

Stage 1 and Stage 2 Review and Assessment Summary

From the Stage I review and assessment, it has been predicted that all areas identified as being of possible concern will meet the necessary air quality objectives.

Therefore, it was not necessary for this authority to declare any Air Quality Management Areas within the Lewes District and we do not need to proceed further in this round of air quality reviews and assessments. This has been confirmed by the DETR verifiers. The next round is due for completion by the end of 2003.

Stage 1 Review & Assessment

Lewes District Council published its Stage 1 review and assessment in November 1998 and identified a number of pollutant sources within the district requiring further assessment. Two Industrial (part B) Processes and 11 Road sections with average daily traffic flows of more than 20,000 vehicles per day were identified.

Stage 2 Review & Assessment

Industrial sources

The two industrial processes identified under stage 1 were a **brickworks at South Chailey** and an **aluminium foundry in Newhaven**. The brickworks was assessed for sulphur dioxide (SO₂), and the foundry was assessed for SO₂ and lead, according to statutory guidance.

Sulphur dioxide diffusion tube monitoring was carried out at sites around the brickworks. This showed that the measured annual means at sites around the brickworks did not exceed the WHO guide line. Also, we conducted advanced (AERMOD) modelling for sulphur dioxide emissions. This did not show any exceedences of the 15 minute, 1 hour or 24 hour standards.

The brickworks complies with the relevant process guidance note, made under the Environmental Protection Act 1990, part 1, i.e. PG3/2(95). The brickworks does comply with best available techniques not entailing excessive cost (BATNEEC); and according to paragraph 360 of the National Air Quality Strategy, the UK government would not generally expect an industry to go beyond this. The UK has chosen to adopt this standard as a matter of national policy and it is more demanding than any EC requirement. There are only six open clamp brickworks in the UK, of which this is one of them. This industry sector should not be disproportionately burdened as we move towards the air quality objectives.

This authority began investigating the brickworks before the most recent technical guidance was released. Under the most recent technical guidance: LAQM TG4(00) gas fired brickworks, such as the one in question, would not even be looked at in stage 1 of the review and assessment process. Such processes would only need to be looked at if they burn coal or heavy fuel oil. In relation to the foundry, the mass balance calculations and consultations with the company showed that there will not be an exceedence of the air quality objective for lead. As the foundry is gas fired and does not have sulphur as an input, it was recommended that there was no need to assess the aluminium foundry for sulphur dioxide.

Road Sections

The 11 road sections identified in stage 1 were assessed for nitrogen oxides (NO_x) and nine of the road sections were also assessed for particulates (PM₁₀), as they have an average daily traffic flow of more than 25,000 vehicles per day. One of the road sections was also assessed for carbon monoxide (CO), having an average daily traffic flow of 50,000 vehicles per day. Future pollutant concentrations along the identified road sections were estimated using the Design Manual for Roads and Bridges (DMRB), Vol 11, in accordance with guidance from the Department of the Environment, Transport and the Regions (DETR). The DMRB model uses existing traffic data to estimate vehicle emissions in future years. All the road sections assessed were estimated using the model to be under the respective air quality objectives for 2003 (CO), 2004 (PM₁₀) and 2005 (NO_x).