

Technical Appendix 9.1: Acoustic Terminology

Term	Definition
Safeguarded Wharf	Those wharves in London which have been given special status by the Mayor of London and the Port of London Authority (PLA) which ensures they are retained as working wharves and are protected from redevelopment into non-port use.
$L_{eq,T}$ or Ambient noise	A noise level index called the equivalent continuous noise level over the time period T. This is the level of a notional steady sound that would contain the same amount
$L_{90,T}$ or Background Noise Level	A noise level index defined as the noise level exceeded for 90% of the time over the time period T. L_{90} can be considered to be the "average minimum" noise level and is often used to describe the background noise.
Vibration	The periodic movements of structures transferred by ground and parts of the building, due to events such as train pass-by, piling, blasting or use of heavy machinery.
Decibel (dB)	A scale for comparing the ratios of two quantities, including sound pressure and sound power. The difference in level between two sounds s_1 and s_2 is given by $20 \log_{10} (s_1/s_2)$. The decibel can also be used to measure absolute quantities by specifying a reference value that fixes one point on the scale. For sound pressure, the reference value is $20\mu\text{Pa}$.
A-weighting, dB(A)	The unit of sound level, weighted according to the A-scale, which takes into account the increased sensitivity of the human ear at some frequencies.
PPV	The Peak Particle Velocity corresponds to the maximum ground movement velocity and is measured in mm/sec. It gives a value and associated direction for the three dimensional axes.
BNL	Basic Noise Level: a road traffic noise at a reference distance of 10m from the road edge, expressed in terms of the LA_{10} statistical level (18-hour or 1-hour), and calculated according by Calculation of Road Traffic Noise (CRTN) based on the traffic flow.
AAWT	Annual Average Weekday Traffic