concludes that there will be no significant impact on the water quality of the River Boyne. There would be a permanent loss of habitat within the from beneath the footprint of the new extension to the proposed WWTP compound but these habitats are not ecologically significant. The proposed rising main would be located underground and having been laid the area would be reinstated using stockpiled topsoil removed during excavations. Therefore, there would only be a temporary loss of habitat as a result of rising main works. The outfall location within the River Boyne will be reinstated with suitable material to return the riverbed of the River Boyne to its natural condition. The temporary disturbance of the riverbed will not cause a significant impact on spawning fish as the riverbed at this location was not noted as suitable for Salmon or Lamprey. Any additional natural material used at this location will be chosen to prevent any increased erosion or sedimentation from occurring thereby prevent any significant impact on aquatic species and habitats. Terrestrial fauna such as bats, hares and badgers will not be impacted by the operational phase of the proposed development. Assuming all mitigation measures are put in place, there would be no significant residual impacts to any protected fauna from the proposed development.
- 9.67. Conclusion on this chapter.

- 9.68. I have considered this chapter of the EIAR and the relevant written submissions made in relation to impacts on biodiversity. I am satisfied that potential direct impacts on biodiversity have been identified and that no unacceptable direct impacts will arise from the proposed development. However, I am not satisfied that the EIAR has properly considered cumulative impacts (see section 8.9.3 for an inadequate comment in this regard) with other existing and/or permitted potential sources of contaminants especially in relation to water dependent flora and fauna. The Report does not identify or rule out indirect impacts on biodiversity arising from the proposed development.
- 9.69. Chapter 9 addresses land Soils, geology and hydrogeology. The existing soils environment within the WWTP (mapped in Attachment 9 in a separate folder submitted with the EIAR) are described as shallow well drained mineral soils derived mainly from calcareous parent material. The soils along the pipeline route are well to poorly drained mineral soils also mapped in Attachment 9.
- 9.70. The aquifer undelaying the WWTP and the pipeline route is a Locally Important Aquifer (Lm) which is generally moderately productive while the section of pipeline closest to the WWT site is classified as poor with generally unproductive flow. These areas cover two ground water bodies (GWD) the Trim GWB and the Donore GWB. These ground water bodies are characterised by extremely heterogeneous limestone with variable aquifer thickness. Recharge occurs from upland areas with thin soil overlay to the surface water bodies such as the River Boyne. Pumping tests for the productivity of the aquifer indicated that it is generally well protected from potential surface pollution by an overlying limestone strata 50m thick.
- 9.71. The potential construction phase impacts on soils and ground water are identified as;-
  - Soil disturbance/removal will occur in the areas of the new WWTP and along the pipeline route. An estimated 1,436 m3 of soils/subsoils would require excavation at the WWTP development while horizontal directional drilling (HDD) will be the is the preferred pipeline laying method in a worst case scenario of using only open-cut about 2,135 m3 of soils/subsoils or road surface would be excavated. The permanent removal of natural soils would

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comprise a negative slight permanent impact whereas re-use of soils would be a positive slight long-term impact.

- Vehicular movements can lead to soil compaction, but construction related traffic will largely use existing hard surface roads/track. Where greenfield areas are used and compaction occurs this would be considered a negative slight medium term impact on the soil and in-situ earth materials.
- Hydrocarbon spills can contaminate soil and subsoil and would have a negative moderate short-medium term impact on soil and subsoil quality.
- There will be a need for imported fill material primarily comprising high standard fill and stone for pipeline construction, hardstanding areas, concrete for foundations, reinforced concrete structures.
- Excavation impact on bedrock will be minimal as the vast majority of the excavation and construction of the proposed WWTP extension would be expected to be within the made ground/ low permeability clays. The pipeline is not expected to encounter bedrock.
- Potential impacts on groundwater during the construction phase may arise from altering the hydrogeological regime in terms of flows or quality. Contaminants are more likely to infiltrate following soil disturbance impacting ground water quality and local wells. The spillage of concrete/cement material poses a potential risk to groundwater.
- 9.72. Construction phase impact mitigation measures will include;-
  - Generally, measures will address the excavation and export of soil/bedrock from the application site and associated rising main pipeline, sources of fill for the WWTP site and pipeline, fuel and chemical handling.
  - A competent professional will supervise all groundworks. All potentially contaminated material would be either left in situ or segregated and stockpiled in a contained manner.
  - Imported fill material would be used immediately or stored within the site boundary. Asphalt or concrete would be brought directly to the construction site when required and immediately placed.

- Any soil imported to site would be subject to assessment in accordance with a Construction Environmental Management Plan (CEMP), which would adhere to appropriate guidance e.g. The Management of Noxious Weeds and Nonnative Invasive Plant Species on National Roads (NRA, 2009).
- Dust suppression measures (e.g. damping down during extended dry periods), vehicle wheel washes, road sweeping and general housekeeping would ensure that the surrounding environment is free of nuisance dust and dirt on roads.
- All potentially polluting liquids would be stored in bunded areas, the capacity
  of which would be 110% the volume of the largest volume of material or 25%
  of the total volume of liquid to be stored, whichever is greater.
- Machinery refuelling would be carried out by competent personnel at a temporary construction compound during rising main works and at a designated location within the site boundaries for WWTP works.
- All machinery/parking areas would be inspected on a daily basis for evidence of hydrocarbons leaking from machinery. Spill kits would be stored at the machinery refuelling areas.
- Plant equipment would be washed in designated areas constructed to prevent potentially polluting material from entering surface or groundwater.
- The pipeline route will cross the Dollardstown Stream and potentially other culverted drains at various locations along its length. A buffer zone of 6m would be maintained, where possible, between the proposed pipeline route working area and any open drains or river channels. Silt fencing would be erected in advance of works and remain in place until after landscaping elements have become established.
- 9.73. Operational phase soil/groundwater impacts will be mitigated by adherence to the conditions of the applicable Industrial Emissions license, storage of all materials required for the maintenance of the sites would be stored according to good practice and in areas either off-site or in bunded areas with impermeable floors. The pipeline will be subject to inspection and maintenance in accordance with the IE Licence conditions.

9.74. This chapter concludes that if the mitigation measures detailed above are implemented it is expected there would be no significant adverse direct or indirect impacts on groundwater and the underlying soils and geology as a result of the construction or operation of the proposed development.

# 9.75. Conclusion on this chapter.

- 9.76. I have considered this chapter of the EIAR and the relevant written submissions made in relation to impacts on soils, geology and hydrogeology. I am satisfied that potential direct impacts on soils, geology and hydrogeology have been identified and that no unacceptable direct impacts will arise from the proposed development. However, I am not satisfied that the EIAR has properly identified or considered cumulative impacts on soils, geology and hydrogeology which may arise from other existing or permitted developments in the area. The Report does not identify or rule out indirect impacts on soils, geology and hydrogeology arising from the proposed development.
- 9.77. Chapter 10 addresses climate. The existing climate environment is described in terms of rainfall, temperature and wind speed in Table 10.1. In summary the average rainfall in the 30-year period up to 2020 was 758.0 mm. The average wind speed in the 30 years to 2020 was 10.3 knots. The mean maximum temperature for 2020 was 9.1 degrees.
- 9.78. The predicted impacts are:-
  - During the construction phase a slight increase in greenhouse gas emissions in the area due to the presence of machinery and HGVs onsite.
  - In the operational phase the removal, of 7/8 effluent tanker movements from the site to the MWWTP will positively impact on the climate by reducing fuel emissions.
  - A single effluent sludge movement would be required per day.
  - Currently nitrous oxide is emitted from the MWWTP. Following the construction of the new WWTP emissions of nitrous oxide would result in

potential nitrous oxide emissions occurring at the application site rather than the municipal WWTP and would not result in an overall increase of nitrous oxide emissions to the atmosphere.

- There are no predicted significant impact on the microclimate of the area.
   There would be no significant direct impacts predicted on the macroclimate as a result of the proposed development.
- 9.79. Mitigation measures in relation to climate impacts are not proposed in the construction phase as the greenhouse gas emissions in the area due to machinery and HGVs are not considered significant given the anticipated volume and transient nature of construction works. The applicant, in compliance with the IE licence, has an Environmental Management Plan (EMP) in place, which includes targets and objectives for a reduction in air emissions. Having regard to these factors the impact to the climate from the proposed development would be minor.

### 9.80. Conclusion on this chapter.

- 9.81. I have considered this chapter of the EIAR and the relevant written submissions made in relation to impacts on climate. I am satisfied that potential direct impacts on climate have been identified and that no unacceptable direct impacts will arise from the proposed development. However, I am not satisfied that the EIAR has properly identified or considered cumulative climate impacts that may arise from other existing or permitted developments. The Report does not identify, consider or rule out indirect impacts on climate.
- 9.82. Chapter 11 addresses material assets (natural and agricultural resources). The chapter primarily the impacts on natural resources and agricultural assets. The area surrounding the application is primarily used as pasture and the soils are generally well drained mineral soil derived mainly from calcareous parent material. Table 11. Lists 11 EPA licenced agricultural enterprises in the vicinity of the development comprising poultry and pig farms. Tourism is a significant activity within the Boyne valley. Sand and gravel extraction is carried out in 4 sites within the area.
- 9.83. The potential impacts are identified as: -
  - There will be a minor loss of disturbed ground previously used as an integrated constructed wetland wastewater treatment system to accommodate

the proposed WWTP. The pipeline is primarily laid underground along the roadside verge there will be no loss or change in the lands along the pipeline route.

- There will be no significant impact on mineral resources in the area. Construction material will be locally sourced.
- Because of the quality of the treated effluent discharged to the Boyne there is no significant risks to the tourism, recreational or fishery resources of the river Boyne.
- Construction and operational noise in the immediate area of the WWTP may arise but wildlife and domesticated animals, already accustomed to the existing industrial plant will quickly acclimatise to the new facility.
- No additional mitigation measures beyond those set out in individual chapters previously are necessary and no significant residual impacts are anticipated.

# 9.84. Conclusion on this chapter.

- 9.85. I have considered this chapter of the EIAR and the relevant written submissions made in relation to material assets (natural and agricultural resources). I am satisfied that potential direct impacts on material assets/natural and agricultural resources have been identified and that no unacceptable direct impacts will arise from the proposed development. However, I am not satisfied that the EIAR has properly identified or considered or ruled out indirect or cumulative impacts on natural and agricultural resources.
- 9.86. **Chapter 12** addresses Material Assets (utilities and transport network). The chapter considers impacts on the following material assets:-
  - Electricity.
  - Municipal Water Supply.
  - Municipal Foul sewer.
  - Municipal Storm water (surface water) drainage.
  - Gas.
  - Telecommunications.

- Road Network & Traffic.
- Utilities owned by other stakeholders.
- 9.87. The local road network is rural in nature characterised by single carriageway roads bounded by established hedgerows. These roads are generally lightly trafficked.
- 9.88. There is an intake for the Staleen drinking water treatment plan from the Boyne at Staleen which supplies 24,000/28,000m<sup>3</sup> of drinking water per day to a population of 77,595 people. Two separate urban WWTPs discharge to the Boyne. The Navan UWWTP discharges approximately 4.6km upstream of the proposed discharge location while the Slane UWWTP discharges to the River Boyne approximately 5.4 kilometres downstream of the proposed discharge location.
- 9.89. There are several electricity lines in the vicinity of the proposed development. The immediate area of the applications site is not served by a gas network. There are broadband, phone and television services in the area.
- 9.90. The EIAR states that the proposed development would have a minor negative impact on utilities and transport network whereby any disruption would be minimal and of a temporary nature during the construction and installation phase of the development. In the construction phase the power and water demand on the local electricity and mains water systems will not be significant. Existing sanitary facilities are in place on site for construction staff. There would be no anticipated impacts to the local telecommunications system.
- 9.91. A Traffic Management Plan for the proposed construction works has been prepared as part of this application that sets out good traffic management practices for during the construction phase and ensure that the predicted low traffic impact levels are achieved. No operational phase mitigation measures are considered necessary. The construction of the WWTP will result in a medium- and long-term improvement in traffic conditions locally, as large tanker vehicles will no longer be required to export effluent from the site for off-site treatment.

# 9.92. Conclusion on this chapter.

9.93. I have considered this chapter of the EIAR and the relevant written submissions made in relation to material assets (utilities and transport networks). I am satisfied that potential direct impacts on material assets/utilities and transport networks have been identified and that no unacceptable direct impacts will arise from the proposed

development. However, I am not satisfied that the EIAR has properly identified or considered or ruled out indirect or cumulative impacts on utilities and transport networks.

- 9.94. Chapter 13<sup>6</sup> addresses archaeological, architectural and cultural heritage impacts of the proposed development. Table 13.8 lists 8 structures on the Record of Monuments and Places within 500m of the application site including the pipeline. Table 13.9 lists 3 structures on the RPS within 500m of the application site/pipeline and Table 13.10 lists 3 buildings on the NIAH within 500m of the application site/pipeline. Additionally the EIAR lists Stackallen Railway bridge as a site of architectural interest, the River Boyne river bank at Ardmulchan as an Area of Archaeological Interest, the Corn Mill at Hayestwon/Carnuff Lane as a site of Archaeological Interest, the enclosure and burial as a site of Archaeological Interest, and enclosure at Dollardstown, and a mound barrow with Ogham stone at Painstown.
- 9.95. The potential construction phase impacts are identified as:-
  - a direct impact on the River Boyne and site of Corn Mill area of archaeological interest in the construction of the proposed effluent pipeline.
  - A direct impact on the zone of archaeological potential associated with the Enclosure and associated burial ME026-019 and the enclosure (ME026-001).
  - A direct impact on the following Architectural Heritage, the Stackallen Railway Bridge arising from the pipeline construction.
  - no features or material of archaeological or architectural significance were identified within the areas of the proposed effluent treatment plant at the Dawn Meats (Slane) facility.
- 9.96. Pre- Construction and construction mitigation measures will comprise:-
  - Preconstruction archaeological testing along the pipeline route should be augmented by archaeological monitoring of the works.

<sup>&</sup>lt;sup>6</sup> This chapter should be read in conjunction with attachment 13 in the folder of attachments to the EIAR (not attachment 14 as stated in the EIAR text).

- Pre-construction testing and underwater archaeological inspection should be carried out at and in the river Boyne. This work should be carried out under appropriate licencing under the National Monuments Acts.
- If archaeological materials are discovered during the pre-construction or construction phases adequate funds to cover excavation, fencing (if required), post-excavation analysis and reporting, and conservation work should be made available.
- to prevent damage to the original fabric of Stackallen Railway Bridge during construction works for the pipeline A buffer zone of 1m from each abutment be put in place and a temporary barrier be erected around the bridge abutments.
- 9.97. All potential direct and indirect archaeological impacts will be resolved at preconstruction phase of the development and therefore that will be no operational stage impacts.

# 9.98. Conclusion on this chapter.

- 9.99. I have considered this chapter of the EIAR and the relevant written submissions made in relation to archaeological, architectural and cultural heritage impacts arising from them proposed development. I am satisfied that potential direct impacts on archaeological, architectural and cultural heritage have been identified and that no unacceptable direct impacts will arise from the proposed development. Additionally the report rules out any indirect impacts on archaeological, architectural and operational phase. However, I am not satisfied that the EIAR has properly identified or considered or ruled out cumulative impacts with relevant existing or proposed developments on archaeological, architectural and cultural heritage
- 9.100. Finally, chapter 14 sets out the interactions between the environmental factors discussed in the previous chapters and these interactions are summarised in table 14.

# 9.101. Reasoned Conclusions on Significant Effects.

9.102. I have carried out an examination of the environmental information contained above in which I have had regard to the EIAR and supplementary information provided by the applicant and the reports and submissions from the planning authority, prescribed bodies and the appeal submissions and observations made in the course of the application. Following on from this assessment I consider that drawing reasoned conclusions on significant effects is hampered by the failure of the EIAR and accompanying information to adequately address, in particular, potential significant indirect and cumulative effects on the environment arising from the proposed development. Accordingly, these reasoned conclusions on significant effects are tentative and incomplete.

- 9.103. I consider that the main significant direct effects (positive and negative) of the proposed development on the environment are those arising from the impacts listed below. An Outline Construction Environmental Management Plan (CEMP) accompanying the EIAR together with mitigation measures to be employed, as summarised in the non-technical summary provide a description of the overarching general mitigation measures embedded in the project design and delivery for construction and operational stages. The main likely impacts, both positive and negative are as follows:
- 9.104. Benefits/positive impacts to population and human health arising as a result of the overall wastewater treatment plant development is the provision of additional treatment capacity in the wider area and a reduction on the loading of effluent currently being treated in the public WWTP in Navan. It is reasonable to assume that an element of that released capacity in the public system can facilitate other forms of development. A minor negative temporary impact on population and human health during the construction phase arising from increased traffic and construction activity and resultant noise, dust and disturbance would be off-set in the medium term by the reduction in tanker movements between the public WWTP and the application site.
- 9.105. Potential impacts on land and soils from risk of spread of invasive species at the site which would be mitigated by the implementation of the Invasive Species Management Plan and a method statement for the control of disturbance of soils containing the invasive species.
- 9.106. Potential impacts on **biodiversity** would be mitigated by measures to be put in place to prevent the release of hydrocarbons or silts into the water environment. There is a risk of pollution of receiving **water** environment as a result of accidental spillages of

chemicals, hydrocarbons or other contaminants entering the site drains and discharging to the River Boyne during the construction phase. The impacts would be mitigated by measures within the EIAR and the Construction and Environmental Management Plan and adherence to best practice construction measures and incorporation of appropriate drainage facilities.

9.107. The effluent to be discharged to **surface water** from the proposed discharge pipe will be of sufficiently high quality either initially or as dispersed in the mixing zone after emission to avoid any negative impact on water quality.

# 10.0 Appropriate Assessment

10.1. The application was accompanied by two Natura Impact Statements. The first dated 8<sup>th</sup> March 2020 and a second dated 3ed February 2022 received in conjunction with the EIAR. This Appropriate Assessment will rely on the second, more comprehensive, of these documents.

# 10.2. Screening the need for AA; Stage 1 likely Significant Effects.

10.3. The screening exercise identified the potential for likely significant effects on 4 European sites on which then proposed development had the potential to a significant effect. These are:-

European Site	Qualifying	Conservation	Impact
	Interest	Objective	Mechanism
River Boyne &	River Lamprey	The conservation	The pipeline
River Blackwater SAC 002299	Salmon Otter Alkaline fens	objective is the maintenance of habitats and	discharges to the River Boyne within the SAC.
	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion,	species within Natura 2000 sites at favourable conservation condition will contribute to the overall	

	Alnion incanae,	maintenance of	
	Salicion albae).	favourable	
		conservation	
		status of those	
		habitats and	
		species at a	
		national level.	
	Vingfighor	The encomention	The pipeline
River Boyne &	Kinglisher.	The conservation	line pipeline
		objective is the	discharges to the
SPA 004232		maintenance of	River Boyne within
		habitats and	the SAC.
		species within	
		Natura 2000 sites	
		at favourable	
		conservation	
		condition will	
		contribute to the	
		overall	
		maintenance of	
		favourable	
		conservation	
		status of those	
		habitats and	
		species at a	
		national level.	
Boyne Estuary	Shelduck	The conservation	25.56 km distant
SPA 004080	Oystercatcher	objective is the	from the
	Golden Plover	maintenance of	application site –
		habitats and	ecological
	Grey Plover	species within	connection via the
		Natura 2000 sites	Boyne River.
1			

	Lapwing	at favourable	
	Knot	conservation	
	O a se al a sella se	condition will	
	Sanderling	contribute to the	
	Black-tailed	overall	
	Godwit	maintenance of	
	Redshank	favourable	
	Turnstone	conservation	
	Turnstone	status of those	
	Little Tern	habitats and	
	Wetlands	species at a	
		national level.	
Boyne Coast and	Estuaries	The conservation	26.56 km distant
Estuary SAC	Mudflats and	objective is the	from the
001957	sandflats not	maintenance of	application site -
	covered by	habitats and	ecological
	seawater at low	species within	connection via the
	tide.	Natura 2000 sites	Boyne River.
	Salizaraia and	at favourable	
	sther oppuele	conservation	
		condition will	
	and sand	contribute to the	
		overall	
	Atlantic Salt	maintenance of	
	Meadows	favourable	
	Mediterranean salt	conservation	
	meadows.	status of those	
	Embryonic shifting	habitats and	
	dunes	species at a	
	Shifting dupper	national level.	
	along the charaline		
	arenana).		

F	-ixed coastal	
d	dunes with	
h	nerbaceous	
v	vegetation ('grey	
c	dunes')	

- 10.7. Having regard to the material submitted with the application, the AA screening report and the NIS, the materials publicly available, in particular from the NPWS, and applying the source pathway-receptor-model, I conclude that there are no other European sites with a connection to the application site, including the pipeline route and outfall in the Boyne River and I consider it reasonable to confine the screening exercise to these four European sites as detailed above.
- 10.8. The AA screening report concludes that the proposed development is largely outside the areas of the European sites and will not have a direct impact on the conservation objectives or qualifying interests. The exception to this is the discharge point within the River Boyne which is within both the River Boyne & River Blackwater SAC and the River Boyne & River Blackwater SPA. The following factors were considered to prevent a conclusion that significant effects cannot be ruled out;
  - The pipeline and outfall within the River Boyne & River Blackwater SAC and the River Boyne & River Blackwater SPA and the hydrological connection to the Boyne Estuary SPA 004080 and the Boyne Coast and Estuary SAC 001957.
  - There are invasive species (Canadian waterweed, Giant Knotweed, Japanese Knotweed and Rhododendron) recorded within 5kms of the application site and Indian balsam along the pipeline route/ road verge and therefore there is a risk to the European habitats.
  - During construction works there is potential for the release of hydrocarbons, suspended solids and uncured concrete into water courses that link to the European sites. During the operational phase there is a risk to water quality

arising from the discharge of treated effluent. Having regard to the nature of the water dependent species for which the European site have been designated mitigation measures are needed to avoid these potential impacts.

- The applicants screening assessment therefore concludes that submission of an NIS and carrying out of an appropriate assessment is necessary.
- 10.9. On the basis of the information provided with the application and appeal and in the applicant's screening assessment I agree with the conclusion that significant effects on River Boyne & River Blackwater SAC 002299, River Boyne & River Blackwater SPA, Boyne Estuary SPA and Boyne Coast and Estuary SAC cannot be ruled out and that the provision of an NIS and carrying out of an AA is required.

# 10.10. Appropriate Assessment Stage 2<sup>7</sup>.

10.11. The NIS identifies the qualifying interests of the	he four European sites with potential for
significant effects as follows.	

River Boyne & River	Assessment	Potential Impact
Blackwater SAC 002299		
Alkaline fens	Risk from deterioration in water quality	Yes
Alluvial forests	Susceptible to spread of invasive species	Yes
River Lamprey	Susceptible to suspended solids and other forms of water pollution	Yes

<sup>&</sup>lt;sup>7</sup> There are various misprints in the NIS (see the unnumbered table outlining impacts on qualifying interests) which refers to County Crest Ltd, Rathmooney, Lusk, County Dublin. There are also references to Rogerstown Estuary SPA (which should be Boyne Estuary SPA) which is also a misprint. Notwithstanding these misprints I consider that enough information is presented to allow an Appropriate Assessment to be carried out.

Salmon	Susceptible to suspended solids and other forms of	Yes
	water pollution	
Otter	Susceptible to indirect	Yes
	can reduce prey species.	
River Boyne & River	Assessment	Potential Impact
Blackwater SPA		
Kingfisher	Susceptible to indirect	Yes
	impacts as water pollution	
	can reduce prey species	
Boyne Coast & Estuary	Assessment	Potential Impact
SAC		
Estuaries	Precautionary protective	Yes
Mudflats and sandflats	measures will be required	
not covered by seawater	at construction phase to	
at low tide	avoid impact.	
Mediterranean salt		
meadows		
Annual Vegetation of drift	A potential deterioration in	No
lines.	water quality is not	
Salicornia and other	anticipated to impact on	
annuals colonizing mud	these qualifying interests.	
and sand.		
Embryonic shifting dunes.		
Shifting dunes along the		
shoreline with Ammophila		
arenaria.		
Estuaries Mudflats and sandflats not covered by seawater at low tide Mediterranean salt meadows Annual Vegetation of drift lines. Salicornia and other annuals colonizing mud and sand. Embryonic shifting dunes. Shifting dunes along the shoreline with Ammophila arenaria.	Precautionary protective measures will be required at construction phase to avoid impact. A potential deterioration in water quality is not anticipated to impact on these qualifying interests.	Yes

Fixed coastal dunes with		
herbaceous vegetation		
('grey dunes').		
Boyne Estuary SPA	Assessment	Potential Impact
Shelduck	A deterioration in water	Yes
	quality would impact on	
	this species.	
Oystercatcher	A deterioration in water	
	quality would impact on	
	this species.	
Golden Plover	A deterioration in water	
	quality would impact on	
	this species.	
Grey Plover	A deterioration in water	
	quality would impact on	
	this species.	
Lapwing	A deterioration in water	
	quality would impact on	
	this species.	
Knot	A deterioration in water	
	quality would impact on	
	this species.	
Sanderling	A deterioration in water	
	quality would impact on	
	this species.	
Black tailed Godwit	A deterioration in water	
	quality would impact on	
	this species.	
Redshank	A deterioration in water	
	quality would impact on	
	this species.	

Turnstone	A deterioration in water	
	quality would impact on	
	this species.	
Little Tern	A deterioration in water	
	quality would impact on	
	this species.	
Wetlands		None specified.

- 10.12. The NIS summarises the threats to the qualifying interests of the European sites examined are synopsised as:
  - During construction works there is the potential foir deterioration in water quality. This could arise from the release of suspended solids during ground works. Such releases can encourage eutrophication through the addition of nutrients, damage to gravel beds required for spawning and smothering fish by negatively impacts gill functions.
  - Hydrocarbons arising from fuel spills can affect water quality by, *inter alia*, interfering with oxygen absorption into the river water required by aquatic flora and fauna.
  - Spills of uncured concrete has the potential to alter the pH of the water impacting on the local flora and fauna.
  - Slaughterhouse wastewater is known to have the potential to increase the biological oxygen demand (BOD) and the chemical oxygen demand (COD). The level of bacteria in the water responds to the introduction of additional nutrients by growing rapidly thereby giving rise to deoxygenation of the water making it uninhabitable for aquatic flora and fauna.
  - Nitrogen and phosphorous also increases eutrophication of the aquatic environment leading to excessive plant, often algae, growth which in turn absorbs oxygen and make the water inimical to fish life.

- 10.13. The NIS refers to the Construction Environmental Management Plan accompanying the application and identifies an extensive list of construction phase water quality mitigation measures of which the most significant are:-
  - Silt mats, silt fencing along all working areas, including soil storage areas, that would prevent suspended solids entering the wider water environment and streams/rivers, including the Dollardstown stream, within the European sites. These installations will be inspected daily.
  - The outfall area in the bed of the River Boyne will be sandbagged and water will be pumped out. This pump will be fitted with a filter to prevent ingress of aquatic fauna and disturbance to the riverbed. No machinery to significantly impact on water quality will be used within the European site.
  - Excavated soil from with the River Boyne and River Blackwater SAC/SPA will be removed from the SAC/SPA or placed in an area not liable to flooding.
  - Excavations and earth moving operations will be planned to avoid periods of heavy rain, graded and/or covered so as to minimise runoff.
  - Otter proof fencing will be installed at the outfall location.
  - It is not anticipated that any drainage ditches will be crossed but in the event
    of stream crossings being required the water flow will be dammed upstream of
    the crossing point with sandbags and pumped to a point downstream of the
    sandbagged crossing point. Where water is encountered during pipeline
    construction it will be pumped to a constructed silt control feature or tampered
    off site for treatment.
  - Interference to vegetation will be limited to out of bird breeding season periods.
  - To avoid impacts on salmonid fish works within the SAC/SPA will be undertaken between July and September which is outside the spawning season. Where works are required outside that period they will be agreed with Inland Fisheries Ireland. Cognisance would be taken of the IFI's "Guidelines on the Protection of Fisheries During Construction works in and Adjacent to Waters".

- A site compound will be used for fuel and chemic storage for refuelling of plant and machinery in compliance with EPA guidance including supervision, bunded areas, drip trays and disposal of waste hydrocarbons by a licensed contractor.
- Pre-cast concrete will be used where possible. Delivery/pouring of concrete will be properly supervised. No washing out of containers or holding uncured concert on site will take place.
- Daily monitoring of receiving waters for suspended solids would be undertaken while works are being carried on in the vicinity of the Boyne.
- An invasive species management will be development which includes staff training, cleaning equipment before moving between water bodies, preventing movement of flora within the site.
- Where appropriate all equipment, clothing, sandbags, ropes, absorbent materials, footwear should be washed/disinfected before moving within or removal from the site.
- 10.14. During the operational phase of the proposed development the facility (WWTP and pipeline) will operate under a revised industrial emissions licence (IE licence). The proposed emission limit values for effluent will be agreed with the EPA and incorporated into the IE licence. Every three years the pipeline will be tested for integrity and cleaned out. The pipeline will be fitted with a valve in the vicinity of the outfall to ensure that no wash water will enter the river and the wash water will be taken in tankers out the European site for appropriate treatment.
- 10.15. The NIS identifies a number of potential in-combination effects. Table 9.1 lists EPA licensed activities within 15kms of the Dawn Meats site and the pipeline. These are, generally, intensive agricultural enterprises, food industries and a number of industrial enterprises. Table 9.2 lists 6 waste handing/disposal facilities with EPA licences. Of these listed facilities only one, Boliden Tara Mines Designated Activity Company, discharges treated effluent to the River Boyne.
- 10.16. Table 9.3 lists 7 licenced discharges to the Boyne or its tributaries. A further 3 public wastewater treatment plants discharge to the Boyne as Navan WWTP, Slane WWTP and Donore WWTP. The 2020 Annual Environmental Report reported that all three public WWTPs were operating within their design capacity. Navan WWTP and

Donore WWTP were compliant with ELVs set out in their discharge licences while Slane WWTP was non-compliant for orthophosphate. The proposed ELVs of the discharge from the proposed WWTP have been determined having regard to the lowest water levels in the Boyne and future climate conditions and it can be concluded on the basis of the foregoing that there are no significant risk of incombination impacts on water quality.

10.17. Having regard to the material set out in the NIS, and subject to the mitigation measures included in the NIS it is concluded that there is no significant risk to any European site arising from the proposed development.

### 10.18. Summary and Conclusion.

I have read the AA Screening report, the NIS and other material submitted with the planning application. I consider that the material set out above reasonably describes the potential sources of pollution that would affect the qualifying interests of the 4 European sites assessed and that the mitigation measures set out are reasonable, implementable and would adequately mitigate against impacts on the European sites including through water pollution. Therefore I 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 River Boyne & River Blackwater SAC 002299, the River Boyne & River Blackwater SPA 004232, the Boyne Estuary SPA 004080 and the Boyne Coast and Estuary SAC 001957 or any other European site, in view of the sites' Conservation Objectives.

# 11.0 **Recommendation**

11.1. I recommend refusal for the reasons and considerations set out below.

# 12.0 Reasons and Considerations

Schedule 6 of the Planning and Development Regulations 2001, as amended, provides that the information to be provided in an Environmental Impact Assessment Report (EIAR) should include a description of the likely significant effects (including direct, indirect, secondary, cumulative, short, medium and long term, permanent and temporary, positive and negative of the proposed development on the environment.

Having reviewed the EIAR the Board has concluded that the EIAR has not provided the information on indirect or cumulative likely significant environmental impacts in a manner as to satisfy the requirements of Schedule 6 of the Planning and Development Regulations 2001, as amended. Accordingly, the Board is unable to conduct an environmental impact assessment and is precluded from granting permission in this case.

Hugh Mannion Senior Planning Inspector

17<sup>th</sup> June 2024