

# Memo

**Project:** National Paediatric Hospital

**Report Type:** Summary of Dust Monitoring Results

**Period of Monitoring:** September 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/m<sup>2</sup>/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:

Eleven

## Location of Monitors:

Location of dust monitoring points for September (D1, D2, etc.) can be seen in Figure 1. The dust monitoring location points have been modified slightly compared to previous monitoring due to the addition of 2 extra monitors. The previous monitoring points for Dust on site are shown in Figure 2 for reference.

## Observations:

During September the Specialist undertaking the dust monitoring changed and the data presented covers a 20 day period. Nine of the eleven dust monitors on site showed levels of dust lower than the levels specified in the Project EIS. Two of the eleven dust monitors showed levels higher than the levels specified in the Project EIS.

Dust Monitoring Point D8 recorded the highest reading and is located to the rear of O'Reilly Avenue. The dust deposition rate was 771% of the maximum deposition rate limit specified in the Project EIS.

Dust Monitoring Point D2 recorded the second highest reading and is located at the boundary of the site with the South Circular Road. The dust deposition rate was 128% of the maximum deposition rate limit specified in the Project EIS.

The lowest reading for dust deposition was recorded at Dust Monitoring Point D5 which is located within the St James Hospital campus with a dust deposition level of 10.6% of the maximum deposition rate limit specified in the Project EIS.

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## Previous Readings:

Dust Monitoring Point D8 (shown in Figure 1) is a new monitoring point on site and is located between 2 previous monitoring points (D5 and D6 in previous reports). Previous readings for locations D5 and D6 were:

<b>Month</b>	<b>Deposition Rate at D5 (mg / m<sup>2</sup> / day)</b>	<b>Deposition Rate at D6 (mg / m<sup>2</sup> / day)</b>
April	173	104.5
May	137.1	87.5
June	305.5	Not Available
July	84.1	38
August	46.9	133.6

The September reading shows an increase on August's readings for the monitors previously located at D5 and D6 (see Figure 2) from 46.9 and 133.6mg / m<sup>2</sup> / day to 2700mg / m<sup>2</sup> / day. The BAM report indicates that the installation of secant pile wall was taking place in the immediate vicinity during the monitoring period which may have generated the high monitoring result here.

Dust Monitoring Point D2 (shown in Figure 1) is located approximately at the same location as dust monitoring point D3 from previous reports (shown in Figure 2). Previous readings for location D3 were:

<b>Month</b>	<b>Deposition Rate at D3 (mg / m<sup>2</sup> / day)</b>
April	155.7
May	156.9
June	152.5
July	229.5
August	151

The September reading at D2 (see Figure 1) shows an increase on August's reading for the monitor previously located at D3 and D6 (see Figure 2) from 151mg / m<sup>2</sup> / day to 450mg / m<sup>2</sup> / day. The BAM report indicates that the formation of soil stockpiles in its vicinity and through the creation of piling mats may have led to the high monitoring result here.

End.

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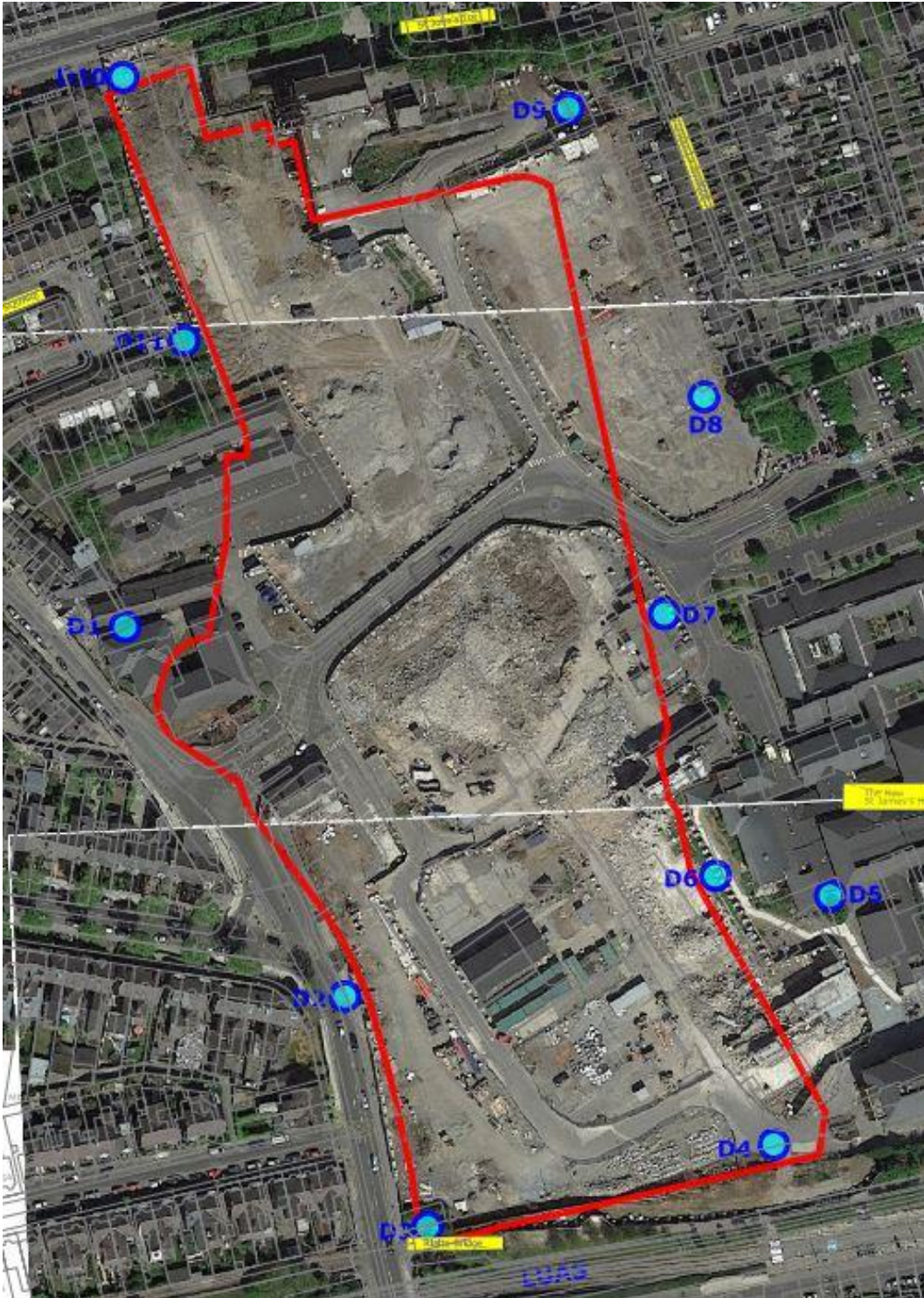


Figure 1. Location of Dust monitors on site (September 2017).



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