Noise Monitoring

Victoria Line

27th November 2018

Sampling Information

Location	Vic Line – Brixton – Walthamstow – Brixton. Drivers Cabin				
Noise Meter S/N	B/85704 CEL 633B (Class 2)				
Calibrator S/N	B/85704				
Sampler					

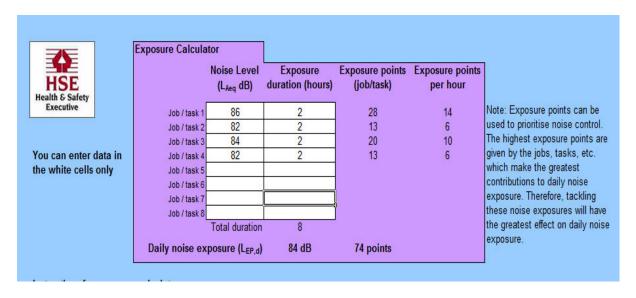
Noise Measurements

S tart Time	S top Time	Laeq	Lceq	La Max	Lc Peak
09:10	09:43	85.5	89.9	-	117.6
09:46	10:33	82	86.9	-	111.3
10:36	11:07	83.8	88.1	-	114.1
11:12	11:45	82.2	84	-	113.6

HSE Noise Calculator

Assumptions are:

- 8 hour work exposure time
- Noise reading samples from above split equally across 8 hours. So each measurement has been assumed to be for a 2 hour sample on the noise calculator.



Results

The Noise readings taken on the 27th November 2018 if extrapolated out into 8 hours of exposure given an overall workshift Laeq of 84 dB(A).

Regulation 4 of the Control of Noise at Work Regulations 2005 states:

The lower exposure action values are—

- (a) a daily or weekly personal noise exposure of 80 dB (A-weighted); and
- (b) a peak sound pressure of 135 dB (C-weighted).

At 84 dB(A) the lower exposure action value of 80 dB(A) is reached in 3 hours. Based on the findings of the noise survey, if track exposure time routinely exceeds 3 hours then suitable hearing protection must be offered to employees.

From a legal perspective, where work shift exposures are below 85 dB(A) but above 80 dB(A) employees are not obliged to wear hearing protection but it must be offered to the employee.

Appropriate Selection of Hearing Protection

The exposure to noise is marginally above the lower action level. Care should be taken not to over protect and lower noise at the ear to below 70dB(A). A low attenuation ear plug with an SNR up to 21 dB is recommended. Banded types are ideal for intermittent use and do not require rolling of the plug material which can introduce dirt into the ear canal. Earplugs with an SNR above 21 are likely to result in over protection and increase the risk of operatives not hearing alarms and other forms of communication.

3M Banded Earplugs (21 dB S NR)

https://www.3m.co.uk/3M/en_GB/company-uk/3m-products/~/All-3M-Products/Safety/Worker-Health-Safety/Personal-Protective-Equipment/Hearing-Protection/Banded-

 $\underline{Earplugs/?N=5002385+8709322+8711017+8711405+8720539+8720546+8720745+329399}\\ \underline{1248\&rt=r3}$

HSE Hearing Protection Calculator

