

Air Quality Management Areas - Frequently Asked Questions

What is an Air Quality Management Area?

An Air Quality Management Area (AQMA) is declared for an area where the local air quality is unlikely to meet the Government's national air quality objectives.

Once an AQMA has been declared, the Council has to carry out further work to monitor the air quality in the area and identify what action can be taken to improve it.

What are the national air quality objectives?

The National Air Quality Strategy sets air quality objectives for England and Wales. These air quality objectives have been set at levels which include a safety margin to protect the health of the public and if these levels are exceeded normally healthy people will suffer no adverse effects. As levels increase health effects will be felt and people with certain respiratory health conditions will notice this sooner but the levels have to be substantially higher before there is a significant risk. By keeping nitrogen dioxide below the objective levels the risk is minimised.

There are two air quality objectives for nitrogen dioxide; one to protect residents and others who will be breathing the air for a long time and one to protect visitors who are just passing through the area.

- The long-term objective (for residents) is 40ug/m³ averaged over a year.
- The short-term objective (for visitors) is 200ug/m³ averaged over one hour.

What are the health effects associated with high nitrogen dioxide levels?

Nitrogen dioxide can have both long and short term health effects on local residents. Short term effects include irritation of the eyes and throat and can lead to the increase of symptoms of respiratory conditions including asthma, and bronchitis.

The long term health effects will increase the susceptibility to respiratory conditions among healthy individuals, and lead to gradual deterioration in health of people already suffering from respiratory problems, particularly in elderly people.

Where does nitrogen dioxide come from?

Although burning any fuel, such as coal, oil or natural gas, produces emissions which react to produce nitrogen dioxide in the air the main source of nitrogen dioxide is the burning of petrol and diesel in vehicles.

As a result, the problems in the Borough and in other towns and cities are usually found close to roads; normally within a few metres of the kerb.

The pollutant usually disperses rapidly but if there are buildings close to the road it will build up to higher levels.

Why is the Council Declaring an AQMA in Twynyrodyn?

Air quality monitoring has been carried out in the Borough since 1993. The air quality here is generally good but in recent years the levels of nitrogen dioxide found along Twynyrodyn Road have been rising. This is a result of the increase in road traffic caused by local developments and the general increase in the numbers of road vehicles.

Nitrogen dioxide levels on Twynyrodyn Road are now consistently in excess of the Government's long-term Air Quality Objective of 40ug/m³ and, as a result, the Council is legally obliged to declare an AQMA. Measurements taken so far indicate that even in the most polluted section of the road the short-term objective level is not being exceeded.

The boundaries of the AQMA have been drawn to include all areas where an exceedance of the nitrogen dioxide objective might occur.

What steps are the council taking to resolve the matter?

Once an AQMA has been declared, the Council must produce an Air Quality Action Plan and submit it to the Welsh Government within 18 months. The Action Plan identifies all steps which have been considered to try to reduce the level of nitrogen dioxide to below the national objectives. Some of these steps may already have been actioned and others will be proposed as additional measures to further improve air quality. Having prepared a draft Action Plan the Council is required to consult the public and various government and trade bodies before finalising it and submitting it to the Welsh Government.

A wide range of options for reducing the level of traffic pollution in the Twynrodyn area have been considered but many were found to have potentially significant adverse effects for people in both the affected and nearby areas. All of the options considered are listed in the draft Action Plan but three in particular are expected to be able to improve air quality in the AQMA with fewer adverse effects elsewhere and with a number of positive benefits such as reducing travelling times, and therefore overall pollution emissions, and improving road safety.

The Welsh Government has been very supportive in our efforts to improve air quality in the area and has funded some initial traffic calming and road re-alignment work to reduce the levels of nitrogen dioxide in the worst-affected area. It has also funded the creation of an air quality model which has been extensively used to predict the effect of altering traffic levels on nitrogen dioxide concentrations in other areas as well as on Twynrodyn Road itself.

Do I have to declare an AQMA against my property on the land registry?

No, there is no legal requirement for the AQMA to be placed on the land registry against properties located within the AQMA, however, the information has to be made available to the public, and will be placed on a national website by DEFRA, and locally on Merthyr Tydfil County Borough Council's website.

Does the AQMA stay in place forever?

No, the Council will continue to monitor the levels of nitrogen dioxide and if the annual average nitrogen dioxide level falls below the national objective, the AQMA can be removed.

Where can I find copies of the Council's air quality reports and details for the AQMA?

All recent air quality reports produced by Merthyr Tydfil County Borough Council for both the Borough as a whole and for the AQMA can be found on the Council's website www.merthyr.gov.uk by searching air quality.

Have other local authorities declared AQMA's?

Yes, many local authorities have identified areas where the air quality needs to be improved for a range of air pollutants in addition to nitrogen dioxide. A full list of these is obtainable at the Government's web page <https://uk-air.defra.gov.uk/aqma/list>.

This page <http://laqm.defra.gov.uk/action-planning/good-practice.html> shows the action various local authorities have taken, or are in the process of taking, to deal with their particular air quality problems. Since many have similar problems to ours some of their solutions will be usable here.

How is air quality monitored?

The Council currently have 24 nitrogen dioxide diffusion tubes located throughout the district, which are changed over every month, with the old tubes sent off for analysis.

In addition the Council also has a real time electronic air quality monitoring device located on Twynrodyn Hill to allow the study of the causes of the pollution in greater detail.

Progress reports are then produced annually using the results from the monitoring and using modelling programs.