

ACRA

ALLIANCE OF CANTERBURY RESIDENTS ASSOCIATIONS

Critique of Air Quality proposals in the proposed Local Development Plan

Summary of key points:

- 1. Current policies to address air quality fail to adequately ensure that air quality in Canterbury will be improved and ACRA has no confidence that the Council's goal of a neutral air quality impact is achievable based on the preferred spatial development plan and other proposals in the LDP. Simply stating that the LDP will be air quality neutral without demonstrating how existing pollution levels will be reduced where currently relevant or how this will be achieved in future is a major flaw in the LDP and Air Quality Plan.**
- 2. The Air Quality Action Plan as written does not take into account current DEFRA guidance on the development of such plans nor does it demonstrate compliance with national objectives for pollution reductions as required by para 192 of the NPPF.**
- 3. Despite air quality being a public health issue the council failed to involve public health specialists in drawing up the plan (as recommended in DEFRA guidance to local authorities) and no reference is made in the plan to whether proposals will minimise people's exposure to pollution and thus protect human health.**
- 4. There is no detailed plan re delivery of reductions needed to meet current and future air quality targets and no reference at all to how to achieve standards considered safe for human health by the World Health Organisation or even show how policies align with national government policy on improving air quality. Without clear actionable strategies to reduce emissions from vehicles and other sources of air pollution (including in existing housing, commercial premises etc) relevant reductions in pollution will not be achieved.**
- 5. The LDP policies that are specific to air quality (SS4, DS13, DS16, DM13) are reliant on the delivery of other key strategic plans associated with the District Plan such as allocation of development sites and design standards, accessibility etc; the transport plan. Currently these plans do not have reductions in air pollutants as primary objectives.**
- 6. Policy DM13 refers to biomass technology and the need to limit emissions. All biomass plants release small particulate matter which is a hazard to human health and the claim that they can be carbon neutral is not widely supported in the scientific literature. No biomass plants should be allowed in the district.**

1. The strategy for tackling air pollution

1.1. The LDP sets out a strategic objective to *Create a transport network with a focus on district-wide public transport and low-carbon travel to improve air quality and people's health while ensuring excellent access to city and town centres on foot, cycle and by public transport.* In addition it states that developments will be air quality neutral. The key policies that address these objectives are:

SS4 - Movement and Transportation Strategy for the district delivered through a bus led strategy and with new development “... *designed to help improve the air quality of the district as a whole.*”

DS13 - Movement hierarchy aimed at minimising additional trips made by private vehicle and contributing to improvements in air quality and carbon emissions

DS16 - Air quality developments will need to demonstrate that they are air quality neutral either by design, additional mitigation or provide funding for other mitigation to be undertaken.

DM13 - Biomass technology to reduce associated air quality impacts, the biomass technology should be a high-quality low emission plant, and biomass should be locally sourced.

1.2. While ACRA welcomes the proposed movement hierarchy and ambition of the movement and transportation strategy the actions needed to achieve these are largely the responsibility of other agencies such as the county council, government and bus companies. Delivery of the transport plan is also reliant on meeting building targets to provide relevant developer funding for bus improvements etc.

1.3. The Council can influence movement patterns through site selection but stating that any development must be air quality neutral does not mean that any site will be. Given that the will be calculated monetary payment where mitigation is not possible for a site, suggests that the council does not expect development sites to be air quality neutral. However, the Sustainability Assessment has assessed every single site as air quality neutral but does not indicate how this is to be achieved. In the meeting with the Council's LDP team it was stated that as the policy is that the LDP will be air quality neutral all sites have been assessed as neutral. However, even if the LDP is air quality neutral it does not mean individual sites will be. This appears to be an aspiration rather than based on any analysis.

1.4. Nationally there has been a nearly 10% increase in traffic miles since 2012 with overall traffic miles just under pre-pandemic levels but grew 2,2% between 2022 and 2023. In Canterbury areas with high levels of pollution have experienced similar increases in vehicle traffic. Wincheap, the area with highest levels of pollution, has seen traffic grow year on year and is now higher, according to Department of Transport data, than in pre-pandemic times. The Air Quality Action Plan highlights that in Canterbury current emission levels are above or close to current national limits in Wincheap with for example the measurement point by the railway bridge requiring a 16.4% reduction in

roadside emissions just to bring levels to current NO₂ limits. No reference is made to the fact that traffic levels have (4% since 2018) nor that development arising from the last LDP is likely to increase traffic volumes over the next few years. The slowdown in purchasing of electric vehicles and increasing purchase of larger SUV vehicles means that little benefit from changing vehicle mix will lead to such improvements in air quality.

- 1.5. Up to 2022 the impact on carbon emissions from road traffic of electric vehicles was only -1.6%. As a proportion of vehicles on the road in June 2023 there were 41.2 million licensed vehicles in the UK, an increase of 1.3% compared to the end of June 2022 of which only were 851,000 licensed zero emission vehicles. Sales of electric vehicles has increased but remain a small 2.1% of the total fleet and made up about 20% of new vehicle sales in 2023/24 but SUV sales made up over 60% of sales, of which only 17% were zero emissions. When driving habits and vehicle sales data is taken together with increased development in Thanington it is likely that traffic will continue to increase and that zero emission vehicles alone will not lead to needed reductions without significant measures to restrict car use well beyond the 16.4% reduction. More importantly to achieve needed roadside PM_{2.5} targets even larger and more extreme reductions may be needed which have not been factored into the LDP, site assessment or transportation plan. All measures are also dependent on delivery of Section 106 or CIL funding (in turn dependent on future housing completions), decisions by KCC, the bus company and central government – in addition to needing to change individual behaviour.
- 1.6. Wincheap is not the only area of concern once relevant national objectives for reducing PM and NO₂ levels are considered. There is no reference in the LDP or air quality action plan to government policy or guidance regarding air quality. In the preparation of Air Quality Action Plans government guidance states that *“All English local authorities (including county councils), the Environment Agency, and designated relevant public authorities, must have regard to this [Air Quality] strategy when exercising functions of a public nature that could affect the quality of air.* (DEFRA 2023 Air Quality Strategy Framework for local authority delivery (AQSF)).
- 1.7. The current Plan and strategy fail to comply with government guidance as such are not sound. In addition, in the preparation of the Plan and air quality strategy the council has not sought public health involvement as recommended by DEFRA nor modelled the impact of their proposals on air quality. The Council appears to have taken an approach that simply because they state that the Plan will be air quality neutral all developments and actions will therefore be neutral without providing any evidence or modelling to underpin such an assertion. There are many areas where current NO₂ levels are high including St George’s Place, Broad Street and Herne. The latter is to be solved by a new bypass road although this has the action of increasing overall pollution levels by redistributing vehicle emissions to areas where these had traditionally been low. With predicted vehicle increases on New Dover Road/St George’s Place it is predicted that levels will increase and require additional action, beyond that currently proposed as

part of the Mountfield Development, to achieve government objectives and probably lower national limits. Additional greenfield development sites will lead to increases in traffic and are focused on already busy traffic corridors (eg. Policy C12).

1.8. Without detailed traffic reduction plans it is not possible to have any confidence in a view that the LDP will be air quality neutral.

2. Compliance with government guidance

2.1. In addition government policy is to reduce pollution levels and it is likely that within the timeframe of the LDP upper limits will be reduced. No reference has been made to these targets in the air Quality Action Plan. In particular, particulates limits are of key concern and while not part of the air quality management framework local authorities are expected to address local levels. Para 192 of the National Planning Policy Framework states that *Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants*. In the preparation of Air Quality Action Plans government guidance states that *“All English local authorities (including county councils), the Environment Agency, and designated relevant public authorities, must have regard to this [Air Quality] strategy when exercising functions of a public nature that could affect the quality of air. (DEFRA 2023 Air Quality Strategy Framework for local authority delivery (AQSF)). The AQSF goes on to state that while PM_{2.5} is not currently part of the Local Air Quality Management framework, the government still expects all local authorities to effectively use their powers to reduce PM_{2.5} emissions from the sources which are within their control. (p20) and that All local authorities should support the delivery of national PM_{2.5} targets by taking action to reduce emissions from sources within their control.*

2.2. In relation to particulate matter Policy DM13 should be redrafted to ban all biomass plants as biomass plants release small particulate matter which is a hazard to human health and the claim that they can be carbon neutral is not widely supported in the scientific literature.

2.3. It is also clear that the LDP and air quality action plan have not been drawn up in accordance with government guidance or policy. To meet government policy set out in the national, air quality action plan and DEFRA 2023 *Air Quality Strategy Framework for local authority delivery* the Plan and Strategy should at a minimum support the achievement of achieving a maximum Annual Mean Concentration Target (AMCT) of 10 micrograms of PM_{2.5} or below per cubic metre (µg/m³) and reduce population exposure to PM_{2.5} by 35% compared to 2018 levels by 2040 (DEFRA Environmental Improvement Plan 2023 (EIP)). In addition the Government has set interim targets to be achieved by 2028:

- The highest annual mean concentration in the most recent full calendar year must not exceed 12 µg/m³ of PM_{2.5}.

- Compared to 2018, the reduction in population exposure to PM_{2.5} in the most recent full calendar year must be 22% or greater with an average 35% reduction by 2040.

2.4. With regard to PM_{2.5} the Air Quality Action Plan simply states that the Council is under no obligation to monitor this and that levels are below current 20µg/m³ national target level. It is then stated that it is anticipated that measures to address NO₂ will help improve PM_{2.5} levels. However, while PM_{2.5} is not currently part of the Local Air Quality Management framework, the government still expects all local authorities to effectively use their powers to reduce PM_{2.5} emissions from the sources which are within their control. (DEFRA 2023: 20). DEFRA modelling suggests some 20-40% of PM_{2.5} is locally attributable so local actions to reduce PM_{2.5} would have a substantial impact on overall levels of reduction needed to reach legal maximum values in 2028 and 2040. The Action Plan should, therefore make explicit Council Plans to reduce PM_{2.5} levels and population exposure.

2.5. For NO₂ it is acknowledged that current levels in parts of Canterbury AQMA and in the Herne AQMA levels exceed national limits and reductions are required to meet current limits. The analysis correctly sets this out in terms of NO_x. To meet current targets for air quality a table is produced with reduction levels in NO_x of between 0.6% (Herne AQMA) and 16.4% (Canterbury AQMA - Wincheap). There is no reference to achieving any further reductions in line with government strategy. The DEFRA Framework states that *All local authorities are expected to take proactive action to improve air quality, whether or not they have an Air Quality Management Area. Local authorities without an Air Quality Management Area, should specify proactive measures they will take in their Air Quality Strategy.* Namely, attention needs to be paid across the whole Council area not just AQMAs.

2.6. The current Plan and strategy fail to comply with government guidance as such are not sound. In addition, in the preparation of the Plan and air quality strategy the council has not sought public health involvement as recommended by DEFRA nor modelled the impact of their proposals on air quality. The Council appears to have taken an approach that simply because they state that the Plan will be air quality neutral all developments and actions will therefore be neutral without providing any evidence or modelling to underpin such an assertion.

3. Protection of health

3.1. The LDP states that the strategy regarding air quality is to protect people's health. This is made explicit in government strategies and guidance on air pollution. Despite a reference to pollution and health impacts there is no discussion within the plan of what the impact might be in Canterbury or reference to any health related document such as

that produced previously by Public Health England, NICE or other national agency, evidence reviews or any input from public health experts to assess the health impacts. Given that the only reference is to current government national pollution limits, considered by all expert reports to fail to protect human health, it is clear that no policies have been designed to reduce air quality to accepted levels of air pollution considered protective of human health. Currently World Health Organisation limits are seen as best practice which would require PM_{2.5} to be reduced to less than half current levels and NO₂ to be reduced to a quarter of current limits. This would require a 78.5% reduction on current levels.

Table 1 WHO recommended 2021 air quality guidance levels compared to 2005 air quality guideline

Pollutant	Averaging time	2005 Air Quality Guidelines	2021 Air Quality Guidelines
PM _{2.5} µg/m ³	Annual	10	5
	24-hour	25	15
PM ₁₀ µg/m ³	Annual	20	15
	24-hour	50	45
O ₃ µg/m ³	Peak season	-	60
	8-hour	100	100
NO ₂ µg/m ³	Annual	40	10
	24-hour	-	25
SO ₂ µg/m ³	24-hour	20	40
CO mg/m ³	24-hour	-	4

Source: World Health Organization, [What are the WHO Air quality guidelines?](#) 22 September 2021

3.2. The fact that health is not considered a relevant outcome is a serious failure of the air quality assessment and the LDP overall, especially when considered alongside current health issues in Canterbury. Air pollution is linked to the top six causes of morbidity and mortality in the UK with PM_{2.5} and smaller particulate proving the most problematic although NO₂ and low level ozone (O₃) are significant causes of respiratory disease. The latter of these is a particular issue in Canterbury due to roadside levels of NO_x and geographical position and topography.

3.3. Government guidance states that *“Local authorities should robustly assess the monetised benefits of air quality interventions, implementing those which boost healthy life expectancy and are economically beneficial to their area. The government publishes evidence damage costs for pollutants, which local authorities can use to support economic assessment of air quality interventions”* There is no indication in the AQ Plan that any of this has been done.

3.4. While the LDP and Air Quality Action strategy is to meet current national limits local people will be exposed to levels of air pollution that are damaging to health. **The plan therefore does not comply with government guidance nor does it achieve its own strategic policy of protecting human health.**

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