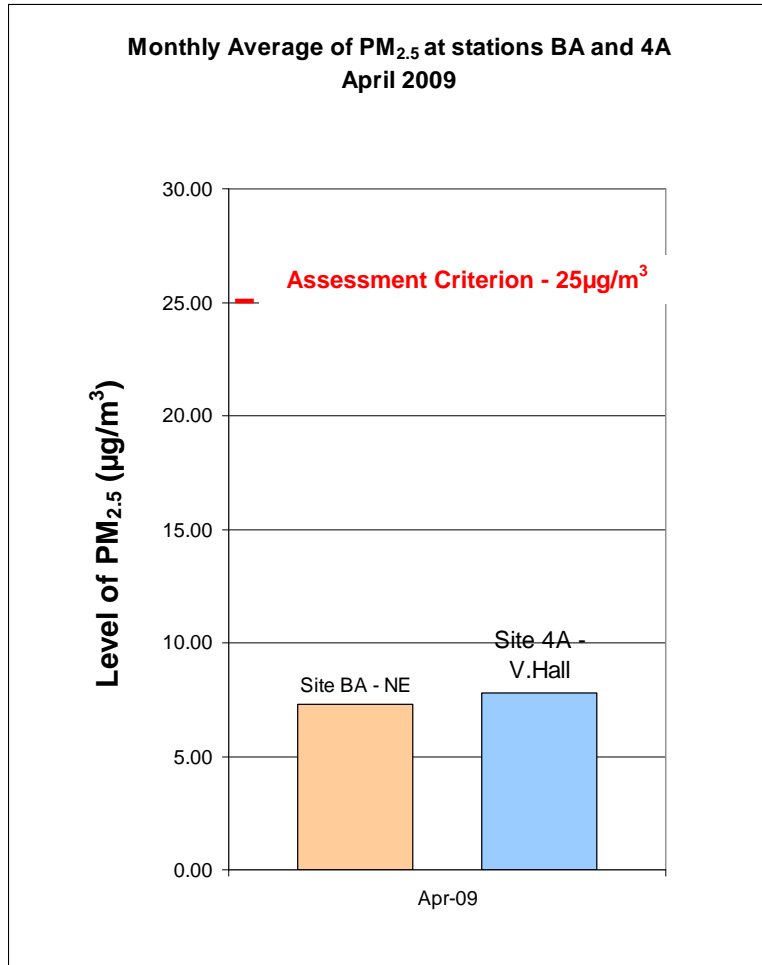


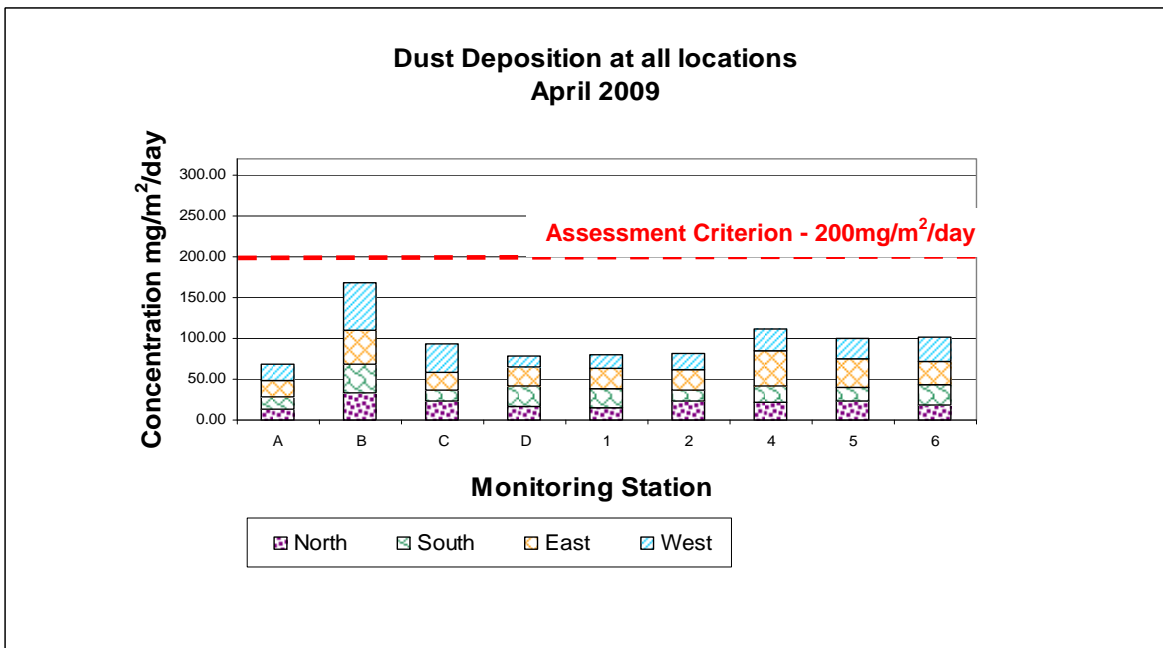
1.2.2 PM_{2.5} Levels

The assessment level of 25µg/m³ was not exceeded at on-site station B or off-site station 4 during the month, with the monthly mean result being 7.31µg/m³ for station B, and 7.80µg/m³ for station 4.



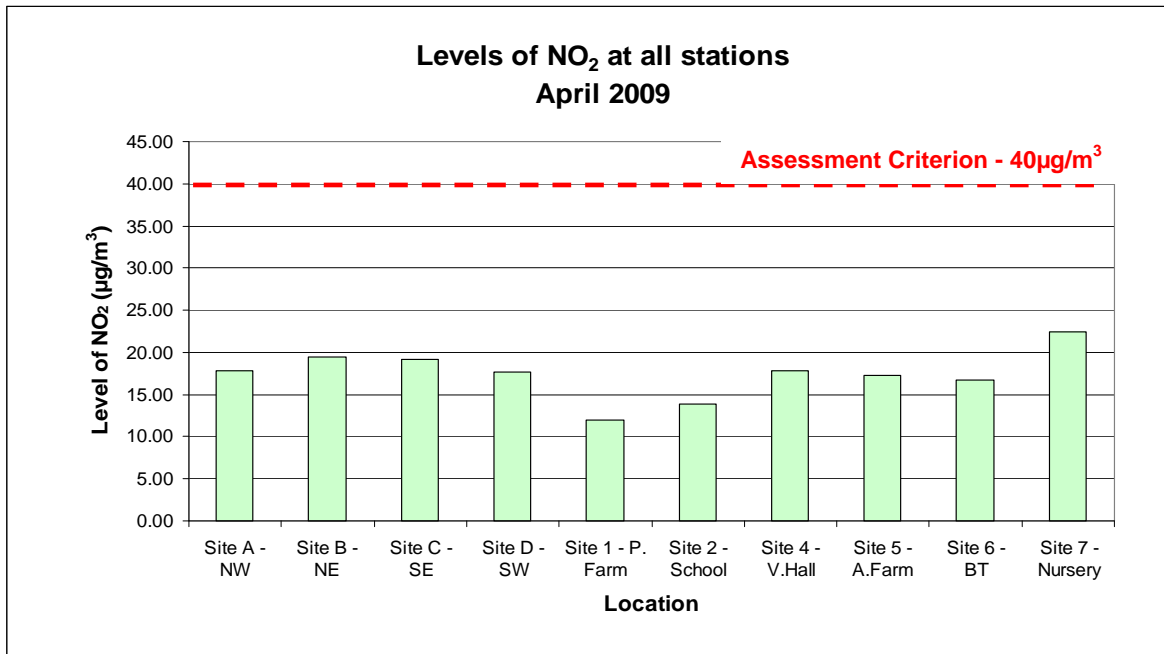
1.2.3 Deposited Dust

The assessment criterion level of 200mg/m²/day was not exceeded during the month, with the highest level being 169mg/m²/day at station B.



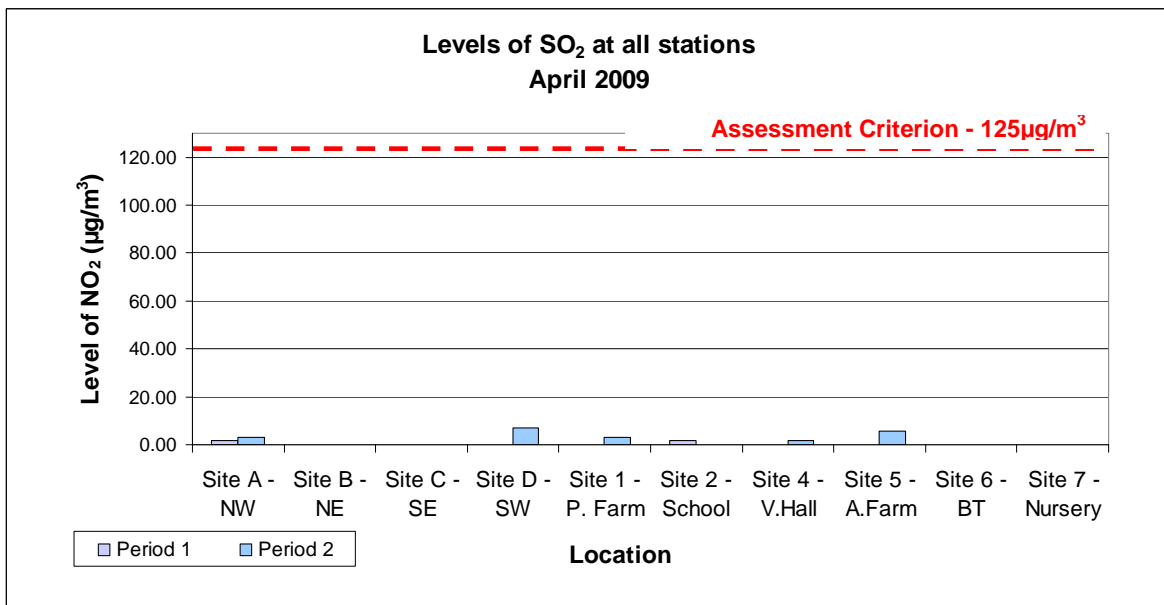
1.2.4 Nitrogen Dioxide

The assessment criteria level developed for NO₂ is 40µg/m³. No stations recorded NO₂ in exceedance of this level, with the highest NO₂ result being 22.37µg/m³, recorded at station 7.



1.2.5 Sulphur Dioxide

The assessment criteria levels developed for SO₂ is 125µg/m³. No stations recorded SO₂ in exceedance of this level, with the highest SO₂ level being 6.92µg/m³ at station D in the second monitoring period.



1.2.6 BTEX Compounds

The assessment criteria limits for benzene and toluene are 5µg/m³ and 1.9mg/m³ per fortnight, respectively. No on-site stations recorded levels of benzene above the LOD, and only station C recorded toluene above the LOD, at 0.0091µg/m³, during the second period.

1.2.7 Metals

The only metal currently falling under the control of the UK Air Quality Strategy is lead, at a maximum concentration $0.5\mu\text{g}/\text{m}^3$ (annual mean). The highest level of lead recorded was $0.02\mu\text{g}/\text{m}^3$, recorded at stations 1, 4, 6 and 7 during the first monitoring period, and stations D, 4, 5 and 6 during the second period.

All other metals were below the assessment criteria developed for the site, and in many cases below LODs.

1.2.8 Cyanide

No National Air Quality Standard has been developed for cyanide; the assessment criteria suggested for the Avenue is a maximum concentration of $50\mu\text{g}/\text{m}^3$ per fortnight. The highest level of cyanide recorded was $0.04\mu\text{g}/\text{m}^3$, recorded at station A during the second monitoring period and stations 2 and 6 during the second period.

1.2.9 Phenol(s)

The assessment criteria limits for phenol and cresol are $48\mu\text{g}/\text{m}^3$ and $220\mu\text{g}/\text{m}^3$ per fortnight, respectively. The reporting of phenols is subject to a LOD of $0.2\mu\text{g}/\text{m}^3$ and no results were reported above this level.

1.2.10 PAHs

The maximum allowable fortnightly concentration of Coal Tar Pitch Volatiles is $0.48\mu\text{g}/\text{m}^3$, whilst for naphthalene the figure is $126\mu\text{g}/\text{m}^3$. No stations recorded concentrations in exceedance of these criteria during April 2009. The highest concentration of total coal tar pitch volatiles was $0.0207\mu\text{g}/\text{m}^3$, recorded at station B during the second monitoring period, whilst the highest naphthalene result was $0.0008\mu\text{g}/\text{m}^3$, recorded at station 6 during the first period.

1.2.11 Quality Control Samples

As part of the routine monitoring programme, quality control samples are submitted in the form of duplicates for all sample media and blanks for phenols, cyanide, metals, PAHs and BTEX. This is to ensure that results generated are accurate and, essentially, reliable. The outcomes for April 2009 are as follows:

Media Blanks

The analysis of media blanks indicated no problems with the contamination of media used for the collection of samples during April 2009.

Duplicates

Duplicate PM_{10} samples taken at station A correlated well with original data during the month, with duplicate results ranging between 74% and 141% of original results.

Duplicate PAH results from station 1 correlated moderately well with original results during the first monitoring period, but less well during the second; the duplicate results for naphthalene, fluoranthene and pyrene were 237%, 244% and 237% of the original, respectively, during the second period.

Duplicate phenol samples were taken at station 1. No results were reported above the LOD of $0.2\mu\text{g}/\text{m}^3$ during both monitoring periods, and as a result the duplicate results correlated exactly with original results.

Duplicate results for BTEX, cyanide, SO_2 and NO_2 taken from stations 6, A and B correlated well with original results during both monitoring periods.

No duplicate metals results were available for analysis due the split filter trial, as described in Section 2.2.3.

1.3 Results from Targeted Air Monitoring

Targeted monitoring is undertaken around specific site activities considered to have the potential to liberate airborne contaminants and also to monitor ambient conditions when no works are taking place. Due to the lack of potential for site activities to generate or liberate significant amounts of contaminative materials, targeted monitoring was not required during the month.

Results from Odour Monitoring

1.4.1 Odour Diaries

Background monitoring using odour diaries was suspended at the end of October 2008 following an 18 month period of monitoring; it was considered that a sufficient level of background data have been collected during this period. The odour diary programme is scheduled to resume prior to the remediation phase.

1.4.2 Sensory Field Odour Surveys

A 'manure' odour was recorded at station 6 on 23 April at odour annoyance impact *high*.

The wind was not from the direction of the Avenue at the time of this record, and the occurrence will therefore not be assessed any further.

1.4.3 Complaints

No odour-related complaints were received during April 2009.