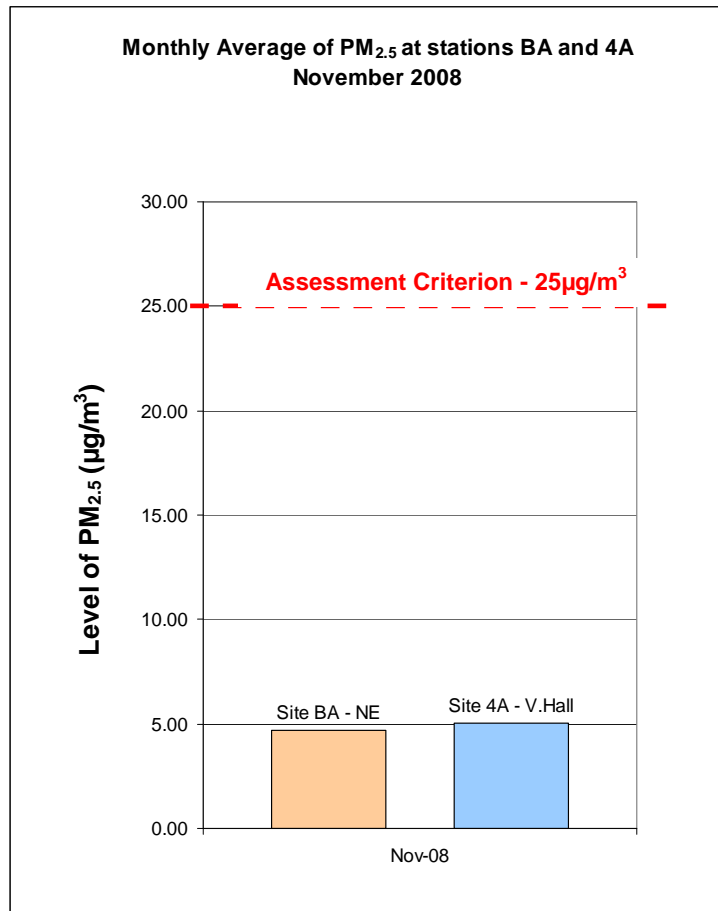




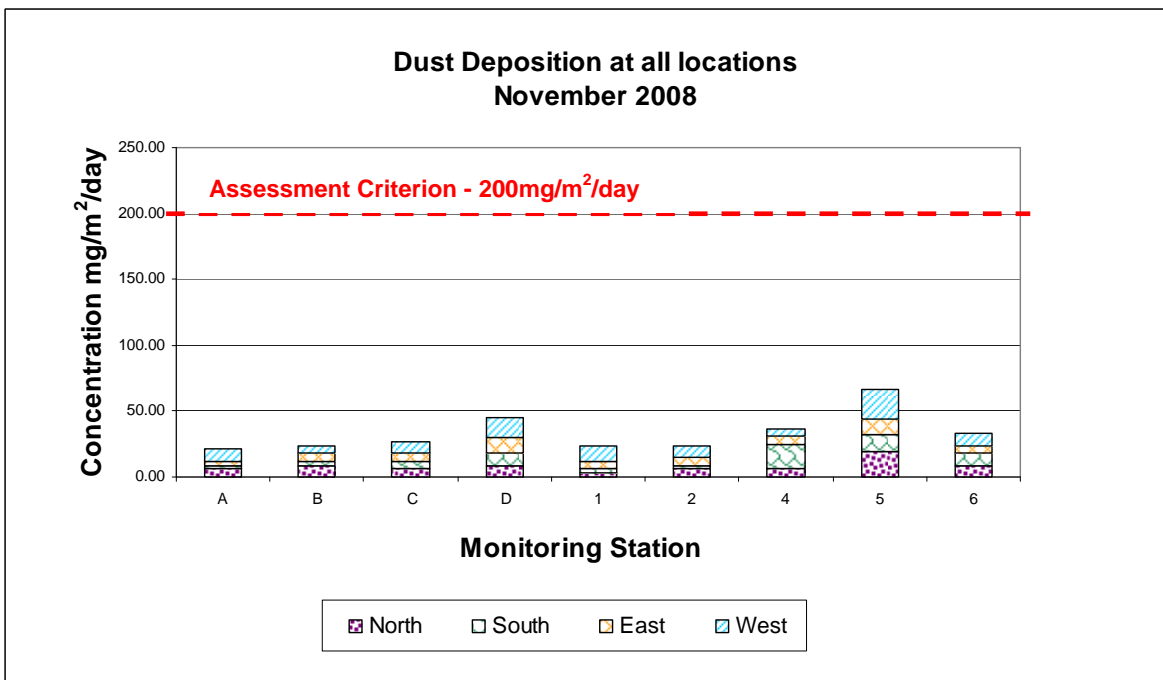
### 1.2.2 PM<sub>2.5</sub> Levels

The assessment level of 25µg/m<sup>3</sup> was not exceeded at on-site station B or off-site station 4 during the month, with the monthly mean result being 4.70µg/m<sup>3</sup> for station B, and 5.03µg/m<sup>3</sup> for station 4.



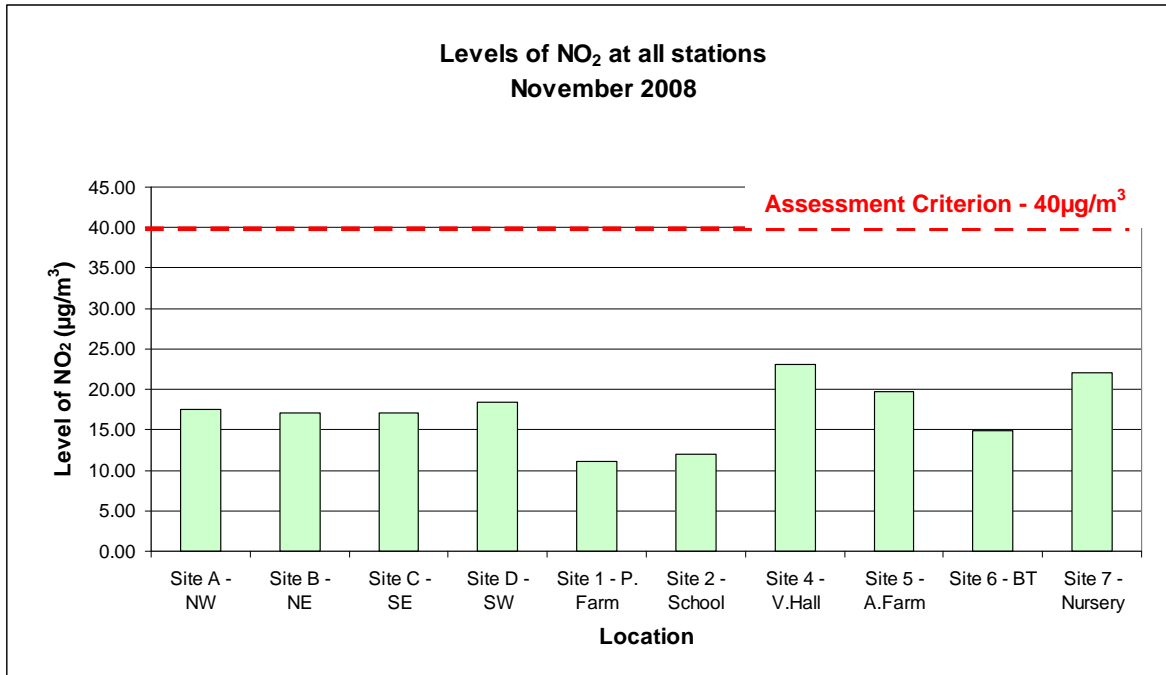
### 1.2.3 Deposited Dust

The assessment criterion level of 200mg/m<sup>2</sup>/day was not exceeded during the month, with the highest result being 66mg/m<sup>2</sup>/day recorded at station 5.



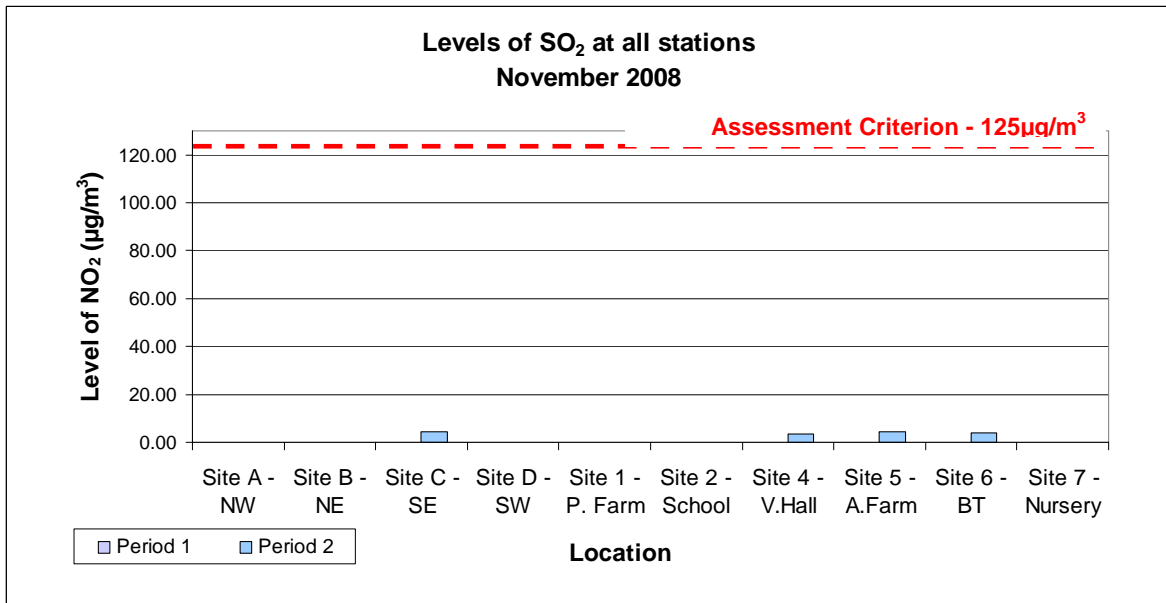
### 1.2.4 Nitrogen Dioxide

The assessment criteria level developed for NO<sub>2</sub> is 40µg/m<sup>3</sup>. No stations recorded NO<sub>2</sub> in exceedance of this level, with the highest NO<sub>2</sub> result being 23.11µg/m<sup>3</sup>, recorded at station 4.



### 1.2.5 Sulphur Dioxide

The assessment criteria levels developed for SO<sub>2</sub> is 125µg/m<sup>3</sup>. No stations recorded SO<sub>2</sub> in exceedance of this level, with the highest SO<sub>2</sub> level being 4.33µg/m<sup>3</sup> at station 5 in the second monitoring period.



### 1.2.6 BTEX Compounds

The assessment criteria limits for benzene and toluene are 5µg/m<sup>3</sup> and 1.9mg/m<sup>3</sup> per fortnight, respectively. No stations recorded levels of benzene or toluene above the LOD during the month.

### 1.2.7 Metals

The only metal currently falling under the control of the UK Air Quality Strategy is lead, at a maximum concentration 0.5µg/m<sup>3</sup> (annual mean). The highest level of lead recorded was 0.01µg/m<sup>3</sup> at stations A to D and 1 to 6 during the first monitoring period, and at stations C, 4, 6 and 7 in the second.

All of the first and second period cadmium results were below LOD. However, as the first period sample volumes were particularly small (due to the shorter sampling period) the first period LOD was actually higher than the applicable assessment criterion ( $0.005\mu\text{g}/\text{m}^3$ ).

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. No results were reported above the LOD during both monitoring periods.

### **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  $126\mu\text{g}/\text{m}^3$ . None of the on or off-site stations recorded concentrations in exceedance of these criteria during November 2008. The highest concentration of total coal tar pitch volatiles was  $0.01952\mu\text{g}/\text{m}^3$ , whilst the highest naphthalene result was  $0.000737\mu\text{g}/\text{m}^3$ , both recorded at station B during the second monitoring 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 November 2008 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 November 2008.

#### Duplicates

Duplicate  $\text{PM}_{10}$  samples taken at station A correlated well with original data during the month, with duplicate results ranging between 71% and 168% of original results.

Duplicate PAH results from station 1 correlated well with original data during the first period, but poorly during the second. Duplicate results during the second period for fluorene, anthracene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)/(k)fluoranthene, benzo(a)pyrene, indeno(123-cd)pyrene, benzo(ghi)perylene, and total for coal tar pitch volatiles were 15%, 28%, 39%, 33%, 11%, 16%, 2%, 5%, 34%, 43% and 42% of the original results respectively.

Duplicate phenol samples were taken at station 1. No results were reported above the limit of detection (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 cyanide, metals, BTEX and  $\text{NO}_2$  and  $\text{SO}_2$  results taken from stations A, 6 and B respectively correlated well with original results during both monitoring periods.

## **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 of 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. Odour diaries will resume prior to the remediation phase.

#### **1.4.2 Sensory Field Odour Surveys**

A 'diesel' odour was recorded three times during the month at station 1; the odours were recorded at odour annoyance impact *high*, *medium* and *very high* on 7, 10 and 17 November respectively.

The wind was not from the direction of the Avenue at the time these records, plus station 1 is located approximately 2.6km from the site, thus it is considered that the odours arising are likely to be due to conditions or activities local to station 1 rather than activities or conditions at the Avenue site.

#### **1.4.3 Complaints**

No odour-related complaints were received during November 2008.