Submission	
Submitter:	[redacted] Phelan
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Application	
Applicant:	Glanbia Cheese EU Limited
Reg. No.:	P1108-01
See below for Submission details. Attachments are displayed on the following page(s).	

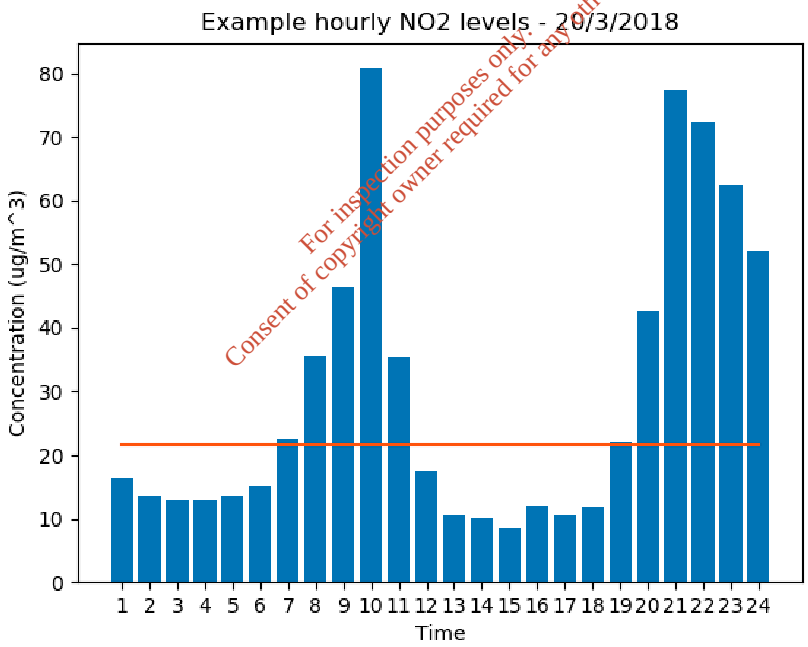
(1) On page 7 of the application form, the telephone number provided for the primary contact post determination is fake. What is the correct phone number?

(2) It is stated in the Air Dispersion modelling report by the applicant on page 10 that "As background concentration is only available as an annual mean, to assess the worst case scenario for the short-term events, annual mean background concentration was doubled". What is the scientific basis or reference for making this assumption, that doubling the annual mean is an acceptable scientific approach to assessing the maximum one hour levels?

(3) "As background concentration is only available as an annual mean…". This is false. The maximum one hour concentrations for Portlaoise are available from the EPA, e.g. "EPA Ireland Archive of Nitrogen Oxides Monitoring Data. Secure Archive For Environmental Research Data (SAFER) managed by Environmental Protection Agency Ireland". Why has the applicant not employed the correct hourly measured background data in the air dispersion model?

(4) Given the Air Dispersion Model is "doubling" the annual average, it is assuming the maximum one hour concentrations are 21.6 µg/m^3. In the 2017 data measured by the EPA in Portlaoise, there are 1,059 NO_2 hourly levels higher than 21.6 µg/m^3, with the highest one hour level of 80.03 µg/m^3. In 2018, there are 986 levels above 21.6 µg/m^3, with the highest one hour level of 118.61 µg/m^3

(5) An example level of hourly NO_2 as measured by the EPA in Portlaoise. The red line is the maximum level assumed by the applicant.



(6) According to the Air Dispersion Report, the maximum process contribution from the facility is 94.49 µg/m^3. The maximum one hour NO_2 level recorded by the EPA in 2018 in Portlaoise is 118.61 µg/m^3. This would lead to a predicted environmental concentration in breach the 200 µg/m^3 air quality limit. How does the licencee justify breaching the statutory air quality standards?

(7) An analysis of EPA data from other monitoring locations show significant higher levels of NO_2 beside motorways. The main emission point from the facility is situated c.180 m from the motorway. Nearest Transport Infrastructure Ireland traffic counter records c.30,000 vehicles per day. According to the WHO publication "Proximity to roads, NO_2, other pollutants and their mixtures" 2013, they characterized the decay with distance from the road source with dispersion simulations and found "NO_2 had gradients of 200 – 500 m". As the facility emission point is

c.180 m from the motorway, what analysis has been done to assess what will be potentially significant levels of NO_2 from the motorway?

(8) It states in AG4 guidance that "The study should also investigate the effect of changing the volume flow from maximum operation (as specified in the licence) to average (or 75% of maximum) operation. Two conflicting factors are at play as the volume flow changes. Higher volume flows will increase the mass emission (in g/s) from the installation whilst also increasing the momentum associated with the released plume. In contrast, lowering the volume flow will reduce the mass emission from the installation but also reduce the plume momentum. As a result, modelling at the maximum volume flow rate (which maximises the mass emission) will not necessarily lead to the highest ground level concentration." Why has the applicant not carried out this analysis as per EPA guidance?

(9) It states in AG4 that it aims "To ensure that assessments are conservative and thus prioritise the protection of human health and the environment", "Ensure that there is a sound scientific basis to the modelling approach", and "Reduce errors in model set-up, application, interpretation and reporting". The Air Dispersion Model submitted with this application does not meet this criteria. It is not an accurate representation, and includes flawed underlying assumptions and large uncertainties.

(10) In the 2018 EPA Industrial and Waste Licence Enforcement Report, 84% of all complaints were for odour (57%) and noise (27%).

(11) According to company, in the past they have had complaints from members of the public regarding odour nuisances at other cheese making facilities under its operation.

(12) It is estimated in the Operational Report that the 774 tonnes of Dissolved Air Floatation sludge will be produced in 2020. The sludge is of an unknown odourous quantity.

(13) In Table 8 of the Operation Report on page 21, there is no planned monitoring of potential odour emissions from the plant including the collection silos, DAF, sludge holding silo, and discharge silo. Neither is there a procedure or any protocol for the replacement of the carbon filters.

(14) On page 18 of the Operation report it states "The DAF unit will be located in an enclosed shed. The shed will have a passive carbon filter." But will the shed be kept under negative air pressure? It is not clear from this or the description on page 25 whether this is the case.

(15) It is stated in the operational report regarding the collection silos C1 and C2, that 'Each silo vent will be fitted with a passive carbon filter to control odour". Discharge Silos D1 and D2, which are contained outside the building and contain agitators, have no passive carbon filter to control odour. There may be the potential for anaerobic digestion, and resultant hydrogen sulfide generation from the discharge silos and their agitators.

(16) A settlement pond is described in drawings in the Operational Report, Appendix B. A settlement pond is generally defined as an open lagoon into which wastewater contaminated with solid pollutants is placed and allowed to stand. Will there be potential for odour generation from the settlement pond? In the planning application, there is no plans or permission granted for a settlement pond.

(17) Due to the proximity to the motorway, an appropriate licence condition of noise limit values could be set on the southern and western boundary of the facility. However residential areas are located towards the northern and northeastern boundaries of the site. This substantial facility has large 15 m high buildings and will offer significant absorption and reduction to any potential noise impact from the motorway at the northern and northeastern boundary. There is no justification for any increased noise level condition at these points of the facility based on potential road noise. The standard EPA noise limits as per NG4 of 55 db(A) daytime, 50 db(A) evening , and 45 db(A) night time, should be applied to the facility at the northern and northeastern boundary. The EPA licensed Glanbia Foods in Portlaoise has caused significant nuisance in residential homes with tonal noise. With more than a quarter of all complaints to the

EPA based on noise, it is important that the noise limit values are set conservatively as per guidance to avoid any uncertainty with potential nuisance to residents.

(18) Under noise impact assessment it states "Air conditioning units will not operate concurrently with AHU's and extraction fans". How will this condition be implemented and monitored by the licencee? If this has been the criteria for noise modelling and assessment, it is appropriate that a suitable condition be inserted in the licence conditions.

(19) There is a sister plant Glanbia Foods Ireland situated in Portlaoise. It was granted an IE licence by the EPA in 2017. In the first year there was double-digit non-compliances for noise, dust, odour. The number of complaints from residents was substantial. The plant was placed by the EPA on the list of worst performing sites in 2018, and according to the EPA Industrial and Waste Licence Enforcement Report published in July 2019, it was the second worse performing site in Ireland. This is despite the company stating in their licence application to the EPA that they were employing BAT.

(20) The other IE licenced site in Portlaoise is ENVA. For 20 years this site has resulted in more than 150 complaints, including residents vomiting, and getting severe headaches. Irish Rail workers complained that their employers were becoming ill and getting sore throats. Families have left their homes due to concerns for their health and children. It has resulted in a Ministerial investigation, a call for a full health based investigation, and a RTE Primetime Investigation. Hazardous waste was boiled in three 100,000 litre tanks, and directly vented out with no abatement. The EPA never challenged the erroneous data submitted by the company during licensing and classified the tanks as minor emission points. Subsequent documents revealed emissions of class 1 carcinogens more than 120 times the maximum limit. This was known at the time of licensing. The full extent of the health effects from this mistake is still unknown.

(21) This will be the third IE licenced facility in Portlaoise. I do not object to the granting of this licence. I trust the EPA will exercise prudent judgement in their assessment of the information submitted in this licence application, and set appropriate licence limits that will prioitise the protection of human health and the environment.