Air Quality Assessment Report 2018 Commission by MarEdu

A R Ziarati MSc

This report will focus on the obligation of the local councils on the technical report from the Department of Environment (Defra) on local air quality management (TG16) February 2018. This is designed to support local authorities to fulfil their obligation under the 1995 Environment Act. The local authorities must carry out monitoring, assessment and take action to improve the local air quality. In this process investigation of none-compliance with the air quality standards set out in table 1.1. This will lead to an action plan highlighting remedials required.

I refer to some of the alarms raised in recent years trying to address the severity of the impact of air pollution in the UK. With reference to the Telegraph (13 Nov 2016), England has the UK's dirtiest air with 25,002 deaths due to air pollution. Cornwall and the Scottish Highlands enjoy the UK's cleanest air. BBC reported 40 towns and cities in the UK are at or have exceeded the air pollution limits set by the World Health Organisation (WHO) estimate that 30 areas have fine particles of air pollution levels above ten micrograms per cubic meter, with another 17 at that limit. The areas that exceeded the level included London, Manchester and Swansea. It added that globally nine out of ten people breathe air containing high levels of pollutants. Fine particles of air pollution is particularly bad for us, penetrating deep into the lungs and cardio vascular system, causing diseases including strokes, heart disease, lung cancer and respiratory infection.

In accordance with the national centre for bio technology information, current levels of air pollution are consistently associated with asthma development and morbidity among children. This is suggesting current regulatory policies may be insufficient.

Identifying specific sources and toxic materials of air pollution and accessing air pollution related asthma outcomes are necessary to provide control measures. The local air quality management (LAQM) system in England, Scotland and Wales has now changed. There is now more emphasis on action planning in connection with the improvements in air quality. The more challenging pollutants for local authorities to focus on are: Nitrogen dioxide (Co2), Particulate matter (PM10) and (except in Wales) Sulphur dioxide, whilst introducing a new approach to reduce PM2.5 in England and statutory obligation in Scotland. Now the emphasis are on action planning and to aid local authorities updated tools and measures have been introduced, which help assessment of the impact of actions taken and these are regularly reviewed and assessed for improvement, when obligations cannot be met.

For England there is a new flexible approach in reducing PM2.5, as examples of the interpretation of this approach highlighted in chapter 7 of ALQM (PG16). For Scotland the obligation for PM2.5 and is aligned to the existing methods, which are used for review and assessment of other pollutants. On the other hand for England there is no such

prescription, instead, there is a flexible approach by which the local authority will be in consultation with the public health officials regarding a method statement and approaches to be taken to target reducing PM2.5. Following the LAQM review process it has been decided to retain Benzene, 1,3-Butadiene, Carbon Monoxide and lead regulations for England and Wales as all objectives for these pollutants have been met for several years, but reporting on these pollutants are statutory obligation for Scotland and Northern Ireland.

Table 1.1 shows pollutants and the UK air quality objectives see The Department of Environment LAQM technical guidance (TG16). Table 1.2 is for Northern Ireland, which shows summary of the round 6 of the process based on phased reporting being used until LAQM is reviewed.

England, Wales and Scotland adopted a methodology called Streamlined approach in order to review and access air quality to produce Annual Status Report (ASR) and Annual Progress Report (APR). In London the Mayor has given power, by which and effective and more coordinated set of responsibilities to be discharged with respect to LAQM system by the secretary of estate.

The local authorities in England have ASR in mandatory template form which replaces all other reports. Only action plan remains as separate. The ASR report must be made available by local authority on their website. Local authorities are mandated to complete a new public facing summary as well. Reports to be submitted by 30 June each year. Extra appendices may be provided, when extra analysis such as screening assessment or dispersion modelling studies are carried out.

Fast track option may be used when persistent exceedance of pollutant limit occurs, so that action plan measures to remediate the problem is provided. Clean air zones are introduced where the cleanest vehicles are allowed to operate, or introduce charges for vehicles not meeting emission standards in different class of clean air zones. In Scotland Annual Progress Report (APR) are required to be submitted annually. This includes Wales LAQM too, which replaces all other reports. Fast-Track AQMA is available for England.

AFFECTIVE AIR QUALITY ACTION PLAN

There has been a number of approaches to improve the development of Air Quality Action Plans (AQAPs). The concept of sustainable development is the key order for the AQAP to be effective. An integrated package of measures linking with other policy areas are:

- a) Land use planning and sustainable development.
- b) Transport planning
- c) Climate change policies in relation to carbon management.
- d) Low emission
- e) Public Health outcomes, improving well being of population and education programmes promoting health.

With the above plan there are key requirements, as follows:

- 1) Development AQAP in stages
- 2) Carry out monitoring assessment
- 3) Establish level of action
- 4) Provide links to other strategies
- 5) Communicate with key stake holders at the start
- 6) Take measures and carry out impact assessment
- 7) Monitor
- 8) Consult with organisations, residence, businesses, DEFRA, Environment Agency, transport bodies.

As part of my conclusion, I refer to a recent evening news report from Channel 4 (TV) on 17 August 2018, a 9 year old girl Ella lost her life in 2013 due to severe air pollution with asthma and acute respiratory failure as a result. Her distressed mother claims her daughter's death is due to spike in air pollution in her area. The Mayor of London Sadiq Khan called on the Attorney General to back a new inquest into the death of Ella. Forty thousand deaths per year is due to high level of air pollution experts say and also whole life impact to consider too, for example, the womb infant development is reduced and the size of the foetus is reduced too. Post birth, it produces pneumonia, reduced lung function growth and cancer.

The consumer group Which found the majority of modern diesel engine cares exceed nitrogen dioxide level. None official tests are not accurate only official tests (EU tests) compares models on like for like basis. At the present time, current targets are not moving fast enough. For decades the focus is on sustainable development concept, which has been introduced and local authorities integrated this within their mandatory guidelines on monitor and control of pollution in their local areas under the umbrellas of sustainable development and public health carries a highly ethical values relating to well being of future generations. The decision makers of the present generation therefore have an obligation to fulfil.