

Meeting: Environment Sub Committee

Date: 12th November 2019

Title: Air Quality Review in North Tyneside

For information Only
This report does not form
part of the agenda for the
Environment Sub-
committee Meeting on 12
November 2019

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Service Areas:

Public Health, Environmental Health, Environmental Sustainability and Planning.

Wards affected: All

1. Purpose of Report

The Environment Sub Committee Members have indicated that they wish to have an update on the council's 2019 air quality status submission.

This briefing paper outlines the latest data included within the air quality report and future actions arising from the status report.

- Local Air Quality Management
- Air Quality Monitoring Review
- Actions to Improve Air Quality

2. Details

2.1 Local Air Quality Management

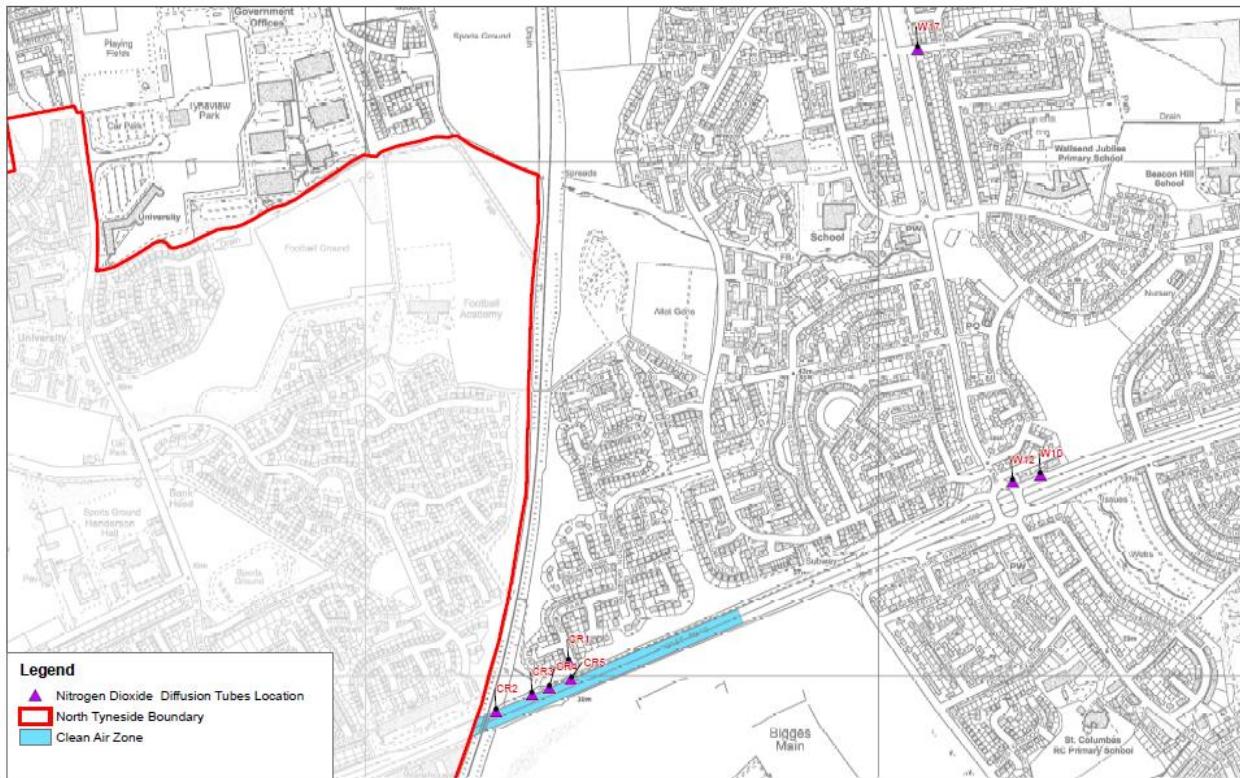
Part IV of the Environment Act (1995) places a duty on the Local Authority to annually review air quality and fulfil the requirements of Local Air Quality Management.

The annual review considers where any of the air quality objectives are not expected to be achieved. Where the objectives are not met, and exceedances are considered likely then the Local Authority must declare an Air Quality Management Area (AQMA).

The air quality status report is submitted annually in June and reviews the calendar year's data on air quality monitoring data from 2018.

2.2 Air Quality Monitoring Review

Air quality in North Tyneside is predominantly good. The borough has levels of air pollutants well below the national air quality objective levels, excluding the kerbside exceedance area on the Coast Road A1058 about Wallsend as identified in NO2 exceedance area.

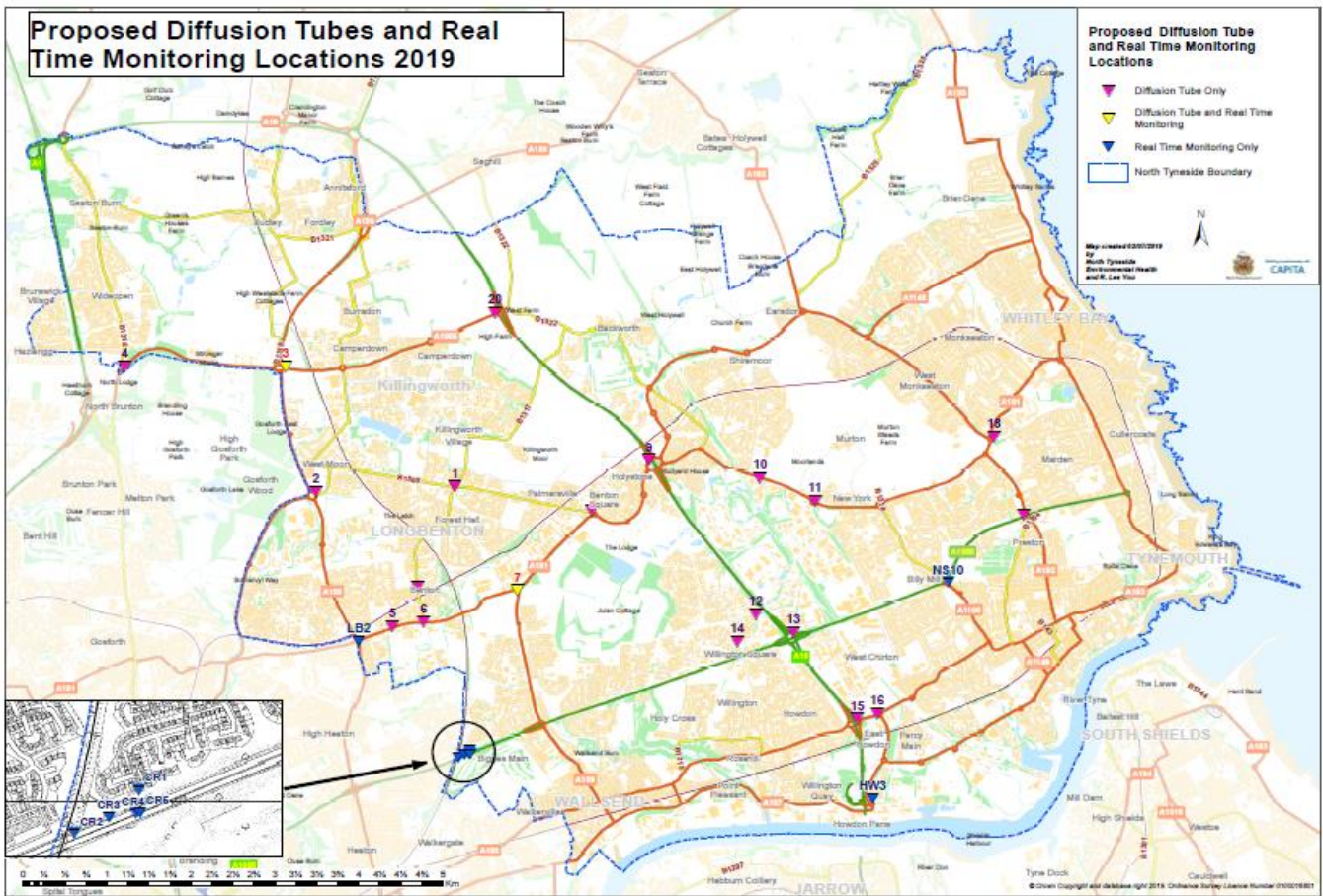


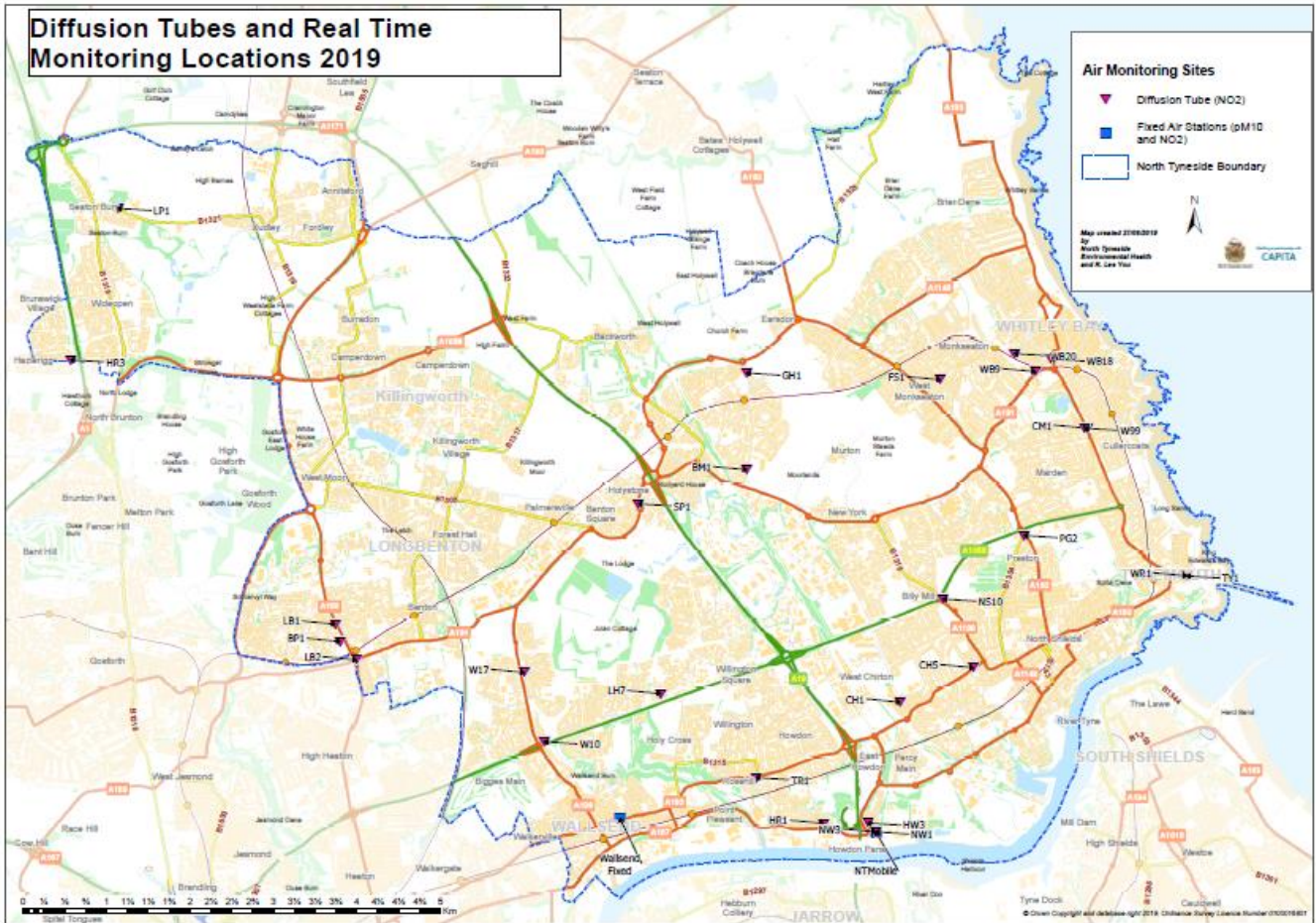
**Nitrogen Dioxide Diffusion Tubes Location
For
DEFRA Nitrogen Dioxide Exceedance Study**

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Ordnance Survey License Number 100016891

Scale 1: 6000@A3
0 0.05 0.1 0.15 0.2 0.25 0.3 0.35
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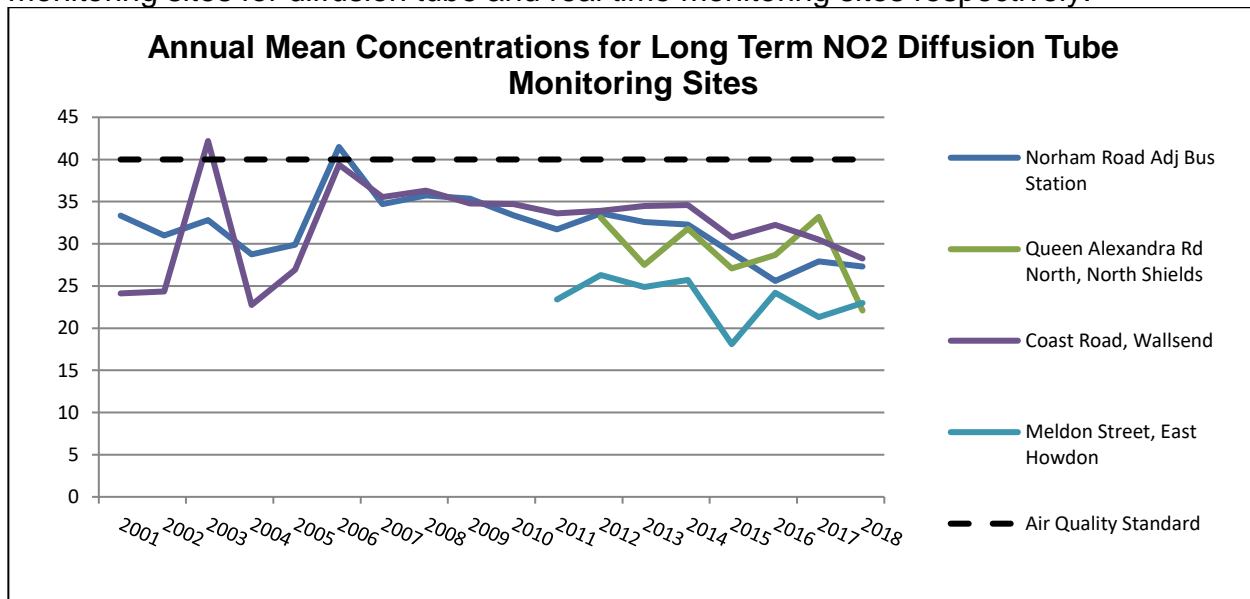
The assessment of air quality is based on monitoring near to relevant sensitive receptors and potentially high traffic emission areas. This has led to monitoring along busy arterial roads within the borough. The attached plan shows the locations of air quality monitoring.

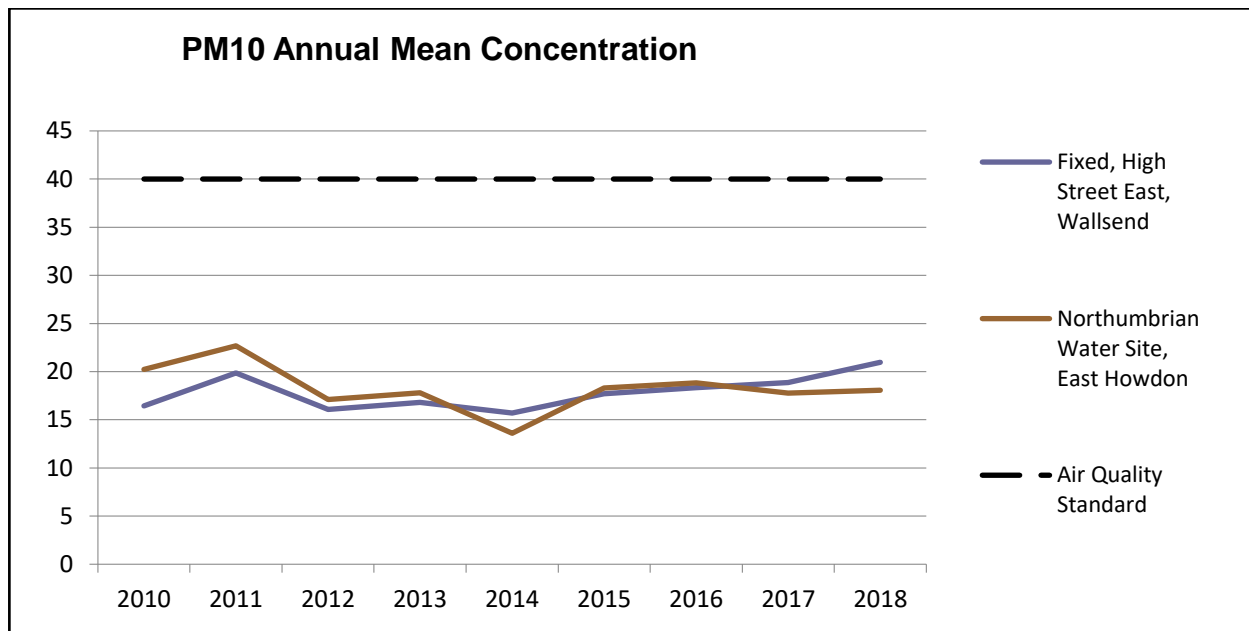




In 2018 two real time continuous monitoring stations at Wallsend and East Howden were utilised for nitrogen dioxide and particulate monitoring and 54 passive nitrogen dioxide diffusion tube sites were exposed on a monthly basis to provide an annual mean objective level at each monitoring location.

The following graphs detail the nitrogen dioxide and particulate results at the long-term monitoring sites for diffusion tube and real time monitoring sites respectively.





Nitrogen dioxide annual mean concentrations have fluctuated over the years but the trend has been a reduction in nitrogen dioxide. This reduction has arisen due to national legislation reducing car emissions however this has been counteracted by increased car usage.

The nitrogen dioxide monitoring data for 2018 indicates there are no likelihood of an exceedance of the objective at the nearest residential receptor. The highest annual mean Nitrogen dioxide exposure level at residential facade was 32 ug/m³, monitoring site LB1 located on Benton Road/West Farm Avenue in Longbenton, which is approximately 20 % below the annual mean objective.

The nitrogen dioxide levels fluctuate with the seasons with higher emissions occurring in the cold months when car combustion is less efficient.

The real time monitoring stations results for particulates in 2019 annual status report indicate particulates well below the annual objective for both real time stations.

The estimated background level for very fine particulate levels PM_{2.5} in North Tyneside is 12-14 ug/m³.

The air quality monitoring data for nitrogen dioxide and particulates do not suggest that the air quality objectives are likely to be exceeded and there is no requirement to proceed to declare any air quality management areas.

2.3 Actions to improve Air Quality

The feasibility study for the Coast Road A1058 nitrogen dioxide exceedance area has been carried out and discussions on the proposed measures to be implemented are being considered. As part of the Council's drive to improve air quality the following measures are currently occurring:

2.3.1 Amendments to the Hackney Carriage and Private Hire Licensing Policy

A consultation commenced on 28 October on the North Tyneside Council Hackney Carriage and Private Hire Licensing Policy. The draft policy includes a proposal for a new vehicle age standard for licensed hackney carriages and private hire vehicles as part of the plan to improve air quality in the borough. If approved by cabinet in February 2020 it would commence April 2020.

2.3.2 Clean Bus Technology Fund

North Tyneside applied for a grant in 2017 to retrofit buses to achieve Euro 6 standard for nitrogen dioxide emissions. The buses selected for retrofitting all operate through the nitrogen dioxide exceedance area along the A1058 Coast Road operated by the main 3 bus operators in the region, Go North East, Arriva and Stagecoach. The retrofitting also includes for the fitting of particulate filters to reduce particulate emissions in addition to reducing nitrogen oxides.

All bus operators have commenced the retrofitting programme with the programme schedule due to be completed by January 2020, when all 69 buses operating along the Coast Road will meet Euro 6 standard.



2.3.3 Transport Measures

Road traffic emissions remain the main source of pollutant for nitrogen dioxide and particulates. The focus continues to be directed towards improvements that can be implemented to reduce traffic congestion and improve traffic flow within the borough. Other measures taken include promotional work within schools by the Go Smarter team to promote ways to reduce air pollution such as work to school initiative and advising parents to switch off vehicle engines when dropping children off at school.

The council is also investing in developing the cycling routes in the borough to encourage the use of other transport modes such as cycling and walking.

3. Summary

No exceedances in nitrogen dioxide, excluding the measures being considered for the Coast Road A1058 exceedance area, or particulates were identified within the borough and there is no requirement to declare any air quality management areas. An Air Quality Strategy has been developed and will incorporate the North Tyneside climate change action plan and it is proposed to seek its adoption in early 2020.

Real time continuous monitoring stations at Wallsend and East Howden and passive nitrogen dioxide diffusion tube monitoring will continue to be utilised for assessing air quality within the Borough.

4. Background Information

The following documents have been used in the compilation of this report and may be inspected at the offices of the author.

Department for Environment Food and Rural Affairs, Local Air Quality Management Technical guidance (TG16) April 2016.

North Tyneside Council Air Quality Status Report 2019, North Tyneside Council.