

SECTION 5

AIR QUALITY

5.1 Introduction

5.1.1 There are two potential causes of air quality impacts from any development project namely:

- emissions from construction activities, including emissions from increased road traffic and plant and machinery associated with construction activities on site and dust and particulates generated from construction or demolition activities; and
- emissions related to the operational phase of the development including those from road traffic generated by the development.

5.1.2 Both aspects will be assessed for the preparation of the planning application.

5.1.3 The Application Site lies within the Highlands Council (HC) administrative area.

5.2 Assessment Methodology

5.2.1 The air quality assessment will involve the following key elements:

- Consideration of Highland Council's review and assessment documents to determine the location and nature of any Air Quality Management Areas (AQMA) or other local air quality issues that could affect, or be affected by the Proposed Development;
- identification of areas that are likely to be sensitive to changes in air quality resulting from the operation and/or construction of the scheme;
- semi-quantitative assessment of the effects of the construction phase in terms of local air quality by reference to published data on the dust raising potential of specific construction activities and the relationship between the duration of activities and the distance between those construction activities and sensitive receptors.;
- quantitative assessment of the impact on local air quality from traffic with and without the Proposed Development based on traffic data and utilising the Design Manual for Roads and Bridges (DMRB) screening tool; and
- the output of the DMRB screening tool will determine whether air quality is a significant issue in the planning process.

5.3 Key Guidance and Legislation

Air Quality Legislation

- 5.3.1** A range of legislation exists at European and national level designed to manage air quality in the Scotland. The assessment will consider the Air Quality (Scotland) Regulations 2000, the Air Quality (Scotland) (Amendment) Regulations 2002 and the Air Quality Standard (Scotland) Regulations 2007 which include national air quality objectives that, in most cases, are numerically synonymous with European limit values although they have different compliance target dates.
- 5.3.2** Dust is not covered in the Air Quality Regulations. Generally dust is only a cause of annoyance or a 'nuisance' when it forms a noticeable deposit on a surface or causes disruption when suspended in the air. The amount of dust that constitutes a nuisance is hard to quantify as the perception of dust deposits is subjective. The likelihood of any impact having an adverse or 'significant' effect is therefore hard to predict with certainty. This is reflected in the absence of legislated standards or widely accepted guidance thresholds to define a Statutory Nuisance due to dust.
- 5.3.3** Relevant legislation dealing with Statutory Nuisance is given Section 83, Part III of the Environmental Protection Act 1990. Under the provisions of the Act where a local authority is satisfied that a Statutory Nuisance exists, it is under a duty to serve an Abatement Notice requiring abatement or cessation of one or more activities deemed to be causing the nuisance. In the absence of any kind of standard, identification of a nuisance is dependent upon professional judgement of the local authority as to whether Best Practical Means (BPM) are being employed to control emissions. Where BPM is evident or can be clearly demonstrated then a particular activity cannot be deemed to be causing a Statutory Nuisance.

5.4 Relevant Planning Policy Guidance

- 5.4.1** Local Air Quality Management Technical Guidance LAQM TG (03) issued under Part IV of the Environment Act 1995, is designed to help local authorities with their air quality management duties. The guidance requires that local authorities integrate air quality considerations into the planning process at the earliest possible stage. As a result, the land use planning system is integral to improving air quality.
- 5.4.2** Scottish Planning Policy (SPP1): The Planning System and the Planning Advice Note 51 (PAN 51) offer guidance to local authorities on the relationship between controls over development under planning law, and under pollution control legislation. It takes into account national objectives, the system of local air quality management under Part IV of the Environment Act 1995.

5.5 Consultees

- 5.5.1** Consultation has been undertaken with the Environmental Health Department of the Highlands Council with regards to potential air quality impacts of the development and any local air quality issues.

5.6 Study Area

- 5.6.1** The study area for the air quality assessment will include the vicinity of the Application Site including the site itself and the road network as considered in the traffic assessment to encompass emissions from road traffic generated by the Proposed Development.

5.7 Environmental Baseline

- 5.7.1** An initial review of air quality in the vicinity of the Proposed Development indicated that the most significant source of emissions to atmosphere is road traffic. The A9 trunk road is approximately 1.5 km to the west of the site. The A9 is the main road between the central belt of Scotland and Inverness to the north and carries large volumes of traffic, especially during holiday periods. The road is a potential source of emissions that may impact on the users of the site. Traffic flows will increase as a result of the Proposed Development and impact on existing receptors close to the road network. As part of the proposed development a new distributor road (with a vehicle bridge over the River Druie) will link the development to the existing B970 in the area of Dell Farm. Access to the development will also be via the existing B970 from Coylum Bridge. A new pedestrian/cycle route (with a footbridge over the River Druie) is also proposed from a junction of the B970 in the area of Rothiemurchus Fisheries.
- 5.7.2** A review of existing air quality information has shown that the Highland Council have not declared any Air Quality Management Areas to date. The review also indicated that there are no industrial emission sources in the vicinity of the site that are likely to impact on the Proposed Development.
- 5.7.3** In order to establish the baseline conditions, in the absence of local monitoring, data will be accessed from the national Air Quality Archive database of background NOX, NO2 and PM10 concentrations. These data are presented as background concentrations at a resolution of 1 km² and can be found on the Department of the Environment, Food and Rural Affairs (Defra) funded air quality website (www.airquality.co.uk).

5.8 Key Receptors and Potential Impacts

- 5.8.1** The Proposed Development is in a largely rural area to the east of Aviemore. Dell Farm, south of the Proposed Development, was identified as the only sensitive receptor that may be affected by additional road traffic emissions from vehicles accessing the site, particularly when the site is operational. Construction related activities such as earthworks and materials handling that occur close to receptors within 200 meters of the site boundary have the potential

to cause nuisance dust episodes. Therefore, receptors within this distance will be considered as part of the assessment.

5.9 Potential Mitigation Measures

- 5.9.1** For the construction phase of the Proposed Development a series of mitigation measures will be proposed based on current best practice from contemporary guidance and codes of practice such as:
- 5.9.2** Buildings Research Establishments; Controlling particles, vapour and noise pollution from construction sites.
- 5.9.3** Mitigation measures will be proportionate to the risks of nuisance dust and vehicle and plant emission impacts.
- 5.9.4** If the operational phase air quality assessment indicates that there are likely to be significant adverse impacts appropriate mitigation measures designed to reduce local air quality impacts will be proposed.

5.10 Initial letter and additional material to consultation

5.10.1 Consultation with CPNA



Record of Telephone Conversation

Project Title Aviemore Proposed Residential Mixed Development-Planning Application

Project No **244958** *File No.*

<i>Between (for MMG)</i>	<i>Date</i>	<i>Time</i>
Jorge Gomez-Perales (JGP)	11-Sept-08	11:00
<i>And (name)</i>	<i>Organisation</i>	<i>Phone No.</i>
Bob Murdock (Environmental Health Officer)	The Highland Council	(01540) 664504

Subject
Proposed Methodology for the Air Quality assessment

(i) General Discussion

BM mentioned that in general, the proposed air quality methodology is acceptable as part of the planning application for the proposed development.

The following areas were agreed during the tele conference.

(ii) Baseline

It was agreed by BM and JGP not to use the air quality data from the nearest station located in Inverness as part of the baseline section as this air quality monitoring station is not representative of the area. Therefore, it was agreed that as part of the baseline section, air quality data will be used from publicly available air quality background map projections that can be found in the UK Air Quality Archive, in order to present the existing air quality around the proposed development.

(iii) Construction Phase

BM highlighted that this area could be one of the main issues for this development and special attention is needed in order to avoid impacts on sensitive receptors.

JGP recommended that the best approach to follow is to use the best practice guidance in the UK for construction activities in order to reduce nuisance caused by dust.

BM recommended dust monitoring should be carried out during construction activities in order to protect sensitive receptors around the proposed development.

JGP mentioned that air quality impacts from construction activities, in particular dust, will not affect sensitive receptors after 200m from the site boundary using adequate mitigation measures as established in the best practice guidance in the UK. In addition, this development is not within an Air Quality Management Area (AQMA) and contribution from construction activities to the existing air quality is likely to be minimum using adequate mitigation measures.

BM agreed with this approach of not carrying out dust monitoring during construction activities. BM also agreed to include a qualitative assessment which includes an overall risk caused by dust-raising activities during construction activities as proposed in Mott MacDonald methodology.

(iv) Operational Phase

BM agreed to follow DMRB guidance as part of the assessment for operational activities.

(v) Mitigation Measures and Significant Criteria

BM agreed to include these sections as part of the planning application.

(vi) Additional Comments

BM asked what type of energy/heating facility will be incorporated as part of the proposed development. BM highlighted that special attention should be given if renewable energy is being considered in particular for biomass boilers. If this is the case, a detailed air quality assessment is likely to be required to identify the impact on local air quality in relation to PM₁₀ (fine particles).

JGP commented that the type of energy/heating generation unit has not been defined by the Client. JGP added that the Client is aware of this situation and once the type of energy/heating facility is selected, the Client will take adequate measures to comply with existing legislation.

BM asked if we have a plan of action should Environmental Health receive a dust complaint associated with the development?

JGP mentioned that this should be recommended as part of the proposed mitigation measures. In the case that this event happens, it will be proposed that immediate actions should be taken by the site manager to control dust emission within the development during construction activities.

BM commented that prior to particularly dusty activities/processes occurring, the mitigation plan should consider neighbour notifications etc and include a contact number for residents to call if they have concerns.

JGP added that this should be included as a standard procedure and will be recommended as part of the mitigation measures.

5.11 Notes and Responses to Scoping Consultations

5.11.1 E-mails from Highland Council

From: Bob Murdoch [<mailto:Bob.Murdoch2@highland.gov.uk>]
Sent: 25 September 2008 14:08
To: Gomez-Perales, Jorge E
Subject: RE: Aviemore Residential Mixed development-air quality (proposed methodology)

Hi Jorge

Sorry again for the delay. All good regarding the minutes, the only issue raised was if you had a plan of action should Environmental Health receive a dust complaint associated with the development?

From: Bob Murdoch [<mailto:Bob.Murdoch2@highland.gov.uk>]

Sent: 25 September 2008 14:08
To: Gomez-Perales, Jorge E
Subject: RE: Aviemore Residential Mixed development-air quality
(proposed methodology)

Again that sounds fine. Prior to particularly dusty activities/processes occurring, you may wish to consider neighbour notifications etc and include a contact number for residents to call if they have concerns.

Regards,

Bob