Spontaneous mutation
A mutation that occurs as a result of natural processes in cells, as opposed to those that arise because of interaction with an outside agent or mutagen.

Soft tissue sarcomas
These are a rare type of cancer that develop from cells in the soft, supporting tissues of the body such as muscle, fat and blood vessels. They may occur in limbs, chest, abdomen or pelvis and less commonly in head and neck.

TCDD
The most studied dioxin, and the one that is used as a reference compound when considering the toxicity of mixtures of dioxins, is often referred to simply as TCDD. This is an abbreviation of its full chemical name, 2,3,7,8-tetrachlorodibenzo-p-dioxin. It is considered the most toxic dioxin.

TEOM
Tapered Element Oscillating Micro-balance. An instrument used to measure the mass concentration of particles in the air. Particles are collected on a vibrating rod: the mass deposited affects the frequency of vibration of the rod and this, being recorded, allows the mass of particles in the air to be calculated.

Tolerable Daily Intake (TDI)
An estimate of the amount of contaminant, expressed on a body weight basis (e.g., mg/kg body weight) that can be ingested daily over a lifetime without appreciable health risk.

Total suspended particulates
A measure of particles derived by collecting particles of approximately 100 µm or less in a sampler. This includes particles that are too large to enter the lung. The measurement method has generally been superseded by measurement of PM_{10}.

Toxic Equivalency Factor (TEF)
A measure of the relative toxicological potency of a chemical compared to a well characterised reference compound. TEFs can be used to sum the toxicological potency of a mixture of chemicals which are all members of the same chemical class, having common structural, toxicological and biochemical properties e.g. dioxins. In the case of dioxins the reference compound is TCDD.

Toxic Equivalent (TEQ)
This is a method of comparing the total relative toxicological potency within a mixture using TEFs (see above). It is calculated as the sum of the products of the concentration of each chemical multiplied by the TEF.

Ultrafine component
The component of particles less than about 100 nm in diameter.

Uncertainty factors
Value used in extrapolation from experimental animals to man (assuming that man may be more sensitive) or from selected individuals to the general population; for example, a value applied to the No Observed Adverse Effect Level (NOAEL) to derive a TDI. The value depends on the size and type of population to be protected and the quality of the toxicological information available.