I refer to the above planning application and letter submitted by a number of residents in the Peterculter area dated 9 October 2016 regarding the noise impact assessment carried out by CSP acoustics and dated 10 June 2015. The residents have also submitted a supporting technical review report of the NIA, carried out by The Airshed Limited, dated 6 October 2015.

The residents raise the following issues on the basis of the comments raised by The Airshed:

1. Use of inappropriate assessment criteria, particularly average versus peak noise
2. Insufficient allowance made for the features of the sound
3. Very limited survey of background noise and does not include the early morning period
4. A lack of an assessment of loss of amenity in gardens

The Environmental Health Service has reviewed the report by The Airshed and has the following observations with respect to the issues raised by the residents.

1. **Use of inappropriate assessment criteria, particularly average versus peak noise**

   The is no specific methodology for the assessment of noise from dog boarding kennels, as acknowledged by The Airshed. Both acoustic reports agree on the noise prediction methodologies in relation to noise source estimates and the calculation of breakout and noise propagation.

   The report by CSP acoustics assesses the impact to PAN 1/2011 and the accompanying Technical Advice Note TAN 1/2011. The Airshed report assess the
impact against BS4142: 2014 Methods for rating and assessing industrial and commercial sound. The Airshed placed greater emphasis on the findings through the use of BS4142. CSP acoustics did not use BS4142 as an assessment criteria.

The scope of BS4142 states it is not intended to be applied to the rating and assessment of sound from domestic animals. Whilst a dog kennels may be considered a commercial operation the noise source being assessed is from domestic dogs. On that basis it is the Environmental Health Services position that the use of BS 4142 is not a suitable assessment method.

Maximum noise levels (Lmax) where considered in the CSP Acoustics report with respect to internal levels in the nearest noise sensitive receptors bedrooms at night. The WHO guidelines and BS8233 were used as a assessment criteria to which there appears to be no dispute. In relation to Lmax noise levels in external areas during the day the WHO guidelines do not detail any criteria.

Both reports have provided an assessment of impact from the proposed kennels for day time noise outside the nearest noise sensitive receptors using TAN. The reports detail different significance of impact.

2. Insufficient allowance made for the features of the sound

The aspect of applying penalties for sound is detailed in BS4142 methodology. Therefore the Environmental Health Service does not consider the application of such a penalty reasonable.

The CSP Acoustics report details a worst case specific sound level at the nearest noise sensitive receptor based on dogs barking for 30 minutes in every 60 minute period (44 dB LAeq 16 hours (free field)). The Airshed has detailed a worst case specific sound level of dogs barking in a reference time interval of 1
hour (47 dB LAeq 1 hour (free field)) in accordance with BS4142. No detail was provided for taking account of any “on time” correction for the intermittent nature of dog barking in the 1 hour reference period. The Environmental Health Service considers dogs may bark intermittently over a given time period and assessment based on dogs barking for 30 minutes in every hour over a 16 hour period to be a reasonable worst case scenario for specific sound feature.

3. **Very limited survey of background noise and does not include the early morning period**

The CSP background noise survey daytime covered the periods 1717 hrs to 1737 hrs and 2101hrs to 2156hrs.

The background levels were derived using average of the LAeq 5 minutes between 2101hrs and 2156hrs. Background measurements of LA90 were also collected during these periods.

The Environmental Health Service considers this to be a reasonable survey to obtain a background during a quieter period.

Notwithstanding this, following a review of both acoustic reports the use of LA 90 as a measure of background noise is considered reasonable in the assessment of worst case impact, if any, when comparing to the specific noise level.

4. **A lack of an assessment of loss of amenity in gardens**

The CSP details an assessment of external daytime kennel noise impact using
PAN 1/2011 TAN magnitude and significance and conclude a significance of impact of 'slight/moderate'.

The Airshed detail a TAN assessment methodology (TAN table 3.5) using noise data from CSP acoustics and noise levels derived from BS4142 assessment criteria to conclude a significance of impact as large/very large. The assessment uses the rated dog barking noise level of 47 dB LAeq 1 hour and the LA90 back ground noise level for the same evening measurement period.

Taking the LA90 background noise levels into consideration if 44 dB LAeq 1 hour (on time correction of 30 minutes barking per hour ) substitutes the 47 dB LAeq 1 hour in 3rd row of Airshed TAN Assessment Methodology a “After-Before” of 3.5 is derived . This gives a magnitude of impact of moderate. The sensitivity of receptor based on the likelihood of complaint (row 6 of Table 2 Airshed report) derives an outcome of + 8, significance moderate.

On review of both acoustic reports and to allow for greater certainty of minimizing any noise impact on amenity in gardens early morning and evening should the background fall below that measured, it is recommended that further noise mitigation could be achieved by requiring dogs to be kept in night time enclosed kennels between defined hours, such as between 1900hrs and 0800hrs.

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