



FOR PUBLICATION

DERBYSHIRE COUNTY COUNCIL

CABINET MEMBER DECISION – HIGHWAYS, ASSETS AND TRANSPORT

3 May 2022

Report of the Executive Director - Place

A619 Brimington Air Quality Management Area Action Plan

1. Divisions Affected

- 1.1 Brimington.

2. Key Decision

- 2.1 This is not a Key Decision.

3. Purpose

- 3.1 To obtain approval for the submission of a package of transport actions to Chesterfield Borough Council for its consideration and inclusion within an Action Plan to maintain air quality levels in accordance with National Air Quality objective level within the declared A619 Brimington Air Quality Management Area. Also, to approve the acceptance of a £30,000 contribution from the Chesterfield Borough Council Community Infrastructure Levy towards implementation of Action 1 as set out in this report.

4. Information and Analysis

- 4.1 On 22 February 2022, the Cabinet Member considered a report about the Ashbourne Air Quality Management Area, which provided background of the impacts of poor air quality on everyone's health. It also set out the Council's responsibilities for tackling transport-related nitrogen dioxide pollution within declared Air Quality Management Areas

(AQMAs). This report makes recommendations for tackling transport-related nitrogen dioxide emissions at a further AQMA in Chesterfield.

- 4.2 Chesterfield Borough Council (CBC) has been monitoring air quality adjacent to a row of eight terraced houses fronting the A619 Church Street in Brimington (see map in Appendix 2). In 2015, the Borough Council declared an AQMA covering this row of terraced houses, having concluded that the annual mean concentration of nitrogen dioxide emissions was exceeding national air quality objectives (annual mean limit value of $40\mu/m^3$). This location is considered vulnerable to air pollution due to a combination of traffic queuing adjacent to the terraced houses, and these houses and other buildings acting as a barrier to rapid dispersal of traffic emissions - known as 'street canyon effect'.
- 4.3 From 2018, annual monitoring of air pollution at this location has found that mean levels of air pollution have since returned below $40\mu/m^3$ and, therefore, are now in accordance with national air quality objective levels. CBC has advised, however, that it is not currently seeking to revoke the AQMA until there is more certainty that increased transport demand associated with regeneration proposals across the wider Staveley and Rother Valley Corridor can be met by delivery of new transport infrastructure.
- 4.4 The Staveley and Rother Valley Corridor is the largest regeneration area within Chesterfield. The County Council is actively involved in assisting partners to bring forward regeneration proposals under the Growth Zone North Regeneration Programme. This programme includes the Staveley Town Deal, as well as business cases associated with two major transport infrastructure projects; the Chesterfield to Staveley Regeneration Route (CSRR) and the re-opening of the Barrow Hill rail line to passengers. Both could provide additional capacity for travel demand within the Corridor and support a clean growth approach for delivery of 1,500 new homes and new employment areas (see Action 1 below).
- 4.5 Until there is more certainty of increased travel demand capacity within the Staveley and Rother Corridor, it is anticipated the AQMA will remain in place. Therefore, the relevant monitoring local authority (in this case, CBC) retains a duty under the Environment Act 1995 (as amended), to prepare an Action Plan. The Action Plan sets out how the functions of all local authorities will be exercised to achieve air quality standards and objectives.
- 4.6 As the source of pollution is associated with tailpipe emissions of nitrogen dioxide on the local road network, the County Council also has

a duty to set out in an Action Plan its approach to exercising its functions to secure air quality standards and objectives. It also has a duty to set out the date by which the implementation of measures will be complete.

- 4.7 Although an Action Plan has not yet been published, CBC has undertaken consultation on a draft Action Plan. In support of this work, the Council has already installed 20 real time bus information screens at bus stops along the A619 Corridor to encourage modal shift from motorised vehicles to public transport.
- 4.8 This report now makes recommendations on the additional functions that can be exercised to impact the achievement of air quality objectives within the AQMA. Firstly, the report sets out mitigation actions to reduce concentrations of pollution once it has occurred and secondly, the preventative actions that seek to reduce pollution emissions.

Air Pollution Mitigation Actions

Action 1: Continue to Develop Proposals for Chesterfield Staveley Regeneration Route and Barrow Hill Rail Line Reopening

- 4.9 The Council is currently working in collaboration with partners to bring forward two major infrastructure proposals that would provide additional transport capacity to support regeneration proposals within the Staveley and Rother Corridor. Both of these infrastructure proposals can support better air quality within the AQMA by minimising the impact of new development on the A619 Corridor. It is recommended that preparatory work continues to be progressed within the Council's overarching Regeneration Pipeline and, as such, is included within the Action Plan.
- 4.10 With recent air quality monitoring showing that National Air Quality Objectives are being met within the AQMA, it is recommended that the Council undertakes a phased approach to implementing traffic management measures. This will ensure that measures are introduced as necessary to maintain air quality improvement within the AQMA, prevent displacement of air pollution issues elsewhere, and ensure that new infrastructure demonstrates good value for money in achieving air quality outcomes. Consequently, each completed phase will require a reasonable period of post-implementation monitoring to appraise whether further phase measures are required and can deliver air quality outcomes.

Action 2: (Phase 1) A619 High Street Traffic Signals Upgrade

- 4.11 The Council has secured £30,000 from the CBC Community Infrastructure Levy to replace the electronic controller of the High Street Traffic Signals with a more intelligent signal controller which is better

able to adapt signal timings to live traffic conditions. A change in signal controller would therefore support more efficient operation of the traffic signals and ease the flow of traffic travelling eastbound on the A619 which is considered to be beneficial to air quality. This action will need to consider impacts on the other arms of the signal to ensure air pollution is not displaced elsewhere. This Action can be delivered in the 2022-23 financial year.

Action 3: (Phase 2) Investigate Use of Transport Technology

- 4.12 The Council's new Urban Traffic Management Control (UTMC) system (due to be operational in Spring 2022) could be used to link existing traffic signals between the A61 in Chesterfield and M1 junction 30 at Barlborough, to encourage a more efficient flow of traffic along the A619 Corridor. This Action can be considered in collaboration with the implementation of the Council's Bus Service Improvement Plan (BSIP), by providing bus priority at traffic signals where they are running behind schedule. The potential to implement additional electronic variable message signs to provide traffic information could also be explored, e.g. when there are incidents on the road network or where congestion levels are increasing. This Action could be considered for delivery in the 2022-23 financial year.

Action 4: (Phase 3) A619/B6050 New Traffic Signals

- 4.13 Should Phases 1 and 2 not be wholly successful in maintaining air quality in accordance with National Objectives, then the installation of traffic signals at the A619/B6050 junction could be investigated and could be operated in conjunction with the A619/High Street traffic signals via the Council's UTMC system to further ease the flow of traffic moving through the AQMA. A key consideration for any investigation would be to maintain a safe and efficient operation of the A619/B6050 junction, maintain pedestrian safety and connectivity, and ensure that air quality issues are not displaced to other locations. This Action could be considered for delivery in the 2023-24 financial year.

Air Pollution Preventative Measures

- 4.14 The Council's aspirations to work with partners in delivering a market town renewal programme and 'build back better' provides an opportunity to develop a wider programme of measures which seek to prevent nitrogen dioxide emissions being emitted across the Borough. The Council has been working in collaboration with CBC to implement a wide range of measures which are complementary to better air quality, including:
- extension of the Chesterfield Key Cycle Network to encourage more people walking and cycling for short journeys;

- implementing an UTMC system, electronic vehicle information signs, and car park guidance systems to provide a more efficient use of the traffic network;
- provision of real time bus information screens along key public transport corridors to support more use of bus services; and
- installation of electric vehicle charging points.

4.15 The Council can continue working with CBC to take opportunities to provide residents, visitors and businesses with more options for making changes to their personal contributions to air quality. It is recommended that five preventative actions, listed below, are also considered by the Borough Council for inclusion within the Action Plan.

Action 5: Investigate Demand for Electric Vehicle Charging Points

4.16 The Council, in collaboration with CBC, is currently working to install 40 electric vehicle charging points within the Borough, including five at Brimington funded by the Office of Zero Emission Vehicles On-Street Residential Charge Point scheme. The County Council has also commissioned a study to assess further demand across Derbyshire and deliver the Council's commitment of 1,000 charge points by 2025. This study, which will report in Spring 2022, is considering the level of demand for additional charge points in the Borough. This Action also supports further opportunities to convert the Council's vehicle fleet to low emission vehicles.

Action 6: Business and School Travel Planning

4.17 The County Council's Sustainable Travel Team provides travel planning support to businesses and schools across Derbyshire and is committed to working with organisations in Brimington and Chesterfield where there is demand.

Action 7: Bus Service Improvement Plan Implementation

4.18 The Government's White Paper 'Levelling Up the United Kingdom' has stated that the County's ambitious BSIP is supported. Opportunities to enhance public transport infrastructure and extend provision of bus priority along the A619 Corridor is identified within the BSIP as a focus for early work across a three-year programme to 2025.

Action 8: Improvement of, and Promotion of the Key Cycle Network

4.19 Brimington is relatively well served by strategic cycle and walking connections to Chesterfield and Staveley via the Trans-Pennine Trail, as well as connections to the wider Borough cycle network.

- 4.20 Opportunities can be considered to enhance the quality of key cycle networks, e.g. through resurfacing programmes to encourage more use of active travel for shorter journeys. The Sustainable Travel Team is also able to promote the use of active travel modes for shorter journeys – see Action 5, for example distribution of the Derbyshire Cycle Map.

Action 9: Awareness of Anti-idling

- 4.21 Although not identified as a specific issue for Brimington, there may be opportunities to raise awareness of poor air quality associated with idling vehicle engines when parked. Roadside information signs or use of electronic variable message signs introduced in Chesterfield could be used to display messages to encourage drivers to switch off their engines, for example, when waiting for passengers.

5. Consultation

- 5.1 Officers have consulted with CBC officers throughout the development of the Actions set out in this report. The local Member, Councillor Dean Collins, has also been consulted but has not made any comments.
- 5.2 The Actions set out in this report are compliant with ten strategic actions that CBC set out in a draft A619 Brimington AQMA Action Plan which was subject to, and confirmed support for, during a public consultation in 2021:
1. Education and campaigns.
 2. Information, e.g. signage to encourage drivers to switch off engines.
 3. Sustainable travel.
 4. Fleet management.
 5. Planning.
 6. Guidance for developers.
 7. Traffic management.
 8. Engineering solutions.
 9. Relocate traffic, e.g. major infrastructure projects.
 10. Low emission vehicle infrastructure.

- 5.3 Further consultation will be undertaken during the preparation stage of the actions prior to implementation.

6. Alternative Options Considered

- 6.1 A do-nothing option has not been considered given the Council's duty to exercise its functions to achieve air quality objectives within the A619 Brimington AQMA. The Cabinet Member should note that should the Secretary of State consider that the Council has failed to discharge its

duties under the Environment Act 1995 (as amended), the Secretary of State has the power to instruct the Council to undertake whatever directions it deems necessary to achieve air quality objectives.

- 6.2 Several other options have been considered and scoped out:
- Placing restrictions on heavy goods vehicles using the A619 Corridor has been scoped out due to the need for many heavy goods vehicles to access businesses along the corridor and the lack of suitable alternative routes.
 - Pedestrianisation of Church Street has been scoped out because displaced traffic to other routes would displace air pollution issues to other locations.
 - Removal of High Street traffic signals has been scoped out because there is a need to maintain good connectivity to the A619 for businesses and communities located near High Street.
 - Replacement of pedestrian crossings with pedestrian bridges has been scoped out because of the significant infrastructure that would be required to provide bridges in accordance with accessibility standards.

7. Implications

- 7.1 Appendix 1 sets out the relevant implications considered in the preparation of the report.

8. Background Papers

- 8.1 None.

9. Appendices

- 9.1 Appendix 1- Implications.
- 9.2 Appendix 2 – A619 Brimington Air Quality Management Area Map.

10. Recommendations

That the Cabinet Member:

- a) Approves the submission of the actions set out in this report to Chesterfield Borough Council to be considered for inclusion within the A619 Brimington Air Quality Management Area Action Plan.
- b) Approves the acceptance of a £30,000 contribution from the Chesterfield Borough Council Community Infrastructure Levy towards implementation of Action 1.

11. Reason for Recommendations

- 11.1 To approve the Council's proposed actions in accordance with the Council's responsibilities in pursuit of the achievement of air quality standards and objectives within the A619 Brimington Air Quality Management Area.

12. Is it necessary to waive the call in period?

- 12.1 No.

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Appendix 1

Implications

Financial

- 1.1 This report seeks approval to accept a £30,000 grant offer from the Chesterfield Borough Council Community Infrastructure Levy. This grant funding is available to support implementation of Action 2: A619 High Street Traffic Signal upgrade during the 2022-23 financial year.
- 1.2 There are no further financial implications associated with the delivery of the Actions set out in this report. The Cabinet Member should note that costs of the proposed Actions set out in this report can either be met from the Council's Local Transport Air Quality capital programme or other transport capital and revenue programmes.
- 1.3 The Council is awaiting Government confirmation of the level of financial support for implementation of the Bus Service Improvement Plan (BSIP). The BSIP work programme update will be reported to Cabinet in due course.

Legal

- 2.1 The air quality standards in the United Kingdom are derived from EC directives and are adopted into English law via the Air Quality (England) Regulations 2000 and Air Quality (England) Amendment Regulations 2002. The Air Quality Limit Values Regulations 2003 and subsequent amendments implement the Air Quality Framework Directive into English Law. Directive 2008/50/EC was translated into UK law in 2010 via the Air Quality Standards Regulations 2010.
- 2.2 The relevant standard for protecting human health from nitrogen dioxide emissions in England and Wales are set out in Table 2.1 below:

Table 2.1 Nitrogen Dioxide Air Quality Standards

Objective	Concentration
200 µg/m ³ not to be exceeded more than 18 times a year	1 hour mean
40 µg/m ³	annual mean

The Environment Act 1995 (as amended)

- 2.3 The Air Quality Standard objectives are used to review and assess air quality in local authority areas under Section 82 of the Environment Act (1995). If exceedances are measured or predicted through the review and assessment process, the relevant local authority must declare an

Air Quality Management Area (AQMA) under Section 83 of the Act and produce an Air Quality Action Plan (AQAP) to outline how air quality is to be improved.

- 2.4 An action plan must set out particular measures the local authority will take to secure the achievement, and maintenance, of air quality standards and objectives in the area to which the plan relates and must, in relation to each measure, specify a date by which it will be carried out.
- 2.5 Section 86 requires the Council to provide the Borough Council with proposals for particular measures that it will take to contribute to the achievement, and maintenance, of air quality standards and objectives for the AQMA. Should the Secretary of State consider that the Council has failed in this duty, the Secretary of State may give directions to the county council requiring it to take such steps as may be specified in the directions.

Human Resources

- 3.1 Some of the projects to deliver the Action Plan may have Human Resource implications. These will be considered on a project-by-project basis.

Information Technology

- 4.1 Some of the projects to deliver the Action Plan may have Information Technology implications. These will be considered on a project-by-project basis.

Equalities Impact

- 5.1 Some of the projects to deliver the Action Plan may have Equality Impact implications. These will be considered on a project-by-project basis.

Corporate objectives and priorities for change

- 6.1 Delivery of the Actions supports the Council Plan's aspiration for a prosperous and green Derbyshire and its ambitions for 'Green Towns'. The development of an Action Plan aligns with the Derbyshire Local Transport Plan (2011 to 2026) key priority to develop packages for improvements where there are air quality issues associated with local traffic.

Other (for example, Health and Safety, Environmental Sustainability, Property and Asset Management, Risk Management and Safeguarding)

7.1 Some of the projects to deliver the Action Plan may have other implications. These will be considered on a project-by-project basis.

Appendix 2

Boundary of A619 Brimington Air Quality Management Area



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