

Response on behalf of Maelor Foods to WBC Public Protection response (05.09.2024) P/2022/0820 & 0840 – Maelor Foods, Pickhill Lane

Further to receipt of the response statement from WBC's Public Protection Service Manager, dated 05.09.2024, on behalf of the applicant, Maelor Foods, we would like to make the following comments:

Reports A & B are referenced, as per the officer's response, as follows:

A: Acoustic Environments NIA - operational site (29.01.2024)

B: Acoustic Environments NIA – night-time HGV movements (26.06.2024)

On a matter of note, Report A was preceded by a Supplementary Noise Assessment submitted to Natural Resources Wales (NRW), October 2023 which provided revised noise impact assessments. This was supplemented by 'Report A' in response to further information and clarification sought by NRW.

Comments specific to Report A

Point of clarification:

Background sound levels – noise surveys are specific to the point in time they are undertaken and are invariably subject to prevailing external factors that cannot – and should not – be controlled. In turn this can result in what may be perceived as anomalous in data, though it should be recognised that there is no definitive singular value to represent the background sound level for a given period. It is in principal an infinitely variable construct that is subject to change no matter what time period it is resolved to. Hence background surveys do not yield identical results.

In the case of the site shut-down results presented in Report A, this has clearly been the subject of external factors at the time. Such examples can include variations whereby increased traffic flow arises on a particular road; seasonal events – such as race meetings at Bangor on Dee and associated on-site commentary – occur; prevailing wind direction changes; aircraft flyover increase or decrease; birdsong is prevalent; human activities take place and so forth.

At the time a site shutdown was engineered at the request of NRW, Maelor Foods were clinically aware that this stood to present a biased assessment of what constitutes both background and ambient sound levels, given that activities and operations at the Maelor site would be absent, and would otherwise legitimately be part of the extant noise climate. This is a contextual consideration, as Maelor

Foods form an element of the background sound against which any noise-producing changes are evaluated. As a principle, BS 4142 is designed in this context to evaluate changes relative to the existing situation, which includes Maelor Foods' present operations. It is noteworthy that for the most critical part of the day, namely night-time, when the site was closed the planning consultation response highlights that night-time background sound levels were lower at monitoring site A, which are used in Report A and of course excluded Maelor HGV movements.

Comments:

In the Public Protection planning consultation response, specific reference is made to Table 5.6 in Report A, against which the officer's conclusions on noise impact are made, these being of a negative tone. What appears to have been overlooked is the critical conclusions of the report on sire-generated noise, as outlined in Chapter 7, where mitigation measures have been identified and estimated BS4142 ratings applied with these in place. The results presented in Table 7.4 in Report A provide for the operational scenario and are hence most pertinent to any conclusion being made on noise impact, this being a position that has been followed by NRW in their approval of the Environmental Permit variation.

As set out in Table 7.4 and the summary Table 1.3, as a part of a strategy for overall installation improvements, proposed additional noise mitigation is intended as an off-set to predicted increases in noise generated by additional site activities. This has been examined having regard to Best Available Techniques (BAT). Maelor Foods are investing in a very substantial scheme of acoustic mitigation (as specified in the Report), which is intended to improve noise impacts comparative to the present position. A summary of the mitigation measures 'at source' is as follows:

1. Aerzen compressor plantroom attenuation.
2. Hvac system inlet and outlet attenuation (sound breakout noise control).
3. Proposed installation of acoustic louvres/ attenuation to cooling tower outlets.
4. Water treatment plant blowers – acoustic screen.

The effects of implementing this in terms of BS4142 assessments of impacts for whole-site noise (adding the existing installation to the proposed changes to increase production, including rating penalties) are graded.

The summary conclusions are as follows:

Set against background sound levels with site shut-down

Daytime

Sites A, B, C, D – low to no impact

Night-time

Sites C, D - low to no impact

Site B - low to no impact, bordering to less than adverse impact

Site A - less than adverse impact, bordering adverse

Set against background sound levels with site operational

Daytime

Sites A, B, C, D – low to no impact

Night-time

Sites A, B, C, D – low to no impact

Note - numerical ratings generally over-predict the extent of impacts

Note – indicative attenuation ratings are commonly conservative figures

Control over sensitive receptors:

Notwithstanding the potential measures that could be applied to the properties in the ownership of the applicant, Report A concludes a **low to no impact on the living conditions** for the properties at Site A, which covers all 5 properties in this location. Hence, additional control is not required.

Comments specific to Report B

The purpose of additional noise survey work being undertaken and the resultant Report B was at the request of the Public Protection team to assess potential night-time impact upon living conditions associated with additional HGV movements.

Noting the Public Protection officer's comments from their response:

Report B has demonstrated that there will be a 1 dB increase in noise from the additional HGV movements and concluded that this will be imperceptible. This conclusion is accepted.

In conclusion, this is paramount in the determination of the planning applications. As set out above, the position on potential noise impact from the operational site, subject to proposed operations increase and proposed noise mitigation proposals, is low to no impact on living conditions. This position has been endorsed by NRW. So, with the position reached by Public Protection on potential impact of off-site activities (HGV movements) being the same, i.e. read increased noise being imperceptible, as low to no impact, it can be deduced that no final position of objection is reached.

Acoustic Barrier

Visual impact concerns raised by the officers are noted, although not necessarily endorsed, particularly if design options, materials and landscaping are taken into consideration. Notwithstanding this, it is noted in NRW's approval of the Permit variation that a further BS 4142 noise survey is undertaken, post Phase 2 implementation. This allows opportunity to review the position regarding an acoustic barrier.

Concerning the effectiveness of the barrier, there appears to be a misconception as to the need to completely obscure a given noise source. Whilst this increases effective performance, if achieving the 'line-of-sight' height, attenuation is still afforded. This is illustrated, for example, in *Calculation of Road Traffic Noise* (Dept. of Transport / Welsh Office), and in British Standard BS 5228 *Code of practice for noise and vibration control on construction and open sites*, the working approximation assumes attenuation of 5 dB when the top of plant is just visible to the (noise) receptor., and 10 dB when it is obscured. These are just two of many references which include established acoustic texts.

In so far as vehicle and pedestrian access/egress is concerned, the barrier system is not explicitly designed to deal with these aspects, as naturally there has to be a facility for entering and existing the site, which is limited in terms of available land and highway considerations. There is nonetheless an option to consider sliding gate components, although the cost-benefits of this need to be understood given the minimal impacts already set out for additional HGV movements.