

# Exercises

Master's degree in environmental science and engineering

## Occupational and environmental health

### Physical agents - noise and vibration

#### 1) The noise of three machines

Calculate the sound level resulting from 3 machines each producing the following levels: 80 dB(A), 85 dB(A) and 90 dB(A).

#### 2) Noise level

A noise dose measured over 4 hours gives a result of 67%. Calculate the average noise level in dB(A) during this period.

#### 3) Site drilling machine ?

An investigation is carried out in the vicinity of a construction site drilling machine. Despite the wearing of adapted protections (hearing protections), the operator complains about hearing annoyance and sleep disorders. A noise measurement carried out by the site safety officer shows a noise level of 92 dB(A). This safety officer also carries out an impact noise measurement and obtains 96 dB(C), which turns out to be lower than the legal threshold.

What hypothesis can you formulate, what do you recommend?