

Air Quality—Aberdeen

The Airshed conducted an air quality impact assessment (AQIA) on behalf of Scotia Homes for a development for up to 550 dwellings at Dubford, Bridge of Don, to the north of Aberdeen. Aberdeen City Council advised that the planning application must be accompanied by a detailed AQIA, to assess the impacts from any increase in road vehicle exhaust emissions associated with the development.

Atmospheric dispersion was predicted using ADMS Roads 3 and five years of hourly sequential meteorological data from Dyce Airport. A detailed model sensitivity analysis was conducted to consider the effects of meteorological variability and surface roughness on dispersion. The assessment also considers the effects of increased emissions during peak hours caused by slow moving traffic.

Three traffic emission Scenarios were modelled to assess existing air quality and future conditions likely to arise from the proposed development, across a study area with ~20km of roads.

- 2011 – Baseline traffic
- 2013 – Baseline with committed development
- 2013 – Baseline, committed development and the proposed Scheme

The assessment assumes that background air pollution levels within the study area will not reduce after 2011 and ignored any likely reduction in emissions due to stricter vehicle emission standards.

The worst case annual mean NO₂ was predicted to increase by ~5%, assuming all development traffic is present in 2013, and assuming 2011 fleet composition and 2011 background air quality. The overall significance of the predicted increase was low, taking account of the European Limit Value of 40ug/m³.

A further model sensitivity was conducted to consider pessimistic congested flow conditions on the affected roads. This confirmed that the proposed scheme was unlikely to cause any Air Quality Objective to be exceeded. The overall significance of the predicted increase was likely to be low.

The report was submitted to and accepted by the City Council.

