



Subject:	2024 Air Quality Updating and Screening Assessment (USA) Report.
Date:	10 th September 2024
Reporting Officer:	Siobhan Toland, Director of City Services
Contact Officer:	Alastair Curran, Environmental Protection Manager

Restricted Reports

Is this report restricted? Yes No

Please indicate the description, as listed in Schedule 6, of the exempt information by virtue of which the council has deemed this report restricted.

Insert number

1. Information relating to any individual.
2. Information likely to reveal the identity of an individual.
3. Information relating to the financial or business affairs of any particular person (including the council holding that information).
4. Information in connection with any labour relations matter.
5. Information in relation to which a claim to legal professional privilege could be maintained.
6. Information showing that the council proposes to (a) to give a notice imposing restrictions on a person; or (b) to make an order or direction.
7. Information on any action in relation to the prevention, investigation or prosecution of crime.

If Yes, when will the report become unrestricted?

After Committee Decision	<input type="checkbox"/>
After Council Decision	<input type="checkbox"/>
Sometime in the future	<input type="checkbox"/>
Never	<input type="checkbox"/>

Call-in

Is the decision eligible for Call-in? Yes No

1.0	Purpose of Report/Summary of Main Issues
1.1	<p>The People and Communities Committee will be aware that Belfast City Council is required to manage ambient air quality across the city in accordance with the provisions of Part III of the Environment (Northern Ireland) Order 2002 and current accompanying Local Air Quality Management Technical Guidance (LAQM.(TG22)). LAQM.TG(22) establishes a cycle of annual ambient air quality reporting for Northern Ireland councils, to include that an Updating and Screening Assessment (USA) report be submitted to the Department of Environment, Agriculture and Rural Affairs (DAERA) technical assessors by 30th June 2024. An Updating and Screening Assessment is intended to identify any significant changes that may have occurred since the previous round of ambient air quality review and assessment was completed. An extension to the above-mentioned submission date has been obtained from DAERA to allow for the 2024 USA report to be considered by the People and Communities Committee in advance of submission. The USA report has been developed using the Department for Environment, Food and Rural Affairs (Defra) Northern Ireland Updating and Screening Assessment 2024 Template. A copy of the Belfast City Council 2024 Updating and Screening Assessment (USA) Report is provided as Appendix 1 to this Committee report.</p>
1.2	<p>The Committee will be additionally aware that the council has declared four Air Quality Management Areas (AQMA) across the city for exceedances of the nitrogen dioxide (NO₂) objectives, associated principally with road transport emissions. These AQMA therefore encompass arterial road transport routes within the city including, the M1 Motorway / A12 Westlink corridor, Ormeau Road, Upper Newtownards Road and area around Cromac Street, East Bridge Street, Ravenhill Road and the Albertbridge Road. All of these AQMA have been declared for exceedances of the nitrogen dioxide 40 µgm⁻³ annual mean objective, with the M1 Motorway / A12 Westlink corridor AQMA additionally having been declared for exceedances of the nitrogen dioxide 200 µgm⁻³ 1-hour mean objective.</p>
1.3	<p>Key conclusions from the 2024 USA report include that there were no exceedances during the 2023 monitoring year of any air quality objectives at locations of relevant public exposure across the city. A further conclusion of the 2024 USA report is that based upon current and historical monitoring data for road transport related nitrogen dioxide, the Ormeau Road and Upper Newtownards Road Air Quality Management Areas should now be revoked.</p>
2.0	Recommendation
2.1	<ul style="list-style-type: none"> • The People and Communities Committee are requested to note the contents and conclusions of the Belfast City Council 2024 Updating and Screening Assessment report and to agreed that the report be submitted to DAERA's technical assessors for appraisal. • The Committee is further requested to agree that pending acceptance of the 2024 USA report and the conclusions detailed and also taking account of the recommendation received from DAERA for the BCC 2023 Air Quality Progress Report, Belfast City Council will move to revoke the Ormeau Road and Upper Newtownards Road Air Quality Management Areas by order.
3.0	Main Report
3.1	<p>The 2024 USA report has considered the results of ambient air quality monitoring undertaken across the city during 2023 for a range of ambient air pollutants as detailed within The Air</p>

3.2	<p>Quality Strategy for England, Scotland, Wales and Northern Ireland, with a principal focus on road transport related nitrogen dioxide monitoring.</p>
3.3	<p>Belfast City Council undertakes automatic monitoring at roadside locations for nitrogen dioxide within the M1 Motorway / A12 Westlink corridor, Ormeau Road and Upper Newtownards Road AQMAs. During 2023, there were no monitored exceedances of the nitrogen dioxide annual or hourly mean objectives recorded at any of our automatic monitoring sites. Moreover, we additionally undertake particulate matter (PM₁₀) monitoring at our Stockmans Lane roadside monitoring site, within the M1 Motorway / A12 Westlink AQMA. No exceedances of the PM₁₀ annual or 24-hour mean objectives were recorded during 2023.</p>
3.4	<p>The Belfast Centre Automatic Urban and Rural Network (AURN) site is located at Lombard Street within a pedestrianised area of the city centre and classified as an urban centre site, meaning that it is representative of a continuously built-up urban area, but located such that its pollution levels are not influenced significantly by any single source or street, but rather by the integrated contribution from all sources upwind of the station. Automatic and non-automatic monitoring is undertaken at the Belfast Centre AURN site for carbon monoxide (CO), ozone (O₃), nitrogen dioxide (NO₂), sulphur dioxide (SO₂), particulate matter (PM₁₀ and PM_{2.5}) and benzene (C₆H₆). No exceedances of any Air Quality Strategy objectives were recorded during 2023 at the Belfast Centre site.</p>
3.5	<p>During 2023, we augmented our automatic roadside monitoring for nitrogen dioxide with a series of 84 passive nitrogen dioxide diffusion tubes, located at 76 predominantly roadside or kerbside monitoring locations across the city. Monitoring results for 2023 indicate that there were exceedances of the 40 µgm⁻³ nitrogen dioxide annual mean objective only at two kerbside monitoring locations; Henry Place (43.0 µgm⁻³), within the existing M1 Motorway / A12 Westlink corridor AQMA, and at the junction of the M3 Motorway off slip with the A12 Westlink and Nelson Street (42.3 µgm⁻³), immediately adjacent to the M1 Motorway / A12 Westlink corridor AQMA. A diffusion tube located at Stockmans Lane roundabout was within 10% of the objective in 2023, having recorded an annual mean of 36.3 µgm⁻³ during 2023.</p>
3.6	<p>Annual mean objectives apply only at locations where members of the public may be regularly exposed over a substantial period of the objective, including at building façades of residential properties, schools, hospitals and care homes, etc. Accordingly, when the above-mentioned kerbside monitored nitrogen dioxide annual mean concentrations were distance corrected to the façade of the nearest residential premises, the 2023 nitrogen dioxide annual mean concentrations were reduced to 29.2 µgm⁻³ and 29.1 µgm⁻³ respectively, both comfortably below the 40 µgm⁻³ annual mean objective. This reduction is supported by a second diffusion tube monitoring location at Henry Place, situated at residential apartments in Carlisle Road adjacent to the A12 Westlink, which recorded a nitrogen dioxide annual mean concentration of 26.0 µgm⁻³ in 2023. Technical details of all various quality assurance, quality controls and distance corrections applied to our monitoring data are detailed within the USA report.</p>
3.6	<p>In addition, and in respect of the nitrogen dioxide 200 µgm⁻³ 1-hour mean objective, Defra have advised that where NO₂ 1-hour mean monitoring data is not available, as in the case of nitrogen dioxide monitoring by passive diffusion tube, local authorities may rely on the outworkings of a Defra study, which indicates that exceedances of the NO₂ 1-hour mean objective are unlikely to occur where the nitrogen dioxide annual mean concentration is below 60 µgm⁻³. Accordingly, all annual mean nitrogen dioxide diffusion tube monitoring data would</p>

	indicate that there were no exceedances of the nitrogen dioxide 1-hour mean objective in 2023.
3.7	On the basis of our ambient monitoring data for 2023, it is considered that there is no need to proceed to a detailed assessment for any of the ambient air pollutants under consideration. Moreover, it is additionally considered that there is no need to extend the boundaries of any of our Air Quality Management Areas at this time.
3.8	Reflecting upon historical monitoring data and monitoring trends within our AQMAs, it is however noted that the annual mean objective for nitrogen dioxide has now been achieved within our Ormeau Road and Upper Newtownards Road AQMAs over a number of years. Monitoring data for the Upper Newtownards Road AQMA indicates that the annual mean objective for nitrogen dioxide has been achieved at the automatic monitoring site since 2011 and at the diffusion tube monitoring site, at the complex junction of the Upper Newtownards Road, Knock Road and Hawthornden Way since 2017. Moreover, monitoring data within the Ormeau Road AQMA indicates that the nitrogen dioxide annual mean objective has been achieved at the automatic monitoring site since 2014, and at the diffusion tube monitoring sites since before 2011.
3.9	LAQM.TG(22) advises that the revocation of an AQMA should be considered following three consecutive years of compliance with the relevant objective, as evidenced through monitoring. Where NO ₂ monitoring is completed using diffusion tubes, to account for the inherent uncertainty associated with the monitoring method, it is recommended that revocation of an AQMA should be considered following three consecutive years of annual mean NO ₂ concentrations being lower than 36 µgm ⁻³ (i.e. within 10% of the annual mean NO ₂ objective). There should not be any declared AQMAs for which compliance with the relevant objective has been achieved for a consecutive five-year period.
3.10	In respect of the impact of the Covid-19 pandemic on revocation, Defra has advised that compliance first achieved in 2020 is unlikely to be representative of long-term trends in pollutant concentrations due to the impact of Covid-19 and associated lock down measures, adding that similarly in 2021, pollutant concentrations continued to be impacted by the change in typical activity that resulted from Covid-19 restrictions. Defra have further advised however that where 2020 and 2021 monitoring years are a continuation of a downward trend and part of many consecutive years of compliance (e.g. where compliance has also been achieved in 2019, prior to Covid-19), the AQMA may be appropriate for revocation.
3.11	Moreover, DAERA's technical assessors, in their report concerning the council's 2023 Air Quality Progress report advised that nitrogen dioxide annual mean concentrations have been below the objective for over five years in AQMA Nos. 3 (Upper Newtownards Road) and 4 (Ormeau Road) and that additionally, the council's Detailed Assessment, published in 2023, predicted that there were no exceedances at relevant public exposure locations within the AQMAs for a 2019 base year and for a 2028 forward projection year. The assessors therefore recommended that the Council should liaise with DAERA to consider revoking AQMA Nos. 3 and 4. The assessors additionally recommended that the AQMA No 1 (M1 Motorway / A12 Westlink) should be amended to revoke the designation for the 1-hour mean NO ₂ objective as compliance has been achieved for more than five years.
3.12	The People and Communities Committee will recall that it considered the outworkings of the Air Quality Detailed Assessment under agenda item 12 at its meeting of 13 th June 2023.

<https://minutes3.belfastcity.gov.uk/ieListDocuments.aspx?CId=166&MId=11151>

- 3.13 On the basis of the abovementioned technical assessor comments, in compliance with Defra LAQM.TG(22) technical guidance, and in consideration of a further full year of post Covid-19 pandemic ambient monitoring data, confirming continuing compliance with the annual mean objective for nitrogen dioxide within the Upper Newtownards Road and Ormeau Road AQMAs, Belfast City Council will now move to revoke these AQMAs by order in accordance with the provisions of Article 12(4)b of Part III of The Environment (Northern Ireland) Order 2002. As part of the revocation process, Belfast City Council will also give consideration to the continuing need for the M1 Motorway / A12 Westlink Corridor AQMA 1-hour mean declaration.
- 3.14 The revocations will require completion of a detailed assessment for each AQMA, to be informed by atmospheric dispersion modelling confirming compliance with the annual nitrogen dioxide annual mean objective throughout the entirety of the AQMA, as opposed to just those areas of compliance demonstrated by ambient monitoring alone. Reports concerning the revocation of AQMA Nos 3 (Upper Newtownards Road) and 4 (Ormeau Road) will in due course be provided to the People and Communities Committee for consideration.
- 3.15 Members are advised that the council will consider the continuing need for automatic and passive nitrogen dioxide monitoring within the areas of the two revoked AQMAs in consultation with DAERA. Data from our roadside automatic monitoring sites currently forms a component of the nitrogen dioxide annual mean for urban roadside monitoring sites reported within the annual Northern Ireland Statistics & Research Agency (NISRA) and DAERA Northern Ireland Environmental Statistics Reports. <https://www.daera-ni.gov.uk/articles/northern-ireland-environmental-statistics-report>
- 3.16 As a further aspect of the Updating and Screening Assessment, Belfast City Council has conducted a review of key road traffic routes and road transport sources across the city for the 2023 year in order to identify any recent significant changes that might affect ambient air quality. The council has confirmed within the 2024 USA report that there are no new or updated road transport sources that have not been considered through previous review and assessment processes. We have also confirmed that the air quality impacts of the new Grand Central Station development have previously been considered as an aspect of the planning process. We have provided similar commentary concerning air quality impacts of Belfast Harbour and George Best Belfast City Airport.
- 3.17 With regard to new significant industrial premises or processes, we have identified 2 new industrial processes within the 2024 USA report but confirmed that respective air quality impacts have been assessed and managed through the planning process.
- 3.18 For commercial and domestic sources, we have confirmed that these sources were considered in detail as a component of the council's 2023 Air Quality Detailed Assessment, adding that there were no further relevant commercial or domestic sources identified during the 2023 year.
- 3.19 By way of conclusion to the 2024 Updating and Screening Assessment report, we have confirmed that there is no need to declare any new Air Quality Management Areas for the city at this time. We have additionally confirmed that on this basis of our historical and current monitoring data, we will move to revoke the Ormeau Road and Upper Newtownards Road Air Quality Management Areas.

3.20	<p><u>Financial and Resource Implications.</u></p> <p>There are no financial or resource implications associated with the development of this 2024 Updating and Screening Assessment Report. This report has been developed from within existing staff resources. The Committee is advised however, the revocation orders for the AQMAs are required to be published in the Belfast Gazette and once at least in each of two successive weeks in more than one newspaper circulating within the district to which the revocation order relates. There will be financial costs associated with publication of the revocation orders.</p>
3.21	<p><u>Equality or Good Relations Implications/Rural Needs Assessment.</u></p> <p>There are no equality or good relations implications associated with this Updating and Screening Assessment report. A Rural Needs Assessment is not required.</p>
4.0	<p>Appendices - Documents Attached</p>
	<p>Appendix 1 - Belfast City Council 2024 Updating and Screening Assessment (USA) Report.</p>