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03rd February 2022

Meath County Council,
Buvinda House, Dublin Road
Navan, County Meath
C15 Y291

Meath Co. Co. Reference: 21-424

RE: "*The development consists of the construction of an extension to an existing wastewater treatment plant (WWTP) where the works include:-*

a) Demolition of an existing storage building (17.50m2) and construction of a new single-storey industrial type building to enclose the DAF unit granted planning permission under planning reference LB180300 and to provide new enclosed storage and control rooms (total floor area 119m2).

b) Install a new sludge press at intake to WWTP, change aeration tank to anoxic tank, install 2 no. additional aeration tanks, alteration to perimeter berm to increase the footprint of WWTP, by 539m2 to that granted planning permission under planning permission LB180300.

c) Treated wastewater rising main from the site of the proposed development to new discharge point at the River Boyne (distance 7.2km), where pipeline shall be laid along a section of Windmill Road, the L1013, Yellow Furze Road, the L1600 (Boyne Road), and the unnamed local road leading from the L1600 to the private lands abutting the River Boyne at the discharge point."

Subject: Response to Submission by An Taisce

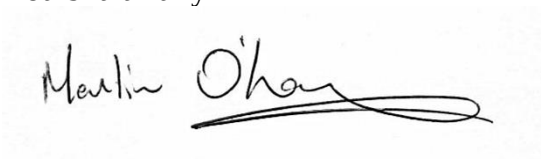
A Chara,

Panther Environmental Solutions Ltd, acting as consultants for Dawn Meats Ireland (Slane), would like to submit the following response to the submission made by An Taisce.

The following section provides excerpts of the submission and responses.

If you have any queries regarding the above, please do not hesitate to get in contact.

Yours faithfully



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1. **Lack of detail on the outfall and rising main**

We note that the proposal does not include sufficient plans for the outfall into the River Boyne – no detail or precise location details are presented.

Please see revised and new design drawings submitted in response to further information requests.

With regard to the NIS submitted, the description of the proposal in Section 4.2 does not adequately describe the planned outfall and the associated works in the area of the River Boyne and River Blackwater SAC (site code: 002299) and SPA (site code: 004232)

Please see revised NIS included as Attachment 8.1 of the EIAR.

An Taisce considers the lack of outfall specifications and of a full plan for the rising main to be wholly insufficient to fulfil the obligations both under Articles 22 and 23 if the Planning and Development Regulations.

Full details of the proposed effluent treatment plant and rising main design have been submitted in response to further information requests.

Further information on installation methods and environmental controls are included in RFI Attachment 3.2 Outline Construction & Environmental Management Plan.

2. **Water quality**

A detailed description of the scientific principles of assimilative capacity assessment, the modelling behind them and their applicability to the subject proposal is required. Crucially, there also does not appear any information provided on the compliance of this assessment and the proposal as a whole with Article 4 of the Water Framework Directive. Further Information should be sought in this regard.

The Assimilative Capacity Assessment has been prepared under the methods outlined in the guidance document:

WSTG, (Aug 2011). "*Guidance, Procedures and Training on the Licensing of Discharges to Surface Waters, Groundwater and to Sewer for Local Authorities: Volume 1 – Technical Guidance Manual*." Water Services Training Group, Monastery Road, Roscrea, Co. Tipperary.

Where applicable, references are made to the WSTG guidance for clarity on the application of the methodology.

The submitted Assimilative Capacity Assessment (Attachment 8.6 of the EIAR) and Mixing Zone Model (Attachment 8.5 of the EIAR) have assessed those objectives

relevant to the proposed development outlined in European Communities Environmental Objectives (Surface Waters) Regulations (S.I. No. 272 of 2009), as amended.

It should be noted that the impacts of climate change must be accounted for in any assessment of water quality impacts.

The Mixing Zone Model (Attachment 8.5 of the EIAR), submitted in response to RFI, includes an assessment of the potential implications of climate change to the proposed discharge.

In relation to the methodology of the assimilative capacity assessment, the EIAR states that: "*The assimilative capacity assessment was undertaken during 95%ile flow conditions, the lowest daily average flow which is equalled or exceeded 95% of the time.*" We would highlight that the 95th centile is entirely separate from the average. To conflate the two indicates a misunderstanding of the statistics and raises queries on the veracity of the assumptions based on that misunderstanding.

This is a misreading of the statement. The flow data used for the calculation of the 95th percentile is average river flow per day. The resulting 95th percentile figure was the 95th percentile of average river flow per day.

The EIAR indicates that it utilised the average of two temporally separate water quality readings from the EPA. We would note that there is a year on year decreasing trend in water quality in the majority of water bodies in Ireland. In the first instance, using data from 2019 is likely to be out of date, and to further compound that, averaging it with data from 2016 is further likely to have reduced the accuracy.

The 2020 Assimilative Capacity Assessment, current revised 2022 Assimilative Capacity Assessment and new 2022 Mixing Zone Model use the complete dataset between the dates specified in each report.

The assessments use to most recent available water quality data for the receiving watercourse, as provided by the EPA, at the time of preparing the reports.

We would also note that EIAR Table 9.1: Proposed Final Effluent Quality discharging to the River Boyne outlines limits for various water chemistry parameters, but does not frame these in the context of the requirements of the Water Framework Directive.

Legislation enacted under the Water Framework Directive provides for Environmental Quality Standards (EQS) for ambient watercourses. The legal standards does not set relevant limits with which to frame the proposed final effluent quality directly.

Discharge limits to be enforced under a discharge licence are determined based upon assessments of the potential impact of the discharge on legislated ambient water quality standards and objectives.

The submitted Mixing Zone Model Report (Attachment 8.5 of the EIAR) and Assimilative Capacity Assessment (Attachment 8.6 of the EIAR) provide assessments of the proposed discharge limits and potential impacts to the legislative objectives under the Water Framework Directive.

3. **Potential impacts on abstractions**

The EIAR indicates that the nearest water abstraction is located approximately 12.7km downstream of the candidate discharge point on the River Boyne, at Staleen, Co. Meath, serving Drogheda / East Meath agglomeration. On foot of that, the EIAR concluded that the overall risk from the proposed discharge to the Staleen water abstraction point would be considered low.

The EIAR and Drinking Water Risk Assessment identified the distance of the Staleen Water Treatment Plant Abstraction downstream of the discharge point as one of the factors influencing the potential risk to drinking waters.

Other factors detailed in these reports include:

- **Capacity of the proposed effluent treatment process to remove micro-organisms,**
- **Control and Contingency measures proposed for normal and abnormal ETP operating conditions,**
- **Dilution factor of 1:1,037 between the discharge and the River Boyne at 95%ile flow,**
- **Downstream distance to the abstraction point.**

It is also noted that, in consideration of potential risk to fisheries, drinking water abstraction and recreational use of the River Boyne, the current proposed development includes a MBR and UV filter which will achieve effective removal rates of micro-organisms and viruses.

However, we would note that, as highlighted in our recent evidence given to the Joint Oireachtas Committee on Housing during the pre-legislative scrutiny of the Abstraction Bill, comprehensive analysis of water abstraction in Ireland is not possible due to inadequate information on the location, number and rate of abstractions.

As such, the risks for drinking water abstraction cannot be conclusively assessed in the Drinking Water Risk Assessment due to lack of information.

During pre-planning meeting with Meath County Council, the issue of downstream receptors was raised. Meath County Council informed Dawn Meats (Slane) (then Dunbia (Slane)) of the presence of the Staleen Water Treatment Plant Abstraction.

No other abstractions were identified by Meath County Council, or during surveys, information gathering and assessments carried out as part of the EIAR. The relevant sections of the EIAR and Drinking Water Risk Assessment were prepared on the basis of the best available information.

4. Potential ecological impacts

The EIAR and NIS note that a walkover survey was conducted on 28th February 2020. It is considered that a single day's surveying, which took place outside the optimal season for habitat surveys, is insufficient for a proposal of this nature. With Regard to species in and around the Boyne, otter, river lamprey, salmon, all of which are qualifying interests of the SACm are highly vulnerable to changes in water quality. We therefore submit that species specific surveying is required to establish baseline data and enable a full assessment of the potential impacts.

In response to RFI, additional ecological assessments have been carried out to inform the EIAR and NIS.

Habitats, flora and fauna site assessments were undertaken by PES on the 28th February 2020, 22nd July 2021, 6th and 23rd August 2021, 2nd September 2021, and 15th January 2022.

Aquatic habitat, macroinvertebrate and otter surveys were carried out by ECOFACT in October 2021 (Attachment 8.2 of the EIAR).

5. Legal obligations under the Habitats Directive

It is now well established in law that approval can only be granted for plans and projects when it has been established beyond all reasonable scientific doubt that the subject proposal will not adversely impact any Natura 2000 sites.

In Case C-258/11, Sweetman & Others v An Bord Pleanala & Others, it was held that the provisions of Articles 6(2)-(4) of the Habitats Directive must be interpreted together "*as a coherent whole in the light of the conservation objectives pursued by the directive*" and that they impose a series of specific obligations necessary to achieve and maintain favourable conservation status. A Plan or project will negatively impact upon a site if it prevented the "*lasting preservation of the constitutive characteristics" of the site for which it was designated, with reference to the site's conservation objectives. Significantly it was determined that "authorisation for a plan or project …. May therefore be given only on condition that the competent authorities ….. are certain that the plan or project will not have lasting adverse effects on the integrity of the site. That is so where* ***no reasonable scientific doubt remains*** *as to the absence of such effects*" (emphasis added).

The competent authority must therefore refuse authorisation for any plans or projects where there is uncertainty as to whether the plan or project will have adverse effects on the integrity of the site. It was also held in paragraph 44 that:

"*So far as concerns the assessment carried out under Article 6(3) of the Habitats Directive, it should be pointed out that it* ***cannot have lacunae*** *and* ***must contain complete, precise and definitive findings*** *and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the protected site concerned (see, to this effect, Case C 404/09 Commission v Spain, paragraph 100 and the case-law cited) ….*" (emphasis added).

In Kelly v An Board Pleanala & Others, (2013 No. 802 J.R.) with reference to Commission v Spain c-404/09, the High Court held in paragraph 36 that the competent authority must carry out an Appropriate Assessment for a plan or project in light of the best scientific knowledge in the field. It was also held that the competent authority must lay out the rational and reasoning which was used to arrive at the determination.

The case repeated the conclusion of the CJEU at paragraph 44 in the aforementioned case C-258/11, namely that an AA "*cannot have lacunae and must contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt*". Consequently, it was held that an AA must include "*examination, analysis, evaluation, findings, conclusions and a final determination*."

The Kelly Judgement has provided a very helpful clarification of the requirements of an AA and in particular in paragraph 40, a summary of what must be delivered by the process in order to be lawfully conducted:

"(*i) Must identify, in the light of the best scientific knowledge in the field, all aspects of the development project which can, by itself or in combination with other plans or projects, affect the European site in the light of its conservation objectives. This clearly requires both examination and analysis.*

(ii) Must contain complete, precise and definitive findings and conclusions and may not have lacunae or gaps. The requirement for precise and definitive findings and conclusions appears to require analysis, evaluation and decisions. Further, the reference to findings and conclusions in a scientific context requires both findings following analysis and conclusions following an evaluation each in the light of the best scientific knowledge in the field.

(iii) May only include a determination that the proposed development will not adversely affect the integrity of any relevant European site where upon the basis of complete, precise and definitive findings and conclusions made the Board decides that no reasonable scientific doubt remains as to the absence of the identified potential effects."

If uncertainty exists regarding the potential impact of any proposed development full account should be taken of the precautionary principle, and the development should be refused.

In response to RFI, additional design information, environmental surveys and assessment reports have been completed in order to inform the planning decision. Submissions made by prescribed bodies and third parties under the planning application (Planning Ref: 21424) have been considered as part of the project brief.

Please see revised and new design drawings and reports submitted in response to further information requests.

The NIS and EIAR mitigation measures will be fully implemented with the roles and responsibilities outlined in Outline Construction & Environmental Management Plan (RFI Attachment 3.2).

It is considered that no lacunae exist in the planning application and the Natura Impact Statement contains complete, precise and definitive findings such that no reasonable scientific doubt remains as to the potential effects of the proposed development.