STRABANE DISTRICT COUNCIL



Environmental Health Department

Air Quality Progress Report

June 2005

Contents

- 1.0 Requirement To Produce Progress Reports
- 2.0 Local Air Quality Management Progress To Date
- 3.0 Air Quality Monitoring
- 4.0 New Local Developments
- 5.0 Draft Air Quality Action Plan

1.0 Requirement To Produce Progress Reports

This progress report is prepared in order to fulfil Strabane District Council's obligation under the Local Air Quality Management Policy Guidance: Policy Guidance on Air Quality Progress Reports (LAQM.PRG NI (04) and the Environment (NI) Order 2002.

2.0 Local Air Quality Management Progress To Date

Strabane District Council has now completed the first round of the review and assessment process. The findings of the review and assessment identified exceedences of the air quality objectives for particles (PM_{10}) resulting from domestic emissions. Three air quality management areas affecting Strabane, Newtownstewart and Castlederg became effective on 30th June 2004 and a draft action plan was developed in order to identify measures to reduce ambient concentrations of particles and attempt to comply with the objectives for particles (PM_{10}). The draft action plan is currently subject to consultation but is expected to be confirmed by August 2005.

Strabane District Council intend to comply with its requirement to produce an updating and screening assessment by April 2006 and work is scheduled to begin on this task shortly.

3.0 Air Quality Monitoring

Strabane District Council continue to operate a combined PM_{10} /sulphur dioxide monitoring station at Springhill Park, Strabane as illustrated in Figure 1 below. The site is surrounded by housing and has been in operation since April 2002. The site is subject to independent QA/QC audits by AEA Technology in order to provide confidence in the procedures adopted by Strabane District Council in managing the site and to enable the data ratification process to take place. Data management services are also provided by AEA Technology.



Figure 1 Location of the Springhill Park Monitoring Site

The automatic SO_2/PM_{10} monitors are co-located with an 8-port sampler which provides black smoke and sulphur dioxide data. The 8-port sampler has been in operation since 1999 and has recorded the highest black smoke levels in the UK in all years from 1999 to 2003. The monitoring results from the PM_{10} monitor are shown in Table 1 and Figure 2 for the calendar year of 2004.

Table 1 Strabane, Springhill Park, 01 January To 31 December 2004

These data have been fully ratified by netcen				
POLLUTANT	SO ₂	*PM ₁₀		
Number Very High	0	1		
Number High	0	118		
Number Moderate	0	551		
Number Low	34154	7779		
Maximum 15-minute mean	98 μg m ⁻³	-		
Maximum hourly mean	74 $\mu g m^{-3}$	363 μg m ⁻³		
Maximum running 8-hour mean	57 μg m ⁻³	210 μg m ⁻³		
Maximum running 24-hour	35 μg m ⁻³	130 μg m ⁻³		
mean				
Maximum daily mean	30 µg m ⁻³	125 μg m ⁻³		
Average	7 μg m ⁻³	42 μg m ⁻³		
Data capture	95.1 %	96.6 %		

These data have been fully ratified by netcen

* PM_{10} in gravimetric units All mass units are at 20'C and 1013mb

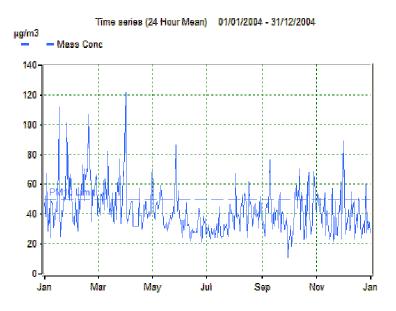


Figure 2 PM₁₀ 24 Hour Mean Results, Springhill Park, Strabane (Jan-Dec 2004)

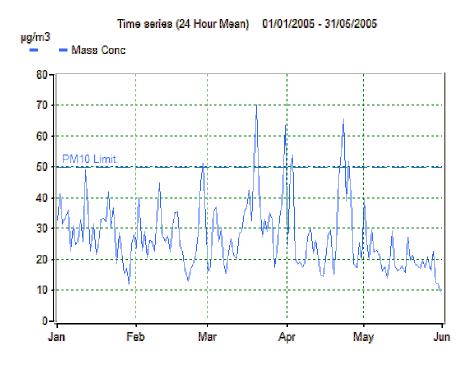
Table 2 below provides a direct comparison with the relevant air quality objectives for PM_{10}/SO_2 . The number of exceedences of the daily mean PM_{10} objective was 86 and the annual mean was $42\mu g m^{-3}$. These figures represent a reduction in the number of daily mean exceedences on previous years. However the annual mean has failed to show a significant reduction. The reduction in the number of daily mean exceedences may be accounted for by meteorological factors and in part by the commencement of the NIHE heating conversion scheme in the environs of the monitoring site. This is commensurate with an improvement in the air quality closest to the site but no improvement in background concentrations across Strabane as a whole.

Table 2 Comparison of Monitoring Data With Air Quality Objectives	

Pollutant	Air Quality Regulations	Exceedences	Days
	(Northern Ireland) 2003		
Sulphur Dioxide	15-minute mean > 266 μ g m ⁻³	0	0
Sulphur Dioxide	Hourly mean > 350 μ g m ⁻³	0	0
Sulphur Dioxide	Daily mean > 125 μ g m ⁻³	0	0
PM ₁₀ Particulate	Daily mean $> 50 \ \mu g \ m^{-3}$	86	86
Matter			
(Gravimetric)			
PM ₁₀ Particulate	Annual mean $> 40 \ \mu g \ m^{-3}$	1	-
Matter			
(Gravimetric)			

This reduction in daily mean exceedences has continued into 2005 as indicated in Figure 3 below with only 8 exceedences in the months January 2005 to May 2005.

Figure 3 PM₁₀ 24 Hour Mean Results, Springhill Park, Strabane(Jan-May 2005) (Subject to Ratification)



4.0 New Local Developments

The Environmental Health Department of Strabane District Council dealt with over 860 planning consultations in the period 01 April 2004 to 31 March 2005. The majority of such consultations related to single one-off dwellings as is commonplace in a rural district such as Strabane District Council. However there were a number of consultations in relation to larger housing developments, sand and gravel quarries and other commercial development. The Environmental Health Department continue to assess the potential impact of such developments on local air quality and make recommendations to Planning Service accordingly, particularly where developments are within or adjoining existing Air Quality Management Areas. Recommendations are also made to the Industrial Pollution and Radiochemical Inspectorate in relation to existing or proposed industrial processes controlled under the Industrial Pollution Control (NI) Order 1997 or the Pollution Prevention and Control Regulations (NI) 2003.

5.0 Draft Air Quality Action Plan

Strabane District Council are currently consulting on the contents of the draft action plan. It is anticipated that this process will be completed by July 2005 and feedback to date indicates that there should be no significant changes required to the format or content of the final action plan. Elements of the draft action plan are currently being progressed, particularly the implementation of smoke control areas as this is deemed necessary in reducing domestic emissions of PM_{10} . Upon completion of the consultation process the individual elements of the action plan will be implemented according to the timeframe outlined within the plan.