

Air Pollution Monitoring

Steve Wilcock

Environmental Protection Team Leader

Mid Kent Environmental Health

Local Air Quality Management

Under the Environment Act (1995), local authorities must periodically review and assess air quality within their boundaries, and identify areas where there are likely to be exceedances of the national air quality objectives.

Where these objectives are exceeded, the local authority must declare an Air Quality Management Area (AQMA), and develop an Air Quality Action Plan (AQAP) which sets out what they are going to do to work towards meeting the objectives.

This process is known as Local Air Quality Management (LAQM).

What do we measure?

Nitrogen Dioxide

PM₁₀ (particulate matter no greater than 10 microns in diameter)

PM_{2.5} (particulate matter no greater than 2.5 microns in diameter)

Sulphur dioxide

~~Benzene~~

~~1,3-Butadiene~~

~~Lead~~

~~Carbon monoxide~~

How do we measure?

- By diffusion tube

cheap alternative, not especially accurate, only provide monthly or annual averages. Owing to low cost, can be used widely around the district.



Or by continuous monitoring

Expensive to run, expensive to operate, but provide instantaneous accurate and real time pollution readings. Owing to high cost, their use is generally limited. Their positioning can also be a difficulty.



What happens if the limit is exceeded?

- Declare an Air Quality Management Area
- Produce an Air Quality Action Plan
- Typical Action Plan Measures have included:-
 - Encouraging the use of Public Transport.
 - Encouraging Walking and Cycling.
 - Encouraging the uptake of Low Emission Vehicles and road infrastructure.
 - Travel Planning
 - Use of electric charging points & low NOx boilers.