

Memo

Project: National Paediatric Hospital

Report Type: Summary of Dust Monitoring Results

Period of Monitoring: December 2017

Introduction

The requirement for Dust Monitoring on site is laid out in the Project Environmental Impact Statement (EIS) that would have been submitted as part of the Planning Permission for the project. A number of monitoring points around the perimeter of the site are used to record dust levels. The location and number of dust monitors may vary throughout the project depending on activities on site.

Dust Monitoring.

The monitors are examined monthly and the levels of dust recorded are compared to a dust limit of 350mg/m²/day set out in the Project EIS. The monitoring points are monitored on a 'trigger level' basis - so if a predetermined level of dust is exceeded the Main Contractor shall review work processes and modify as required to reduce the level of dust generated.

Number of Monitors on Site during Monitoring Period:

Eleven

Location of Monitors:

The location of dust monitoring points for November (D1, D2, etc.) can be seen in Figure 1. The dust monitoring location points for December are the same as November. The previous dust monitor locations for the period April to September 2017 are shown in Figure 2 for reference.

Observations:

The dust monitoring period for December extends from 5th December 2017 to 5th January 2018.

Over this period, all eleven monitors were tested on a monthly basis i.e. once.

Overall, ten of the eleven dust monitors on site showed levels of dust lower than the levels specified in the Project EIS. One of the eleven dust monitors showed levels higher than the levels specified in the Project EIS.

Dust Monitoring Point D3 recorded the highest reading and is located near the carpark for St. James's Hospital A&E car park. The dust deposition rate was approximately 3400% of the deposition rate limit specified in the Project EIS.

The report notes that "the results obtained at the dust monitoring location D3 indicate that *the excessive dust (i.e. 12,000mg/m²/day) was likely generated by the operation of a secant piling rig which was in the vicinity of D3 during the sampling period*".

There is a local spill zone from the pile machine which has likely lead to this abnormally high reading. During the monitoring period, works have been ongoing across large areas of site and all other monitors have recorded very low levels of dust deposition (i.e. < 40mg/m²/day) which would indicate that the reading at D3 has been influenced by very localised works.

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Previous Readings:

Dust Monitoring Point D3 (shown in Figure 1) was previously identified as Dust Monitoring point D1 (shown in Figure 2). All previous results at this point were below the limit identified within the Project EIS.

Previous Reading for location D3 (and previously D1) were:

June 131mg / m² / day

July 222mg / m² / day

August 297mg / m² / day

September 74mg / m² / day

October 100mg / m² / day

November 25mg / m² / day

The December reading shows an increase on November's reading from 25mg / m² / day to 12000mg / m² / day.

The nearest adjacent monitors are D2 and D4. During this monitoring period the monitors at D2 and D4 were within limits specified in the Project EIS which would suggest the higher level of dust is reasonably localised.



Figure 1. Location of Dust monitors on site (December 2017).

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Figure 2. Previous location of Dust monitors on site (April 2017 to August 2017).