10dB acoustics

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Ms Helen Wass

Cambridgeshire County Council

Shire Hall

Castle Hill

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CB3 OAP

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Dear Ms Wass

Re: Barrington Quarry, Cambridgeshire

Comments on representations in respect of planning application

Further to our discussions I have read the representations from the Barrington Parish Council, Bendyshe Way Residents Association and Mr & Mrs Pow and would make the following comments. I have no comments to make in respect of the letter from Cemex, which I consider to be self explanatory.

As advised by counsel, the Planning Policy Guidance Minerals (PPGM) is the relevant guidance in respect of this development and the limits contained in that document relate to 1 hour LAeq levels and not an average over a day, although WBM have referenced daily limits in their submission. As you have indicated that a limit on train movements of a maximum of two per hour is to be incorporated in the draft conditions, limiting the overall number of movements per day would have no effect on any assessment carried out under the terms of PPGM.

The effect of reducing the number of trains from a maximum of 4 per day to 2 per day would reduce the overall average noise level by 3dB, which is generally regarded as the smallest change in noise level that can be detected by the human ear. Changing from 3 trains to 2 trains per day would reduce overall noise levels by less than 2dB, which would not be regarded as a significant change in noise level and would be undetectable to the human ear. However, it is import to note that because the train movements are discrete events widely separated in time this is not a satisfactory representation of the actual perceived noise impact and obviously reducing the number of such events would reduce the noise impact on residents to some extent. I am unaware of any substantive research that would quantify this effect and the reduction in daily noise impact would also need to be judged in the context of an extended infilling programme.

With regard to the concerns expressed by Mr and Mrs Pow, it would appear that their primary concern is that engines are idling at point Z, which is directly opposite College Farm. It is important to note that counsel's opinion is that the Planning Practice Guide Minerals (PPGM) applies to this site and development and the daytime noise limit contained in this guidance is 55dB LAeq,1h. The calculations provided by Cemex indicate that this limit will not be exceeded at the boundary of College Farm when a Class 66 locomotive is idling continuously at point Z. However, Cemex state that "the noise from a train with 2 Class 47 locomotives was found to be around 58 dB LAeq,5min when idling prior to departure to the branch line. At this magnitude, idling can only occur for around 30 minutes before 55 dB LAeq,1h is exceeded at Location A, which is representative of the dwelling. Within the garden, which is closer to the sidings, noise levels will be higher."

I have already suggested that a condition be attached to any consent granted that idling of locomotives must only take place at stabling points X and Y in order to mitigate against adverse noise impacts, and this suggestion is to be incorporated in the draft conditions document. The phasing out of older locomotives will also assist in mitigation.

The provision of acoustic fencing is not necessary in respect of daytime train movements as the calculations indicate that train noise levels will be within the PPGM limits with no further mitigation required, provided the older locomotives are not used and stabling takes place at points X and Y. In respect of night time operations, such fencing has been suggested by WBM as suitable mitigation and this would be taken into account on submission of a scheme to allow night time operations. Such operations would not take place until a suitable scheme has been approved by the council.

The issue of the age and condition of locomotives and rolling stock is to a large extent out of the control of Cemex and it may be that this aspect cannot be conditioned. I am aware that some Class 66 locomotives (used by DB Schenker) have been fitted with Auto Engine Stop-Start but I do not know how widespread this practice is among the other operators.

It is usual to locate monitoring positions at publicly accessible locations in order than anyone can check noise levels and reproduce monitoring exercises without the need to move onto private land. I have already indicated to Cemex and WBM that their monitoring may be carried out on any land they have access to.

With regard to the issue of Wilsmere Down Farm and the provision of noise protection, any form of barrier with relatively modest noise reduction would be suitable provided it is the same height and length as the originally proposed bund. However, the improvement in noise level afforded is relatively

small and the duration of any likely exceedance of noise limits is very limited. The additional cost of constructing an alternative barrier is not known at this stage but may be significant.

Should you require any further assistance please let me know.

Yours sincerely

Gordon Brown