

**Scott Wilson**  
12 Regan Way  
Chetwynd Business Park  
Chilwell  
Nottingham  
NG9 6RZ  
United Kingdom

Phone: +44 (0)115 9077000  
Fax: +44 (0)115 9077001  
www.scottwilson.com

Direct Line: 0115 907 7028  
email: [steve.cawser@scottwilson.com](mailto:steve.cawser@scottwilson.com)

Dr J England  
Morton House  
Morton Road  
Darlington  
Co. Durham  
DL1 4PT

Your Reference: 24/06/JRE  
Our Reference: D115146/NOIS  
Date: 23/02/07

Dear John,

**RE: Noise ES Chapter Middleton Lodge Quarry**

The assessment of noise impacts presented in the ES covers the topics one would expect to see covered for a development of this type and there is an adequate level of detail.

The overall conclusions, based on the information provided, appear to be reasonable. However, there are a number of points of detail that I would like to draw your attention to and discuss.

Ambient noise monitoring has been undertaken over a limited time frame. The noise environment at seven representative locations has been monitored over a series of 15 minute samples between the hours of 07:00 and 19:00 on a single day. There were between four and five of these 15 minute samples collected at each monitoring location.

Considering the nature of the development under assessment, it would have been appropriate to have collected ambient noise data by monitoring continuously over a number of days at one or more of the monitoring locations, possibly the most noise sensitive. This could have been supported by a series of 15 minute samples at the other locations. This would have produced a much broader picture of the ambient noise environment at the noise sensitive receptors; however, the measurements taken will be representative of the noise environment at the time they were collected.

The tabulated results for the background noise have been based on an average of the samples measured at each location. The response of residents to the quarry operations is likely to be determined by the minimum background noise level experienced during operational hours. The use of the minimum background noise would produce a true worst-case assessment. However, since the difference between the minimum and average  $L_{A90}$  is typically 1dB, this will not influence the assessments significantly.

The predictions of the noise impacts of the temporary and long-term operations have been carried out in accordance with current guidance. There is not enough information given in the Chapter to enable the calculations to be checked and verified. For example, the results detailed in Appendix 8.3 and Appendix 8.4 do not indicate which item of plant results in which noise level. The number of results for each receptor is different to the number of items of plant listed in Table 8.2 of the Chapter.

**Scott Wilson Ltd - Part of the worldwide Scott Wilson consultancy group**

Registered in England: No 880328 Registered Office: Scott House, Basing View, Basingstoke, Hampshire RG21 4JG  
Offices in: Abingdon, Ashford, Basildon, Basingstoke, Belfast, Birmingham, Bristol, Chesterfield, Crewe, Dublin, Edinburgh, Glasgow, Guildford, Inverness, Leeds, Liverpool, London, Manchester, Mansfield, Matlock, Newcastle-upon-Tyne, Nottingham, Peterborough, Plymouth, Swindon, Telford, York and over 30 offices worldwide

To enable the predictions to be verified, details of distances for each receptor and item of plant, ground attenuation, barrier attenuation, percentage 'on-time' and traverse distances for mobile plant would need to be provided.

The table of significance given in Table 8.5 has been derived from the guidance given in MPS2 Annex 2. The significance attributed to temporary operations has been based on the absolute level and duration for temporary works given in MPS2 of 70 dB(A) for 8 weeks. Ideally, significance should be based on a comparison with a range of levels, the duration and with reference to the ambient or background noise levels. This approach has been adopted for the long-term operations.

For example, the significance for the temporary operations will categorise a noise level of 69 dB for 7 weeks as having a negligible impact. If this were to occur at Woodhouse Farm for example, this would be more than 20 dB above the background noise level. Such an impact would be a substantial increase in noise levels, although temporary in duration. It is considered that the scale for categorising the impact of temporary operations could be improved; however, this would not change the outcome of the assessment since the predicted levels are within guidance given within MPS2.

There is one potential noise source that has not been discussed within the Chapter. This relates to the noise emitted by reversing alarms. MPS2 Annex 2 states, in paragraph 2B.5, that reversing alarms are one of the principal causes of complaints about noise from mineral operations. No discussion on this topic has been presented either within the impact assessment, or within the details of the Environmental Management policy.

Noise from reversing alarms has the potential to cause annoyance due to the intermittent and tonal nature of the sound, making it clearly audible above the background noise, even at relatively low levels. This also makes it difficult to assess the impact accurately. I would expect comment on reversing alarms to be included in the Chapter.

As indicated above, I do not believe that had the impacts been assessed differently it would have drawn different conclusions. The only omission from the Chapter is the lack of discussion on the impact of reversing alarms. However, since there is no agreed methodology for predicting the impact from these, the inclusion of this would not have changed the eventual conclusions.

If you have any queries, or you require any further details, please do not hesitate to contact me.

Yours sincerely  
for SCOTT WILSON LTD

Steve Cawser  
Noise & Vibration Consultant