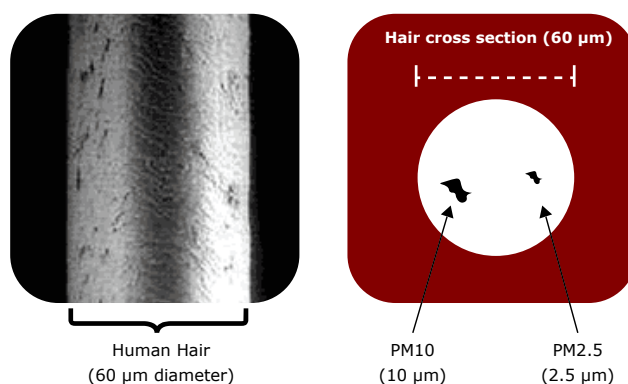


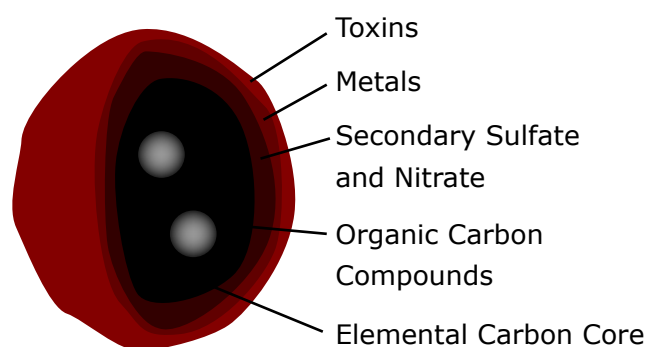
FACTS - Diesel Particulate Matter

Particulate matter (PM) is the term for solid or liquid particles found in the air. Diesel PM, also referred to as diesel soot, is part of a complex mixture that makes up diesel exhaust. Diesel PM is a health concern as it includes very fine particles (PM_{2.5}) that are small enough to be inhaled deeply into the lungs, resulting in impacts to both respiratory and cardiovascular systems.



Source: <http://www.arb.ca.gov/pm/pm.htm>

The health risk is further increased because diesel PM has a very rough surface, which bonds easily with other toxins. When this happens, the particles become a vehicle, carrying those toxins into the body. An example of diesel PM, which is composed of a carbon and ash (diesel soot) core covered by layers of organic compounds, sulphates and nitrates, metals and other trace elements, is shown below.



Source: <http://pghdieselcleanup.wordpress.com>

Diesel PM also causes global warming when it absorbs heat in the atmosphere and when black soot falls on snow and ice. The amount of glacial melting caused by soot is similar to amount of melting caused by carbon dioxide. However, unlike carbon-dioxide, cost effective technology exists that can substantially reduce diesel emissions.

Information on ways to reduce diesel PM emissions can be found on Facts – Emissions Reduction Measures.

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