



Investigation

Air quality

We completed a detailed assessment of the impact of the proposed multi-storey car park on air quality using ADMS Roads. Emissions from vehicles that have been parked for some time, called 'cold starts', can give rise to increased levels of pollutants, and this was something taken into account when we calculated the combined emission rate for the cars that would be using the car park.

Our investigations showed that annual and short-term concentrations of nitrogen dioxide (NO₂) and particulate matter (PM₁₀) were predicted to be well below the respective air quality objectives for both 'without development' and 'with development' scenarios at all receptor locations. No exceedence of the short-term 1 hour NO₂ and 24 hour PM₁₀ air quality objectives was predicted.

Action and Outcome

When assessed in accordance with current guidance, we concluded that the impact on local air quality of emissions from traffic redistributed on the road network surrounding the Royal Preston Hospital as a result of the development, and from vehicles using the car park, would be negligible. The development was granted planning permission with no conditions relating to air quality.

Background

Like many other hospitals, Royal Preston Hospital in Lancashire was struggling to provide the parking required by the many staff, patients and visitors. As the parking available on site was at times inadequate, many people were forced to leave their cars on nearby public roads, causing problems for residents. With limited space, the hospital had to find a way to provide more parking on site.

Proposition

Miller Goodall was asked to provide an air quality assessment in relation to a planning application for a proposed three-storey car park. The new development, to be built on an existing area of hospital car parking, would create an additional 350 spaces.

The car park would not cause an increase in traffic associated with the hospital, as the number of users would remain the same, but it would mean a reduction in some of the on-street parking. It would also allow some vehicles to transfer from the hospital's off-site staff parking resources.

Royal Preston
Hospital,
Lancashire

Air quality
assessment