



**City of Stoke-on-Trent
Fenton (Burnham Street)
Air Quality Management Area**

**Air Quality Action Plan
Progress Report 2007**

Fenton (Burnham Street) Air Quality Management Area (PM₁₀)

Background

The Burnham Street Air Quality Management Area (AQMA) was declared by the City Council on 15 August 2002 as a result of the Stage 3 Review & Assessment of air pollution throughout the City. Figure 1 shows a map of the AQMA.

Figure 1 - Fenton (Burnham Street) AQMA



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This was in response to the assessment that there was a likelihood that emissions of PM₁₀ (fine particulate dust) would not meet the national and European Air Quality Objective for that pollutant.

The City Council installed a PM₁₀ pollution monitor at Queens Primary School (subsequently Clarice Cliff Primary School) in 2003 and has continued to monitor the area on a continuous basis since that time (see Figures 2 & 3)

Figure 2 – Monitoring Results

PM₁₀ Annual Mean and Number of 24-Hour means greater than 50 µg/m³

Site Name / Location	E Grid Ref (SJ)	N Grid Ref (SJ)		2003	2004	2005	2006
Clarice Cliff (formerly Queen's Primary)	390353	344314	Annual Mean (µg/m ³)	37.79	33.70	32.07	32.07
			No of 24 Hr means >50µg/m ³	66	57	51	58
			Data capture (%)	81	97	95	99

Burnham Street Area.

The Action Plan identified the primary source of PM₁₀ as being the industrial development to the north-west of Burnham Street, in particular a large complex containing a waste transfer station (Potteries Demolition Co. Ltd), two scrap yards (Moore's Metals & New King Street Breakers) and a building materials reclamation site (Gardiners Reclaimed Building Materials Ltd).

All of these sites generate high levels of dust from the activities on site, but observations and inspections carried out also identified that mud and debris from unmade site roads was tracked by lorries servicing these operations out onto Burnham Street.

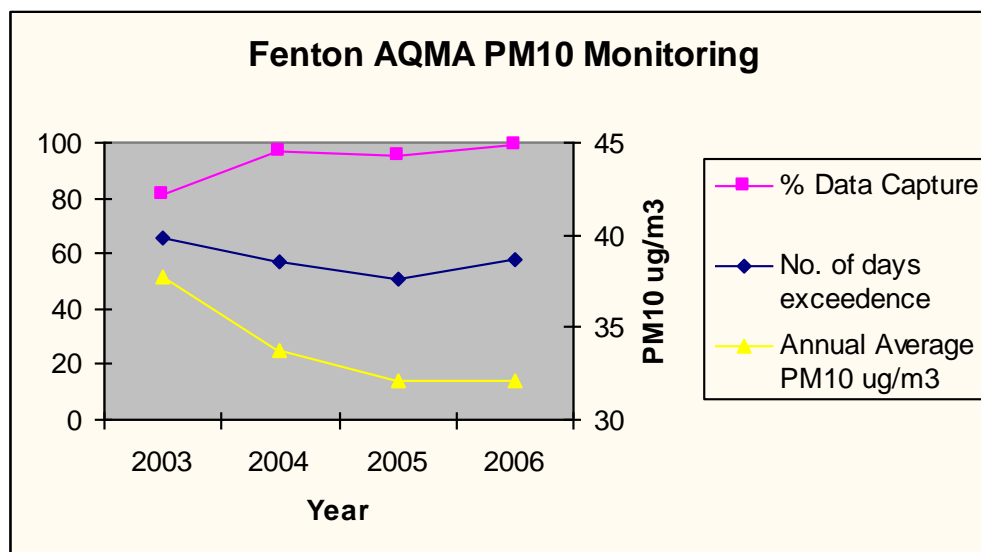
This is a terraced street with back of pavement houses and is the only access road to the industrial complex. Subsequent drying out of the mud and continuing vehicle movements leads to severe dust problems for the residents in the street.

Monitoring

Monitoring results over the 4 year period since its inception are shown above. The annual average PM₁₀ value [c.f. Annual objective of 40 micrograms/cubic metre ($\mu\text{g}/\text{m}^3$)] has reduced from 37.79 $\mu\text{g}/\text{m}^3$ in 2003 to 32.07 $\mu\text{g}/\text{m}^3$ in 2005 and 2006.

However when looking at the 24 hour mean objective of 50 $\mu\text{g}/\text{m}^3$ which is allowed to be exceeded for not more than 35 days/year, the exceedences in 2003 were 66 days, in 2004 there were 57 days, in 2005 there were 51 days and in 2006 there were 58 days. The improvement over the 2003 – 2005 period is likely to have been reversed by a major intensification of the site operations particularly in the spring and summer of 2006 which also resulted in an increase of complaints from residents.

Figure 3 – Monitoring information



Using 2003 as a baseline, monitoring in 2004 saw only marginal improvements in the levels of dust being produced and complaints continued to be received from local residents. Therefore, in August of that year legal action was taken under the provisions of the Environmental Protection Act 1990 which resulted in areas of unmade ground within the sites of these companies being hard surfaced.

The position is slightly complicated in the case of Moores Metals & Potteries Demolition Co. Ltd, as the operations on both sites are controlled under conditions attached to Waste Management Licences, enforced by the Environment Agency. This could lead to conflict between the requirements of the two enforcement agencies, so it has been necessary to establish a close working relationship between that Agency and the Council, whereby there is regular liaison over any action taken by either body to achieve improvements in emissions from the sites. Indeed, consideration was also given to the provision of a vehicle wheel wash, the site licence conditions requiring that steps be taken to prevent the tracking of mud and debris onto the public highway. This however did not proceed.

Further slight improvements in 2005 still did not alleviate the impact of the site on the local population. Thus, in December 2005 the Council took further enforcement action under the Environmental Protection Act 1990, which led to additional areas of hard surfacing within the boundary of the waste transfer station.

Further extensions to the hard standing are proposed at present in order to address the lack of improvement in dust exposure and number of days on which the 24hr mean limit is exceeded. The operator has accepted this proposal and, hopefully, formal enforcement to achieve these improvements will not be necessary.

In addition, as part of the North Staffordshire Regeneration proposals there is current discussion regarding the suitability of such industrial processes to be located "cheek by jowl" with residential properties. Whilst no firm proposals exist, this subject is one that will clearly hugely influence the actions taken by both Council and Operators over the next 12 months.