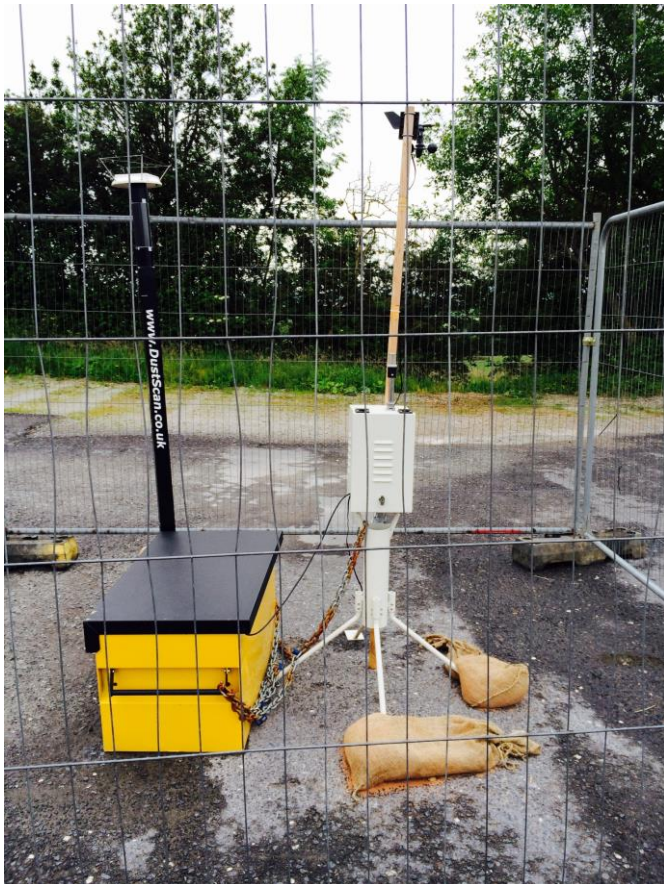




Air Quality Monitoring for Residential Development Barnoldswick

Background

Miller Goodall Ltd (MGL) was asked to provide an air quality assessment in relation to an outline planning application for a residential development on land within the boundaries of an active pre-cast concrete plant. Given the location of the proposed dwelling in relation to the manufacturing facility, the local authority requested an assessment of dust from the plant in order to assess the suitability of the site for residential use. Consultation with the local authority indicated that effects on health and effects of nuisance were both of concern.



Action Taken

The contribution of the plant to dust and particulate matter (PM) levels at the application site was measured by a subcontractor over a two month period from June to August 2014. A DustScan DS100-D passive directional dust gauge and an Osiris particulate matter monitor were used.

The DustScan instrument was used to provide a qualitative assessment of general dust settlement and movement. The Osiris was used to provide measurements of PM₁₀ in the atmosphere.

The DustScan was used to sample fugitive dust in flux from 360° around the sampling head. In the instrument, airborne dust is trapped upon a 360° sticky pad in the direction it is travelling, thus allowing the direction from which dust has arisen to be determined. The pad is then analysed in 15° segments to provide an indication of the direction dust is travelling.

The DustScan gauge sampling pads were collected and replaced between periods of 1-2 weeks during the whole monitoring period.

An air quality assessment was produced for the client that assessed the suitability of the site for residential use with regard to local air quality and the potential local air quality impacts associated with traffic generated by the development.

Summary of Findings

The impact of traffic emissions on local air quality generated by the development, once operational, was considered to be insignificant. It was also found that there was no evidence of dust and PM₁₀ being an issue at the site of the new dwelling. However, since there was potential for unexpected emissions to affect the property, some mitigation was recommended. The assessment concluded that there was no reason why this application should not be allowed on the grounds of air quality, with appropriate mitigation.

For more information about us, visit our website at www.millergoodall.co.uk. If you would like to discuss how we can help your project, please contact Miller Goodall on 01204 596166 or email info@millergoodall.co.uk.