

## **Baddow Road Pollution: No Improvement In Sight**

Peter Kirk, August 2006

Measurements have shown that in Baddow Road the concentrations in the air of nitrogen dioxide and of small airborne particles are at levels officially considered to be harmful to health. The main source of these pollutants is the constant queue of cars and buses at the Army and Navy, and there is no sign of a solution to this problem.

Baddow Road, from the Army and Navy to the Beehive, together with part of Meadgate Avenue, Meadgate Terrace and Tusser Court, has been officially designated part of an Air Quality Management Area. Some interesting figures about the situation are provided in the Air Quality Assessment accompanying the planning application for redevelopment of the Army and Navy site. In 2005 the average nitrogen dioxide level in Baddow Road, opposite the Meadgate Avenue turning, was measured as  $47.9 \mu\text{g}/\text{m}^3$ . This concentration is predicted to fall to 41.8 by 2009, but it will remain above 40, the official safe level of exposure. The concentration of small particles ( $\text{PM}_{10}$ ) was measured in 2005 as  $27.9 \mu\text{g}/\text{m}^3$  and is predicted to fall to 25.8 by 2009, well above the safe level of 20 to apply from 2010. The 2009 estimates allow for a small increase in road traffic, but also an expectation that new vehicles will produce lower emissions.

DEFRA warns that "long term exposure to particles... can cause premature deaths, particularly from heart disease," and so it has set a new lower safe level to apply from 2010. Also according to DEFRA, nitrogen dioxide "irritate[s] the airways of the lungs, increasing the symptoms of those suffering from lung diseases."

So can anything be done about the pollution in Baddow Road? It can be brought down to safe levels only by reducing the amount of traffic on the road, or in theory by letting it flow freely without queuing. Over 450 homes are being built in or planned for the Baddow Road and Beehive Lane area, potentially generating a huge amount of extra traffic. Essex County Council has ideas about expensive major road improvements to reduce queuing, but these might simply encourage car use and so generate more pollution. The Liberal Democrats oppose such plans and want to reduce dependency on the car by boosting public transport and cycling, but many people will still need or prefer to use a car.

The Sandon Park and Ride has helped with the traffic problems at the Army and Navy, significantly reducing queuing on the Baddow bypass. However, it has had little or no effect on Baddow Road. A chance was missed to build a relief road from Beehive Lane to the Army and Navy through the new development area. There is no other route available.

Thus there are not yet any concrete proposals that will realistically reduce the traffic in Baddow Road. It will be interesting to see how the Borough Council proceeds. But it seems inevitable that for some time to come the residents of Baddow Road will continue to suffer from breathing difficulties and to be at risk of premature death.

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