

# ***Information/Discussion Paper***

## **Overview and Scrutiny Committee – 5 July 2021**

### **Revised Air Quality Action Plan update and results from the Schools Monitoring project**

This note contains the information to keep Members informed of matters relating to the work of the Committee, but where no decisions from Members are needed

#### **1. Why has this come to scrutiny?**

1.1 Members may be aware of previous discussions at Overview and Scrutiny in: [January 2020](#), and [September 2020](#). These discussions were mostly around changes to the existing Air Quality Management Area (AQMA), which was reduced in size to reflect that legal levels of air pollution were being met across most of the town, and efforts to make further improvements needed to concentrate on the worst affected area. Changes were approved by DEFRA and CBC, and formally implemented Sept 2020. On declaring a new AQMA, the existing Air Quality Action Plan (AQAP) became obsolete, and new AQAP is now being developed in association with consultants. This plan is legally required to concentrate on the AQMA area, but also assesses other areas of concern and considers ways to improve AQ across the borough.

1.2 During discussion in September 2020 members queried isolated effects of the school run potentially causing elevated levels of air pollution at schools, and the effectiveness of GCC “Streets for Schools” schemes, announced in July 2020. The Public Protection team has now carried out our own investigation into pollution levels at 3 Cheltenham schools, using an intern and short term hire of monitoring equipment.

#### **2. Summary of the Issue**

This paper will provide updates on:

- Progress made in preparing a revised air quality action plan.
- Monitoring of pollution levels at schools.

#### **3. Summary of evidence/information**

Further information for discussion is provided below on:

- AQAP Models. Computer models of pollution levels revised and updated to use 2019 data.
- AQAP Meetings held to discuss modelling results and partners ideas. Cars & LGVs are key issues in the AQMA.
- AQAP Measures being assessed at time of writing. Likely to identify where more info is needed.
- AQAP Process has indicated positive intent and aspiration for a far more significant air plan.
- Update on GCC “Streets for Schools”.
- Schools Monitoring Project. Used intern with hired kit – cost saving, officer time saving
- Schools conclusions maybe not as expected.

**3.1 AQAP Models:** The first step in formulating a revised AQAP is to establish current levels of pollution across the borough in a process similar to the [detailed assessment](#) carried out in 2019. In the case of the current work, 2019 data has been used, as the 2020 data set was skewed by a huge reduction in traffic during lockdown periods. The results of models are then validated against levels of pollution detected using monitoring points around the town. This process has identified that in the AQMA the main sources of NO<sub>2</sub> are cars causing 40% and LGVs 20%. Not HGVs, or buses (c.5% each). At the worst case receptor we have a target of reducing by NO<sub>2</sub> by 40%.

**3.2 AQAP Meetings:** Initial meetings have been held with a steering group, including representatives of GCC Transport Commissioner and Highways; CBC Officers for Strategic Planning, Car Parks and economic development; Ubico Fleet management and Clean Air Cheltenham. Ideas for measures to reduce pollution were requested, to be focussed on the AQMA, but wider measures can also be considered and assessed. Disappointing lack of attendance from some partners, or lack of focussed ideas or information to assess measures.

**3.3 AQAP Measures:** being assessed. A list has been drawn up of measures to reduce pollution now being assessed for feasibility and efficacy. This includes a wide range of measures including public health campaigns, providing additional electric vehicle charging infrastructure, and working with Royal Mail to improve their LGV fleet which operates from the AQMA. This process has also started to identify where more data is needed. Obtaining this data could involve surveys on vehicle trips: (origin, destination, distance, alternatives). As more detailed data become available it will be used to identify incentives and options to promote change towards less polluting options.

**3.4 AQAP Process:** In discussion of measures to improve air quality it has become apparent that there is widespread enthusiasm from all the agencies involved to go beyond what is statutorily required. The scope here is very broad, and there is significant potential for CBC to make wide-scale comprehensive improvements to AQ across the town. This will require a considerable amount of work to produce a "Comprehensive Air Plan".

**3.5 Update on GCC Streets for Schools:** GCC launched "Streets for Schools" at Warden Hill Primary School in January 2021, closely followed by lockdown which prevented most pupils from attending school at all. CBC provides a monitoring service at 2 locations near the school for GCC in the way they requested. Results from these are obtained on a monthly basis and show (unsurprisingly) a very low level of pollution at the school gate when measured this way. Given that the location of this site is on a very quiet residential cul-de-sac it is of little surprise that monthly levels are this low, and it is not possible to determine if the project has had a significant effect on air pollution levels. Queries remain regarding the benefits of this project, including concerns over short distance displacement of where children are dropped off.

**3.6 Schools Monitoring Project:**

In order to better understand the effects of the school run on levels of pollution at the school gate in a local context, officers from the Public Protection team arranged a project to carry out short-term monitoring at 3 schools. A copy of the full report is attached. In order to keep costs of this trial project to a minimum, the project utilised an intern who had just completed a 12 month placement with Publica who stepped in at the eleventh hour to replace a University of Gloucestershire student. Data was obtained from one of the council's existing network of AQ Mesh Pods, located outside

Gloucester Road School, and 2 more pods hired on a short-term basis at All Saints Academy and Cheltenham Bournside. Members may note that these schools were not selected due to any particular concerns over air quality, but they had shown willingness to be involved in an air quality study. Whilst there were some limitations to this project, the analysis of the data carried out by the intern was highly valuable.

**3.7 Schools Monitoring Project Conclusions:** The most serious limitation in this project involves the accuracy and reliability of levels of pollution recorded by the monitoring equipment. We have found through using this equipment over the last 9 months that the AQ Mesh pods struggle to provide accurate data most when pollution levels are low and we continue to work with our suppliers to improve this aspect of operation. What we can rely on is the temporal patterns detected by this equipment that demonstrate peaks of pollution falling outside school run times. They also demonstrate that in some cases levels of pollution were worse during the school holiday than in term time. These conclusions may not be as expected and warrant further investigation, possibly through repeating the survey over a longer time period, to remove short term effects of weather and road works around the school sites.

#### **4. Next Steps - possible next steps for the committee to consider eg potential witnesses, further report, site visit etc.**

4.1 Publishing an AQAP, to the requirements of, and approval by DEFRA is a statutory requirement. Guidance from DEFRA indicates that this should be completed within one year of a new or revised AQMA being declared. Progress towards this deadline is reasonably good, and we have received positive engagement with the process from NHS, Gloucestershire County Council and other agencies. An initial assessment of measures is expected to have been received by the time this report reaches committee.

4.2 As discussed above, it has become apparent that there is an ambition at CBC to go significantly beyond the minimum plan required by statute, and develop a comprehensive plan to address an improvement in air quality across the entire borough. Such a plan has been introduced by a small number of number of local authorities and has considerable scope which could potentially include setting our own target for a maximum pollution level of 30ug/m<sup>3</sup> of NO<sub>2</sub> (current legal limit of 40ug/m<sup>3</sup>). Developing such a plan will require significant staff resources and time and will have significant overlap with the climate change agenda. It will also require the commitment of CBC and partners to deliver the actions identified, which are likely to entail significant costs.

4.3 AQ at Schools: Given the surprising outcome of the initial project assessing pollution at the school gate, it would seem that the logical next step is arrange monitoring and analysis to establish if these results are indicative of the longer term, and repeated at other schools. Obviously this will have a cost in terms of officer time and equipment purchase or hire, which will be established as the extent of the project is determined. There is considerable scope for this project to link in to schools to help educate young people on travel choices and achieve a positive effect outside of the immediate school area.

4.4 The Committee meeting will be attended by Gareth Jones, Senior EHO to answer any questions.

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**Appendices**

1. Cheltenham Schools Air Quality Report, May 2021

**Contact Officer**

Gareth Jones,  
Senior Environmental Health Officer  
07836 510830  
[gareth.jones@cheltenham.gov.uk](mailto:gareth.jones@cheltenham.gov.uk)

**Accountability**

Councillor Max Wilkinson, Cabinet Member  
Climate Emergency