

Fermanagh District Council

Local Air Quality Management

PROGRESS REPORT 2005

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Local Air Quality Management

PROGRESS REPORT (2005)

1 BACKGROUND

The UK Government published its strategic policy framework for air quality management in 1995 which established national strategies and policies on air quality issues.

The Environment (NI) Order 2002 (Part III) together with the Air Quality Regulations (NI) 2003 provides the statutory basis for district councils to undertake local air quality management (LAQM) duties in NI.

One of the first steps in the LAQM process is for all District Councils to carry out a review and assessment of their local air quality. This has been carried out by FDC and was based on a staged approach as follows:

Stage One

An initial screening of industrial, transport and any other sources of pollution that could have a significant impact within the council area, resulting in the likelihood of exceedances of the air quality objectives

The Stage One report for Fermanagh District Council was completed in August 2001. It concluded that no further investigation or action needed to be undertaken for the following pollutants:

- Benzene
- 1,3-Butadiene
- Lead
- Carbon Monoxide

However, the Stage One screening indicated that air quality objectives were at risk of being exceeded for three of the strategy pollutants, namely:

- Nitrogen Dioxide
- Sulphur Dioxide
- Particulate Matter (PM₁₀)

Accordingly, Fermanagh District Council was required to proceed to a Stage Two/Three Review of these pollutants.

Stage Two/Three

A more detailed assessment of all the pollutants identified as significant locally in the first stage. This included computer modelling of sources and made reference to locally monitored air quality data.

The conclusions of the second/third stage were:

• Nitrogen Dioxide (NO₂) (Stage Two):

The assessment of NO₂ emissions from road traffic was largely based upon the application of the Design Manual for Roads and Bridges (DMRB) and some diffusion tube monitoring data that was available.

The results of both the diffusion tube survey and the DMRB modelling showed that it is unlikely that either the annual mean or hourly NO₂ objective will be exceeded in Fermanagh DC area at relevant receptor locations.

It was therefore not necessary to undertake a Third Stage Review and Assessment for NO₂.

• Sulphur Dioxide (SO₂) (Stage Two/Three):

In the absence of any reliable local monitoring, Fermanagh District Council was required to proceed directly to a Third Stage Review and Assessment in respect of SO₂ from domestic fuel combustion for the 1km x 1km grid square identified in Stage One.

The results of the assessment, using ADMS computer modelling, suggested that there was unlikely to be an exceedance of the SO₂ objectives in the modelled area.

• Particulates (PM₁₀) (Stage Two/Three) :

The results of DMRB modelling confirmed that there would be no likelihood of predicted exceedances of the PM_{10} objective from traffic sources.

Based on findings elsewhere it was not considered necessary to proceed to a Stage Three Review and Assessment for PM_{10} in respect of industrial type sources, controlled or uncontrolled.

In relation to domestic solid fuel use, in the absence of any reliable local monitoring data, it again was necessary to proceed to a Third Stage Review and Assessment for this source. This also involved detailed modelling of domestic fuel emissions using ADMS version 3.1, using new fuel usage data, as well as more locally accurate PM₁₀ monitoring data from neighbouring Omagh District Council.

The modelling suggested that an exceedance of the PM₁₀ objective was unlikely.

The conclusion of the first round of the Review and Assessment process was that it is not necessary to declare an Air Quality Management area within the Fermanagh District Council area.

2 PROGRESS REPORTS

In order to ensure continuity of the Government's Local Air Quality Review and Assessment process, Progress Reports are now required in the intervening years to fill the gaps between the three yearly requirement for detailed Assessments. The aim is to report progress on implementing local air quality management and progress on achieving or maintaining concentrations below the air quality objectives.

This Progress Report is being submitted therefore as required in accordance with the LAQM Progress Reports Policy Guidance PRG NI (04).

3 NEW MONITORING RESULTS

Since completion of Fermanagh District Council's Stage 2/3 Report in September 2004, NO₂ emissions from road traffic has continued to be monitored by diffusion tubes at four sites in Enniskillen. The 2004/05 results are shown below:

Table 1: Annual average concentrations measured by Diffusion Tubes at locations in the Fermanagh District Council area in 2004

Site Name (Enniskillen)	Site Type	Sample Frequency	Average NO ₂ (μgm ⁻³) (uncorrected for bias)	Laboratory
Townhall	K	Monthly	15	Ruddock & Sherratt / Eurofins
Belmore St	K	Monthly	23	do.
Tempo Rd	В	Monthly	5.3	do.
Rossole Rd	В	Monthly	6.8	do.

K = Kerbside 1-5m from a busy town centre road

B = Urban Background in a residential area more than 50 metres from a busy road.

[Dec 2005 Objective for Nitrogen Dioxide (Annual Mean) - 40 µgm⁻³]

These results do not indicate an exceedance of the December 2005 NO₂ concentration objective. There has been no monitoring of any of the other pollutants of concern.

4 NEW LOCAL DEVELOPMENTS

Industrial Pollution Control / Industrial Pollution Prevention and Control.

Two Part B Mineral processes (quarrying / concrete products) and a Part A Combustion process (Combined Heat and Power Plant) have come into operation since the issue of the Stage 2/3 Review and Assessment Report. Construction work is also under way at the Council's proposed new Waste Management Landfill Facility at Drummee, Enniskillen. (This of course will result in the closure of the existing facility at Glassmullagh). These processes are / will be regulated by the Environment and Heritage Service (IPRI). Applications for IPC Authorisations / IPPC Permits are also being sought for a Part A poultry process, a Part C animal carcass incinerator and two Part C coating processes.

Retail / Residential / Road Developments.

There are a number of medium / large housing developments both under construction and proposed in the Enniskillen area but these are all of a similar type and density to existing developments and are not expected to adversely affect air quality.

There have been no major retail developments within the District since September 2004 nor have there been any new road schemes constructed which might significantly modify traffic flows.

5 ADDITIONAL INFORMATION

Fermanagh District Council has not been required to declare an Air Quality Action Area and consequently does not need to implement any Action Plans.