Project: National Paediatric Hospital

Report Type: Summary of Dust Monitoring Results

Period of Monitoring: 6th June 2018 – 2nd July 2018

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 June 2018 (D1, D2, etc.) can be seen in Figure 1. Previous dust monitor locations for the period September 2017 to April 2018 and April 2017 to August 2017 and are shown in Figures 2 and 3 respectively for reference.

Observations:

The dust monitoring period for March extends from 6th June 2018 to 2nd July 2018. (Results for May included testing up to and including 6th June, meaning all working days on site have been captured in the dust monitoring results)

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

Works on site during this monitoring period include, but are not limited to:

- Construction works and piling for the Utility Tunnel at the Energy Centre.
- Excavation, pile anchoring near the South Circular Road.
- Pile cropping at Cameron Square.
- Pile cropping, pile capping and excavation near the hospital.
- Excavation of material from Mount Brown.

Overall, 10 dust monitors on site showed levels of dust equal to or lower than the levels specified in the Project EIS, 350mg/m²/day.

Dust Monitoring Point D9 recorded a reading above the limit set out in the Project EIS and is located near O'Reilly Avenue. The dust deposition rate was approximately 155% of the limit specified in the Project EIS. During this monitoring period, there were construction and piling works ongoing in this area which may have resulted in this higher reading.

This is the first breach in dust levels in this location. A sensor has been present in this area since September 2017. The previous readings in this location can be seen below:

Date	Dust (mg/m2/day)
Sep-17	200
Oct-17	210
Nov-17	<18
Dec-17	<18
Jan-18	<18
Feb-18	<18
Mar-18	26
Apr-18	22
May-18	52
Jun-18	540

The adjacent dust monitors D8 (120 mg/m²/day) and D10 (83 mg/m²/day) are considerable under the allowable limit which indicates that the dust created which resulted in the high reading at D9 was the cause of localised works.



Figure 1. Location of Dust monitors on site (May 2018).

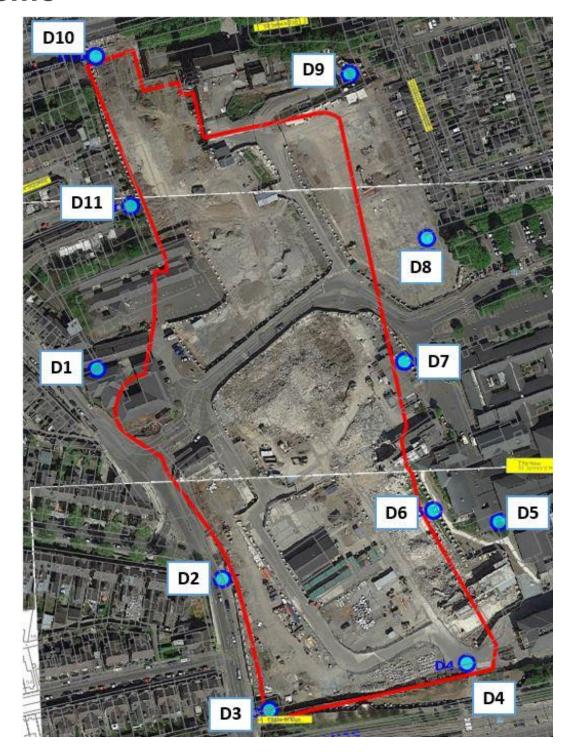


Figure 2. Location of Dust monitors on site (September 2017 – April 2018).

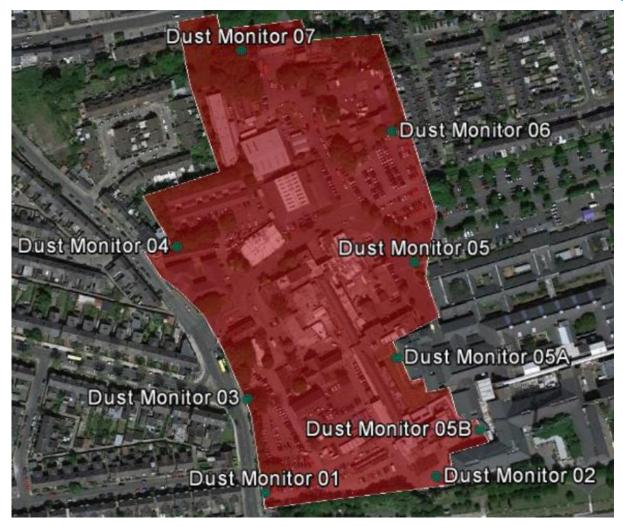


Figure 3. Previous location of Dust monitors on site (April 2017 to August 2017).