

South Wonston Parish Council – Air Quality Summary (Dec 2025 – Jan 2026)

1. Overview

This report summarises air-quality data captured by device Zephyr 1070 over the period 1 December 2025 to 2 January 2026. Data represents 24-hour averaged pollutant readings. Air quality remained consistently good throughout the period with no pollution episodes detected.

2. Pollutant Definitions

Nitrogen Dioxide (NO₂): Gas mainly from vehicles and combustion; associated with airway irritation.

Particulate Matter 2.5 (PM_{2.5}): Fine particles that penetrate deep into the lungs; linked to cardiovascular harm.

Particulate Matter 10 (PM₁₀): Larger dust and particulate matter; can irritate eyes, throat, and lungs.

Ozone (O₃): Formed in sunlight from traffic and industrial emissions; affects lung function.

Sulphur Dioxide (SO₂): Gas produced mainly by industrial processes and some fuels; can cause breathing discomfort.

Carbon Monoxide (CO): Produced by incomplete combustion; reduces oxygen transport in the bloodstream.

3. Pollutant Summary with RAG Ratings

Pollutant	Average Value	RAG Rating	Comment
NO ₂	0.04 µg/m ³	GREEN	Extremely low, well within limits.
PM _{2.5}	0.31 µg/m ³	GREEN	Below UK/WHO recommended levels.
PM ₁₀	11.17 µg/m ³	GREEN	Very low particulate load.
O ₃	3.53 µg/m ³	GREEN	Significantly below any risk threshold.
SO ₂	4.59 µg/m ³	GREEN	Very low; no concern.
CO	8.12 mg/m ³	GREEN	Well within acceptable limits.

4. Overall Assessment

Air quality in South Wonston during December 2025 and early January 2026 was very good. All pollutants remained at low background levels, far below UK or WHO thresholds. No pollution episodes or concerning trends were identified during this monitoring period.