

J.A. Higham MRICS
Pagham Beach (Holdings) Ltd
Woodlands Cottage,
Normandy,
Guildford,
Surrey
GU3 2HT

28th October 2015

Dear Tony

Re - Report no. 3279-R1 – land to the east of 29 Harbour Road, Pagham, West Sussex 14th May 2015

Thanks for your recent communication in respect of the above site and subsequent EHO comments. Our consultant on site advised that in his view the low level of noise subjectively attributable to the pumping station could not be accurately differentiated from the ambient background noise levels.

I understand from yourself that Southern Water were contacted but do not have records of how often the pumping station operates other than it operates on demand. Obviously such operational conditions make a definitive survey impracticable as we have no way of ascertaining just what constitutes a “demand” period or predicting when it may happen in order to arrange a survey of the event.

However, taking information from an internal survey by Clover Acoustics of a similar pumping station in the Peterborough area, noise levels internally with pumping equipment operational were found to be 81dB(A) within the building. Using this as a reasonable source level of similar equipment a prediction can be made using “Woods” formula

$$SPL2 = SPL1 - R + 10\log Sp - 20\log r - 14$$

Where:

SPL2 = Noise level at the receptor (to be determined)

SPL1 = Noise level of the proposed operation predicted at 1m of the internal facade – (81BA)

R = Building attenuation (roofing taken as weakest element: 40dB R_w ¹)

Sp = Approximate surface area of the weakest element – Pump Station Roof (30m²)

r = Distance (3m)

– 14 = Diffusivity correction (reverberant field to free field)

Following the above the resultant levels calculated at the nearest sensitive receiver can be compared to the lowest background condition and an assessment made. Noise levels from the specific source are calculated to be 32dB(A) which is below the lowest recorded background level found during the survey. Considering window attenuation internal levels well within the criteria identified in BS8233 are readily achievable. This prediction

¹ Euroclad Panel equivalent

supports the low levels of noise apparent on site and we offer this as supplementary evidence in support of the findings of our report.

Kind regards



Steve Clow MIOA