<u>Comments on the Applicant's Response to ExA Written</u> <u>Questions by William David Moore</u>

ExQ 1.8.2 Ambient Noise Levels:

The applicant's update note doesn't address NMP3 & its NSR 19 (Burbage Common & Woods) at all.

The update note doesn't address all eleven NSRs associated with NMP4. It only addresses the NSRs which it thinks are on Billington Road East.

The update note misstates the locations of NSRs 2, 3 & 4 and they should not have been included in Table 5.

The update note attempts to introduce rail noise contours to claim all the NSRs in Table 5 experience 50 dB of ambient rail noise, but all the NSRs in Table 5 are outside the contours.

The rail noise contours in the applicant's update note show sound levels far higher than those measured by NMP4 & NMP3.

The update note attempts to introduce the applicant's road noise contours to make claims about ambient road noise at the NSRs in Table 5. The applicant's own report states that the ambient sound levels predicted by the applicant's road noise model are higher than those measured by noise monitoring positions.

At NMP5, in close proximity to the M69, the ambient sound levels predicted by the applicant's road noise model were 7 dB above the levels measured by NMP5.

At NMP1, also in close proximity to the M69, the predicted daytime ambient sound levels were 5.4 dB above the levels measured and used in the report. The predicted night-time ambient sound levels were 6.4 dB above the levels measured and used in the report.

I made a number of other points in my response to the applicant's update note at Deadline 4, which I won't repeat here. I expect the applicant to make a response to those points at Deadline 5.

The noise contours introduced by the applicant are known to overstate noise levels versus those measured by NMPs and they should not be used in lieu of NMP measurements.

The applicant needs to be returned to the sound levels measured by NMP4, and the applicant needs to apply attenuation corrections to the measured sound of train pass bys to generate ambient sound levels at NSRs 1-8 & 24-26 during weekday daytimes, weekday night-times, weekend daytimes and weekend night-times.

The applicant needs to do the same with NMP3 & its NSR19 for the weekday and weekend daytimes.

ExQ 1.8.13 Background and Rating Levels:

This relates to Paragraph 10.174 of the applicant's <u>Main Statement on Noise</u>. The applicant's inclusion of Paragraph 10.174 is highly misleading, it should not be in the report, and the report should not have relied upon it at all. Paragraph 10.174 would only apply if **both** background levels and rating levels are low.

The Technical Note to BS 4142 published by the Association of Noise Consultants provides independent, third-party evidence that the applicant is failing to adhere to BS 4142. The Technical Note refers to the Scope of the 1997 version of BS 4142, "which defined very low background sound levels as being less than about 30 dB LA90, and low rating levels as being less than about 35 dB LAr,Tr."

In this case, the background and rating levels in the report are significantly higher than those levels at all NSRs during all time periods, so Paragraph 10.174 does not apply. Yet the applicant has still wrongly included it, has wrongly given the impression it applies, and has wrongly disprivileged the importance of the exceedance of the rating level above the background sound level. In this case, the exceedances of the rating levels above the background sound levels are what matter.

This has been repeatedly explained to the applicant since Deadline 1.

ExQ 1.8.14 Rail Movements:

The applicant would need to have significantly overstated the number of freight train pass bys to have an appreciable effect on the applicant's stated ambient noise levels in proximity to the railway. The applicant has done exactly that. The applicant has overstated the number of freight train pass bys to the tune of 40 freight trains during a weekday, with even larger overstatements during the weekends. A freight train pass by generates many multiples of the sound energy generated by a passenger train pass by so overstating freight trains is particularly significant.

This has been repeatedly explained to the applicant since Deadline 1.

The applicant is retreating to strategic contours. We have levels measured on the ground at the site: The measurements of NMP3 & NMP4. Both of those NMPs show sound levels far lower than those depicted by the strategic contours.

ExQ 1.8.23 c) Rating Levels:

A +3dB penalty due to "other sound characteristics" should be applied in the absence of penalties due to impulsivity, tonality or intermittency, as it was in the noise reports of other rail freight interchange proposals.

This has been repeatedly explained to the applicant since Deadline 1.

Whether the applicant does or does not regard the addition of the +3dB as causing a change which is significant has no bearing on whether the penalty should be applied.

The applicant's report contains multiple layers of wrongful behaviour which coalesce to create a distorted picture. A separate "sensitivity analysis" does not correct any of the wrongful behaviour in the report and the applicant's noise report remains fully distorted.

ExQ 1.8.24 Rating Penalties:

The applicant states: "The rating penalties have been applied in accordance with the subjective method". This does not explain how the applicant has made decisions concerning rating penalty allocation.

Has the applicant simply had a guess? There's no evidence the applicant has done anything other than that.

In the case of <u>The West Midlands Rail Freight Interchange Environmental Statement On</u> <u>Noise and Vibration</u>, a clear method was disclosed and used "to provide a consistent, quantified approach to determining the likelihood of each characteristic being audible." Applying that method to the sound levels in the applicant's report leads to far higher rating penalties than the unsubstantiated rating penalties in the applicant's report.

This has been repeatedly explained to the applicant since Deadline 1.

ExQ 1.8.26 Magnitude of effect applicable to LAFmax levels:

The applicant's responses strongly indicate the report is not considering the number of container placements and spreader impacts there may be during a night-time period, despite there likely being very many of them.

ExQ 1.8.33 Noise – Burbage Common Wood:

The applicant states: "There is a small area adjacent to the A47 link road near where the road crosses the railway line, that is predicted to experience noise levels up to 65dB LAeq,T, but this is not representative of the area as a whole."

At exactly the same time, the applicant is using ambient sound levels measured in extremely close proximity to the railway line, without attenuating the measured sound of the train pass bys to the location of Burbage Common's NSR 19, ~85 metres from the railway line.

The applicant has used these ambient sound levels containing unattenuated, extremely close proximity train pass bys - leading to ambient sound levels of 57 dB - as being representative of the area.

Can the Examining Authority see the inconsistency here?

The applicant states: "The assessment has also assumed the higher noise level (i.e no mitigation) for gantry cranes, which in reality will be lower."

The post-mitigation specific sound levels presented by the applicant and used in the applicant's comparison tables actually exclude all noise associated with the gantry cranes.

The applicant explains this in Paragraph 10.284 of the applicant's <u>Main Statement on Noise</u>: "Due to the height of the gantry cranes, a barrier of significant height would be required to remove line of sight to the nearest NSRs. Therefore, consideration has been given to plant selection and noise control options further in this section, to control the noise at source. Considering this, the noise associated with the gantry cranes and associated character correction have been removed from the following assessment."

The applicant does not show the post-mitigation specific sound levels with the gantry cranes included.