

VENTILATION & AIR QUALITY STATEMENT

14/03/2026

Proposed New Detached Dwelling
Land at Oxford Road, Tilehurst, Reading, RG31 6TH

Ventilation and Flues

The proposed dwelling will be ventilated in accordance with Building Regulations Part F. Mechanical ventilation will be limited to normal domestic provision, such as kitchen and bathroom extract, and may include a whole-house mechanical ventilation with heat recovery (MVHR) system.

No combustion-based heating systems are proposed and no flues are required.

Any external vents or terminals will be modest in scale, discreetly located, and integrated into the building design. Full ventilation design details will be confirmed at the detailed design and Building Regulations stage.

Mechanical ventilation and cooling will be provided to allow windows to remain closed in response to external noise from rail and road sources. Any external plant will be selected and installed to ensure compliance with BS 8233 and local authority noise limits.

Glazing and ventilation to be installed in accordance with approved Acoustic Report (Auricl, Jan 2026).

Air Quality Checklist and Statement:

1. Development Type

- ☒ New single dwelling (Use Class C3)
- ☐ Major residential development
- ☐ Commercial / industrial development
- ☐ Change of use generating significant traffic

Conclusion: The proposal is a small-scale residential development.

2. Scale of Development

- Number of dwellings proposed: **1**
- Additional vehicle movements: **Very limited**
- HGV movements: **Temporary, construction phase only**

Conclusion: The scale of development is well below thresholds that would normally require an Air Quality Assessment.

3. Air Quality Management Area (AQMA)

Is the site located within an AQMA?

☒ Yes

☐ No

AQMA designation: **Oxford Road AQMA (traffic-related NO₂)**

Assessment: The AQMA designation relates primarily to existing traffic emissions along Oxford Road. The proposed development will introduce one additional residential receptor only and will not result in a material increase in traffic flows or emissions within the AQMA.

4. Traffic and Transport Impacts

Will the development materially increase traffic flows within the AQMA?

☐ Yes

☒ No

Will the proposal result in congestion or queuing?

☐ Yes

☒ No

Net change in vehicle trips: **Negligible**

Conclusion: The development will not worsen existing air quality conditions within the AQMA.

5. Exposure of New Receptors

Does the proposal introduce new sensitive receptors?

☒ Yes – single residential dwelling

Assessment: The proposed dwelling represents a minor increase in residential exposure within an established urban corridor. Given the very small scale of development and the absence of any material increase in emissions, the introduction of one dwelling is considered acceptable and proportionate.

6. Construction Phase Impacts

Construction impacts will be:

☒ Temporary

☒ Short-term

☒ Localised

Mitigation measures:

- Good site management practices will be employed
- Dust generation will be minimised using best practice measures

- Construction impacts will be controlled to ensure minimal effect on local air quality

Conclusion: Construction-related air quality impacts will be minor, temporary, and reversible.

7. Operational Phase Impacts and Mitigation

The proposed dwelling incorporates measures that actively reduce emissions within the AQMA, including:

- **Electric Vehicle (EV) charging infrastructure**, encouraging low-emission vehicle use and reducing reliance on internal combustion engines
- **Air Source Heat Pump (ASHP)** for space heating and hot water, avoiding on-site combustion and associated nitrogen dioxide (NO₂) and particulate emissions
- **Roof-mounted solar photovoltaic (PV) panels**, generating on-site renewable electricity and reducing reliance on grid-supplied energy

No biomass, solid fuel, or other combustion-based heating systems are proposed.

Conclusion: The completed development will result in negligible operational air quality impacts and will support local and national air quality objectives.

8. Cumulative Impacts

Is the proposal part of a wider phased or strategic development?

☐ Yes

☒ No

Conclusion: No significant cumulative air quality impacts are anticipated.

9. Overall Conclusion

Although the site is located within an Air Quality Management Area, the proposed development comprises a single residential dwelling and will not result in a material increase in traffic movements or emissions.

The inclusion of electric vehicle charging, an air source heat pump, and on-site solar photovoltaic panels provides additional mitigation, ensuring the proposal supports the objectives of the AQMA.

The development is therefore not expected to give rise to significant adverse air quality impacts, and a detailed Air Quality Assessment is not required.

10. Declaration

This Air Quality Checklist has been prepared to accompany a planning application for a single dwelling within an AQMA and reflects a proportionate approach to air quality assessment in line with national planning guidance.