

**LOCAL AIR QUALITY MANAGEMENT – CARDIFF COUNCIL AIR QUALITY ANNUAL  
PROGRESS REPORT 2021: PERFORMANCE MONITORING SCRUTINY**

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**Purpose of the Report**

1. To provide Members with background information to aid scrutiny of the report to Cabinet regarding Cardiff Council's Local Air Quality Annual Progress Report, which is due to be considered by Cabinet at their meeting on 18 November 2021.

**Scope of Scrutiny**

2. At their meeting on 18 November 2021, the Cabinet will consider a report entitled 'Local Air Quality Management – Cardiff Council Air Quality Annual Progress Report 2021' that seeks cabinet approval for:
  - The 2021 Cardiff Council Local Air Quality Management (LAQM) Annual Progress Report (APR), based upon on air quality datasets obtained in 2020, for submission to Welsh Government for approval.
  - The undertaking of a procurement of a 2-year pilot project on a city wide real-time monitoring network using the 20/21 One Planet Funding.
3. During this scrutiny, Members have the opportunity to explore:
  - i) The progress and performance of the Council in relation to the national air quality objectives Wales;<sup>1</sup>
  - ii) The impact of the Covid-19 pandemic on air quality in Cardiff;
  - iii) How any benefits gained during the pandemic can potentially be made exploited to reduce air pollution longer term;
  - iv) The proposals for a 2-year pilot project on city wide real-time monitoring network;

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<sup>1</sup> [Standards and Objectives | Air Quality In Wales \(gov.wales\)](#)

- v) The timeline and next steps for delivering the Clean Air Plan;
- vi) The recommendations to Cabinet.

## **Background**

4. Local authorities have a statutory duty under Part IV of the Environment Act 1995 & Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007 to manage local air quality. Under Section 82 of the Environment Act 1995 the Local Air Quality Management (LAQM) process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not air quality objectives are likely to be achieved.
5. The air quality objectives applicable to LAQM in Wales are set out in the Air Quality (Wales) Regulations 2000, No. 1940 (Wales 138) and Air Quality (Amendment) (Wales) Regulations 2002, No 3182 (Wales 298).<sup>2</sup>
6. Where the air quality reviews indicate that the air quality objectives may not be met, the local authority is required to designate an Air Quality Management Area (AQMA). Action must then be taken to provide an Air Quality Action Plan (AQAP) for each identified AQMA to ensure that air quality in the identified area improves.
7. In 2018, Shared Regulatory Services and Cardiff Council developed a citywide Clean Air Strategy & Action Plan (CASAP) for Cardiff. The strategy coincides with Cardiff's Capital Ambition report and helps to implement and deliver the priorities outlined in the Ambition report with an overarching aim to improve air quality to protect and improve public health in Cardiff.
8. The current Air Quality Annual Progress Report for the Council provides details on the ratified data for air quality monitoring undertaken in 2020 within the Cardiff Council area. This report must include monitoring results for the previous calendar year, a progress report on action plan implementation and an update on any new policies or developments likely to affect local air quality.

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<sup>2</sup> [The Air Quality \(Amendment\) \(Wales\) Regulations 2002 \(legislation.gov.uk\)](https://www.legislation.gov.uk/uksi/2002/1940/related/ukdl/2002/3182)

## Structure of the Papers

9. The draft report to Cabinet is attached at **Appendix A** with the 2021 Annual Air Quality progress Report attached at **Appendix A1**.

10. The Progress Report consists of the following sections:

- Executive Summary: Air Quality in Our Area..... iii
- Actions to Improve Air Quality..... 1
- Air Quality Monitoring Data and Comparison with Air Quality Objectives.... 24
- New Local Developments..... 85
- Policies and Strategies Affecting Airborne Pollution ..... 95
- Conclusions and Proposed Actions.....105
- References ..... 106
- Appendices..... 107
  - Appendix A: Monthly Diffusion Tube Monitoring Results..... 108
  - Appendix B: A Summary of Local Air Quality Management..... 110
  - Appendix C: Air Quality Monitoring Data QA/QC ..... 112
- Glossary of Terms ..... 117

11. A full **Table of Contents** can be found on **Page xxviii** of the Progress Report.

## Issues identified in the Cabinet Report

12. As the attached report to Cabinet highlights, in the UK, in the context of air quality management, the main air pollutants that are the primary public health concern are particulate matter and Nitrogen Dioxide (NO<sub>2</sub>).

13. Public Health Wales has stated that poor air quality is the second greatest public health concern after smoking and is the most significant environmental determinant of health. In Wales, based on data for the period 2011-2012, it has been estimated that an equivalent of 1,100 avoidable deaths can be linked to NO<sub>2</sub> exposure each year. The principle source of these pollutants is from road transport emissions, particularly from diesel cars.

14. **Point 18** of the Cabinet report identifies four Air Quality Management Areas (AQMAs) declared across Cardiff which have all been declared due to exceedances of the annual mean NO<sub>2</sub> Air Quality Standard (40 µg/m<sup>3</sup>), known to be derived from road transport. These areas are:

- **Cardiff City Centre AQMA** (declared 1/4/13 to incorporate Westgate Street; formerly St Marys St AQMA);
- **Ely Bridge AQMA** (declared 1/2/07);
- **Stephenson Court AQMA** (declared 1/ 12/10); and
- **Llandaff AQMA** (declared 1/4/13).

15. According to the Cabinet report, **points 20 – 28**, Cardiff had four automatic air quality monitoring sites in 2020, located at Frederick Street in the City Centre, Richard's Terrace, just off Newport Road, Castle Street<sup>3</sup> and Lakeside Primary School. **The results obtained at 3 of these sites, omitting Lakeside (see point 26 of the Cabinet report) demonstrate compliance with the national air quality objectives for both NO<sub>2</sub> and PM<sub>10</sub> which are set at 40 µg/m<sup>3</sup> as an annual average.**

16. Further to this, points **29 – 30** state that **out of the 92** Cardiff Council operated specifically allocated non automatic monitoring sites in Cardiff which monitor levels of Nitrogen Dioxide (NO<sub>2</sub>), **none of them recorded exceedances of the annual average objective set for NO<sub>2</sub> (40 µg/m<sup>3</sup>).**

17. As highlighted at **point 31**, however, the concentrations recorded for 2020 are not a true representation due to the impacts of the COVID lockdowns and restrictions on pollution levels in Cardiff which is likely owing to traffic volumes having decreased. The results have therefore generated a bias/ underestimation of levels of pollution across Cardiff in 2020.

18. **City Centre AQMA – Points 37 and 38** – Using sites 186 and 187 located on Castle Street - pre pandemic, 2019 levels were 44 µg/m<sup>3</sup> at both sites. For 2020, the same locations recorded concentrations of 23 µg/m<sup>3</sup> and 26 µg/m<sup>3</sup>, which equates to a reduction of 47% and 41%.

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<sup>3</sup> Installed late summer 2020 and operational from October 2020

19. **Ely Bridge AQMA - Point 39** - Site 117, 192 & 218) recorded annual average levels of NO<sub>2</sub> at 30µg/m<sup>3</sup> or less.
20. **Llandaff AQMA – Point 40** - Site 212, in 2019 had an annual average reading of 41.3 µg/m<sup>3</sup>. For 2020, it recorded a concentration of 33 µg/m<sup>3</sup>, a reduction of 20%.
21. **Stephenson Court, Newport Rd, AQMA – point 41** - No monitoring sites within the Stephenson Court AQMA (Sites, 81, 131 & 198) recorded concentrations >30 µg/m<sup>3</sup>. Site 131 recorded the highest concentration of 28 µg/m<sup>3</sup> which in comparison to concentrations recorded in 2019 is a reduction of 22%.
22. **Points 52-58** of the Cabinet provides detail of the **School Streets Pilot Project** which involves the temporary closure of road links surrounding an initial 6 specific schools in Cardiff, followed by an additional 9, with the idea to encourage parents, staff and children to adopt an alternative mode of travel. The results obtained from each of the initial 6 school sites indicated **full compliance with the NO<sub>2</sub> annual average objective of 40 µg/m<sup>3</sup>**. Details of the results from the additional 9 Schools will be presented in the 2022 report owing to the work only commencing in December 2020.
23. **Cardiff Council Clean Air Plan – points 59 to 71** provide an update regarding the Council's Clean Air Plan in achieving legal compliance on **Castle Street** and how measures set out in early 2020, have been impacted or delayed by the Covid-19 pandemic including:
- Implementation of Electric Buses – 36 Electric Buses to be implemented on a number of routes within the City Centre;
  - Bus Retro Fitting Programme;
  - Taxi Mitigation Scheme; and
  - City Centre Transportation Improvements.
24. **Points 63 and 64** highlight that the temporary measures established on Castle Street in response to COVID-19 led to a significant improvement in air quality on Castle Street and ensured that compliance with the EU Limit for NO<sub>2</sub> was achieved in advanced of the modelled forecast date within the Clean Air Plan of 2021. This Monitoring has continued on Castle Street throughout 2021 and the

current average concentration for NO<sub>2</sub> between January-September 2021 has been recorded at **22 µg/m<sup>3</sup>**.

25. According to the Cabinet report, **points 72 – 79**, further work identified the need to broaden the real time air quality monitoring which could then be utilised to inform research, health impact analysis, policy development and the public, with the hope that they will use this information to make better decisions on daily travel choices.

26. One Planet Cardiff Capital funding has been made available to support the expansion of this network with the aim to undertake a 2-year pilot project and increase the density of monitors in the city in the region of ~50 units.

### **Proposed Recommendations to Cabinet**

27. The report to Cabinet contains the following recommendations:

- i) To note and accept the monitored results gathered in 2020 and approve the 2021 Annual Progress Report for submission to Welsh Government for approval.
- ii) To delegate authority to the Director of Planning, Transport & Environment in consultation with the Cabinet Members for Clean Streets, Recycling & Environment and Strategic Planning and Transport, to determine all aspects of the procurement process for the 2-year pilot project on a city wide real-time monitoring network.

### **Previous Scrutiny**

28. The Environmental Scrutiny Committee has been very involved in reviewing the work being undertaken by the Council to improve air quality in the city. Pre decision and update reports were received in March 2018 and March 2019 respectively as well as a Task and Finish Group inquiry in 2017/18 titled 'Improving Cardiff's Air Quality'. The inquiry considered a range of aspects that have an impact on Cardiff's air quality and consulted with a number of industry experts. The report made 31 recommendations and was presented to Cabinet on the 20<sup>th</sup> September 2018, a response to which was presented to the Scrutiny

Committee in January 2020<sup>4</sup>, and resulted in further observations and comments via the Chair's letter<sup>5</sup>.

29. In June 2019, the Committee received and provided comment on a pre-decision item titled 'Air Quality Feasibility Study Final Plan - Full Business Case & City Centre Transport Improvements'<sup>6</sup> and more recently, in June 2021, a further pre-decision report on City Centre Next Steps – Castle Street and City Centre East (Phase 1 + Canal). A copy of the Chair's letter and Cabinet response from the latter item are attached at Appendices B and D.

30. The Committee has also examined the subject of air quality during scrutiny of associated topics and Council strategies such as One Planet Cardiff, Active Travel, Cardiff Bus Strategy and the Cardiff Transport White Paper.

## **Way Forward**

31. Councillor Caro Wild, Cabinet Member for Strategic Planning and Transport, Cllr Michael Michael, Cabinet Member for Clean Streets, Recycling and Environment and Cllr Susan Elsmore, Cabinet Member for Social Care, Health and Wellbeing have been invited to make a statement. Andrew Gregory, Director of Planning, Transport and Environment as well as other representatives from the Directorate have also been invited to answer questions and assist the Committee in its consideration of the item.

## **Legal Implications**

32. The Scrutiny Committee is empowered to enquire, consider, review and recommend but not to make policy decisions. As the recommendations in this report are to consider and review matters, there are no direct legal implications. However, legal implications may arise if and when the matters under review are implemented with or without any modifications. Any report with recommendations for decision that goes to Cabinet/Council will set out any legal implications arising from those recommendations. All decisions taken by or on behalf of the Council

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<sup>4</sup> [Agenda item - Cabinet Response to the Environmental Scrutiny Committee Report Titled 'Improving Cardiff's Air Quality' : City of Cardiff Council \(moderngov.co.uk\)](#)

<sup>5</sup> [\(Public Pack\)Correspondence Following Committee Meeting Agenda Supplement for Environmental Scrutiny Committee, 21/01/2020 16:30 \(moderngov.co.uk\)](#)

<sup>6</sup> [\(Public Pack\)Correspondence Following the Committee Meeting Agenda Supplement for Environmental Scrutiny Committee, 12/06/2019 16:30 \(moderngov.co.uk\)](#)

must (a) be within the legal powers of the Council; (b) comply with any procedural requirement imposed by law; (c) be within the powers of the body or person exercising powers on behalf of the Council; (d) be undertaken in accordance with the procedural requirements imposed by the Council e.g. Scrutiny Procedure Rules; (e) be fully and properly informed; (f) be properly motivated; (g) be taken having regard to the Council's fiduciary duty to its taxpayers; and (h) be reasonable and proper in all the circumstances.

### **Financial Implications**

33. The Scrutiny Committee is empowered to enquire, consider, review and recommend but not to make policy decisions. As the recommendations in this report are to consider and review matters, there are no direct financial implications at this stage in relation to any of the work programme. However, financial implications may arise if and when the matters under review are implemented with or without any modifications. Any report with recommendations for decision that goes to Cabinet/Council will set out any financial implications arising from those recommendations.

### **RECOMMENDATION**

The Committee is recommended to:

- i) Consider the information in this report, its appendices and the information presented at the meeting;
- ii) Determine whether they would like to make any comments, observations or recommendations to the Cabinet on this matter in time for its meeting on 18 November 2021; and
- iii) Decide the way forward for any future scrutiny of the issues discussed.

**DAVINA FIORE**

**Director of Governance & Legal Services**

**5<sup>th</sup> November 2021**