



Report to: Policy & Performance Improvement Committee – 4 December 2023

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<b>Report Summary</b>	
<b>Report Title</b>	Air Quality Monitoring in Newark & Sherwood
<b>Purpose of Report</b>	To provide Members with an overview of Air Quality requirements and how air quality is monitored and managed within Newark & Sherwood
<b>Recommendations</b>	That the Policy & Performance Improvement Committee: <ul style="list-style-type: none"> <li>a) note the work undertaken by Newark &amp; Sherwood District Council in monitoring Air Quality across the District;</li> <li>b) support the creation of the Anti-Idling Campaign; and</li> <li>c) support the countywide DEFRA bid submission in 2024 to include particulate monitoring.</li> </ul>

## 1.0 **Background**

1.1 Local Air Quality Management is a legal requirement under Part IV of the Environment Act 1995. There is a prescribed upper air quality limit value for Nitrogen dioxide (NO<sub>2</sub>) and particulates, together with other air pollutants, that the general population should not be exposed to in order to protect public health. These limits are legally binding through EU and UK law.

1.2 The Council undertakes monitoring of NO<sub>2</sub> (Nitrogen Dioxide) concentrations through a network of diffusion tubes. These tubes are located around the district and are changed every month and submitted to a lab for analysis. The national prescribed air quality objective is 40µg/m<sup>3</sup> where there are exceedances of this annual limit detailed assessment work is required to be undertaken with the possible outcome of an Air Quality Management Area (AQMA) being declared. There are no exceedances at the diffusion tube locations within the district and therefore no AQMAs are required.

1.3 Each year we are required to complete an Annual Status Report (ASR), which is submitted to Nottinghamshire County Council (NCC) Public Health for review prior to submission to Department for Environment, Food & Rural Affairs (DEFRA). Every report submitted to DEFRA is reviewed and feedback is provided on DEFRA's acceptance of the report and any recommendations.

## 1.4 Diffusion Tubes

- 1.4.1 The Council has 13 NO<sub>2</sub> tubes located within the district. These locations have been chosen to be representative and meet the requirements of the DEFRA Technical Guidance for the siting of diffusion tubes. Transport sources is the main contributor to NO<sub>2</sub> levels and therefore diffusion tubes are often located on lamp posts close to the busiest roads/junction where there are also residential properties. The current diffusion tube locations are representative locations across the district of our busiest roads near to residential housing. Diffusion tubes can only be located in accordance with the DEFRA Technical Guidance and therefore considerations on further diffusion tubes must be considered in line with this guidance.
- 1.4.2 The use of diffusion tubes is widely used across the country for Local Air Quality management and forms the fundamental basis of air quality monitoring. Additional monitoring is only considered when NO<sub>2</sub> tubes have been consistently close to the annual legal limit. Monitoring equipment other than diffusion tubes is often costly to install and maintain.
- 1.4.3 A site visit to the current tube locations has been developed and will take place in the new year with Councillors Oldham and Melton. A plan of the current tube locations can be found in **Appendix 1**.

## 1.5 Particulate Matter

- 1.5.1 In September 2021, the World Health Organisation (WHO) published updated Air Quality Guidelines to DEFRA for annual average concentrations of particulate matter PM<sub>2.5</sub> as 5 µg/m<sup>3</sup>. This advice was presented to DEFRA to inform the air quality targets under the Environment Act 2021. WHO's advice was as follows:
- a focus on reducing long-term average concentrations of PM<sub>2.5</sub> is appropriate;
  - newer evidence indicates that PM<sub>2.5</sub> pollution can have harmful effects on people's health at lower concentrations than had been studied previously;
  - the available studies have not indicated a threshold of effect below which there is no harm;
  - reducing concentrations below the WHO Air Quality Guideline (10 µg/m<sup>3</sup>) would benefit public health.
- 1.5.2 The draft Environmental Targets (Fine Particulate Matter) (England) Regulations 2022, which are due to come into force from 1 January 2024 states the annual mean concentration target is that by the end of 31 December 2040 the annual mean level of PM<sub>2.5</sub> in ambient air must be equal to or less than 10 µg/m<sup>3</sup> ("the target level").
- 1.5.3 There are a number of real time air quality monitors within Nottinghamshire, the closest to Newark & Sherwood is located at Netherfield. These real time monitors are available online and show information on PM<sub>2.5</sub>, PM<sub>10</sub> and PM<sub>1</sub>. Whilst these monitors are some distance away from Newark & Sherwood they do provide an indication of particulate matter levels.

- 1.5.4 The Council are part of the Countywide Air Quality Group, with representatives from all authorities in Nottinghamshire. The group has agreed to prepare, in advance, a detailed project proposal that will include localised particulate monitoring to submit to DEFRA for grant funding. Each year DEFRA releases air quality grant funding for local authorities to apply for funding on specific projects. These bid submissions have a short application window and following consideration for this year's bid process the county group, with support from the Heads of Environmental Health, it was agreed to spend the coming months developing a detailed project for the county that would include funding for additional staffing resources to be ready for submission in 2024.
- 1.5.5 It is important to note that particulate monitoring is a costly exercise. Whilst there are many different particulate monitors available, many have limited accuracy and it is important to monitor consistently in a location to ensure that a true representative picture is evidenced. DEFRA requires that monitoring must be technically robust and meet their requirements to ensure the validity of the monitoring and also to ensure the results can be used to inform a more localised picture. If the bid is unsuccessful, we would not be able to undertake additional monitoring.
- 1.5.6 There are a number of benefits in taking this decision, they include:
- A countywide proposal allows for shared co-ordination of the project;
  - Some areas have AQMAs, this increases the chances of a successful bid;
  - Consistency of approach;
  - The funding allocation requested will be higher allowing for greater monitoring to take place.

## **1.6 Smoke Control Areas**

1.6.1 The Council have a number of Smoke Control Areas in place, a local authority can choose to designate part or whole of the district as a smoke control area. A smoke control area means you cannot release substantial smoke from a domestic chimney and you can only burn authorised fuel, unless you use an appliance approved by DEFRA known as an exempt appliance.

1.6.2 The following areas have smoke control areas in place:

- Bilsthorpe
- Blidworth
- Clipstone
- Edwinstowe
- Ollerton
- Rainworth
- Walesby

## **1.7 Air Quality Campaigns**

1.7.1 Annually a National Clean Air Day takes place, which is the largest air quality campaign in the UK. The day aims to educate the public on air quality issues, why air quality is important and what can be done to improve air quality. National resources are produced, and the day often focuses on certain topics. The Nottinghamshire Air Quality Group actively engage with this national day with significant support from the

communications teams. The next campaign in Nottinghamshire is to highlight the impact of wood burning stoves on air quality and on particulate matter of which they are one of the biggest sources.

- 1.7.2 Many local authorities have in place localised anti idling campaigns that aim to educate and reduce the prevalence of vehicles left idling especially outside schools. Discussions with Councillor Oldham and Councillor Melton have taken place on creating a new NSDC anti idling campaign. Once finalised this will be rolled out to schools starting at primary schools and then move across the district. This campaign would be driven by strong communications with the public and schools including access to a resources pack for the schools to get involved.
- 1.7.3 Due to the link to particulate matter and idling vehicles, the countywide group are looking to include anti idling campaigns and linking particulate monitoring in these locations as part of the larger funding bid to DEFRA in 2024.

## **1.8 Environmental Permitting**

- 1.8.1 The Council is responsible for permitting certain industrial processes that, as part of their processes, release emission to the air. This legal framework sits with the Council but also with the Environment Agency for the larger processes. Each permitted installation must apply for a permit and adhere to conditions stated within. These conditions are taken from the national process guidance notes and include requirements such as annual monitoring from any stack/flue, dust control and mitigation and strong operational management.
- 1.8.2 These permitted installations are inspected on a risk-based system. The inspection frequency depends on the risk from that installation. Any amendment to the process that may impact the permit must be first applied for to NSDC and they are also subject to an annual fee set by DEFRA.

## **1.9 Planning Applications**

- 1.9.1 Environmental Health are a consultee for planning applications and in particular applications where air quality may require consideration as part of the either the construction phase or once completed. Officers currently use the East Midlands Air Quality Network Guidance document for developers to require suitable and sufficient air quality assessments are undertaken, that specific conditions to be met as part of the application and where necessary additional mitigation be required. This document is currently only a guidance document, a number of authorities have formally adopted it as a Supplementary Planning Document ensuring that it has more weight when applications are considered.
- 1.9.2 Applications are looked at to determine any potential concerns during the construction phase that may require a construction management plan to be developed, submitted and approved in advance, this aims to control both noise and dust emissions from the development having a wider impact. Conditions on the application can also be added to ensure air quality is not adversely impacted by the development and to seek sustainable improvements.

## **2.0 Proposal/Options Considered**

- 2.1 It is proposed that Members support the creation of the Anti-Idling Campaign including sharing future resources within the local communities and schools to support the campaign and the education resources.
- 2.2 To support the development of the countywide Air Quality Grant bid to DEFRA in 2024. For this bid to include monitoring of particulate matter and funding for staffing resources to ensure the project is suitably resourced.

## **3.0 Implications**

In writing this report and in putting forward recommendations, officers have considered the following implications; Data Protection, Digital and Cyber Security, Equality and Diversity, Financial, Human Resources, Human Rights, Legal, Safeguarding, Sustainability, and Crime and Disorder and where appropriate they have made reference to these implications and added suitable expert comment where appropriate.

- 3.1 It is important to note that the current working practices and the service provided is commensurate with the staffing resources available within Public Protection based on the air quality levels across the district. Additional monitoring and additional communication campaigns is currently outside of the current service provided and consideration of the impact to services and resources requires consideration.

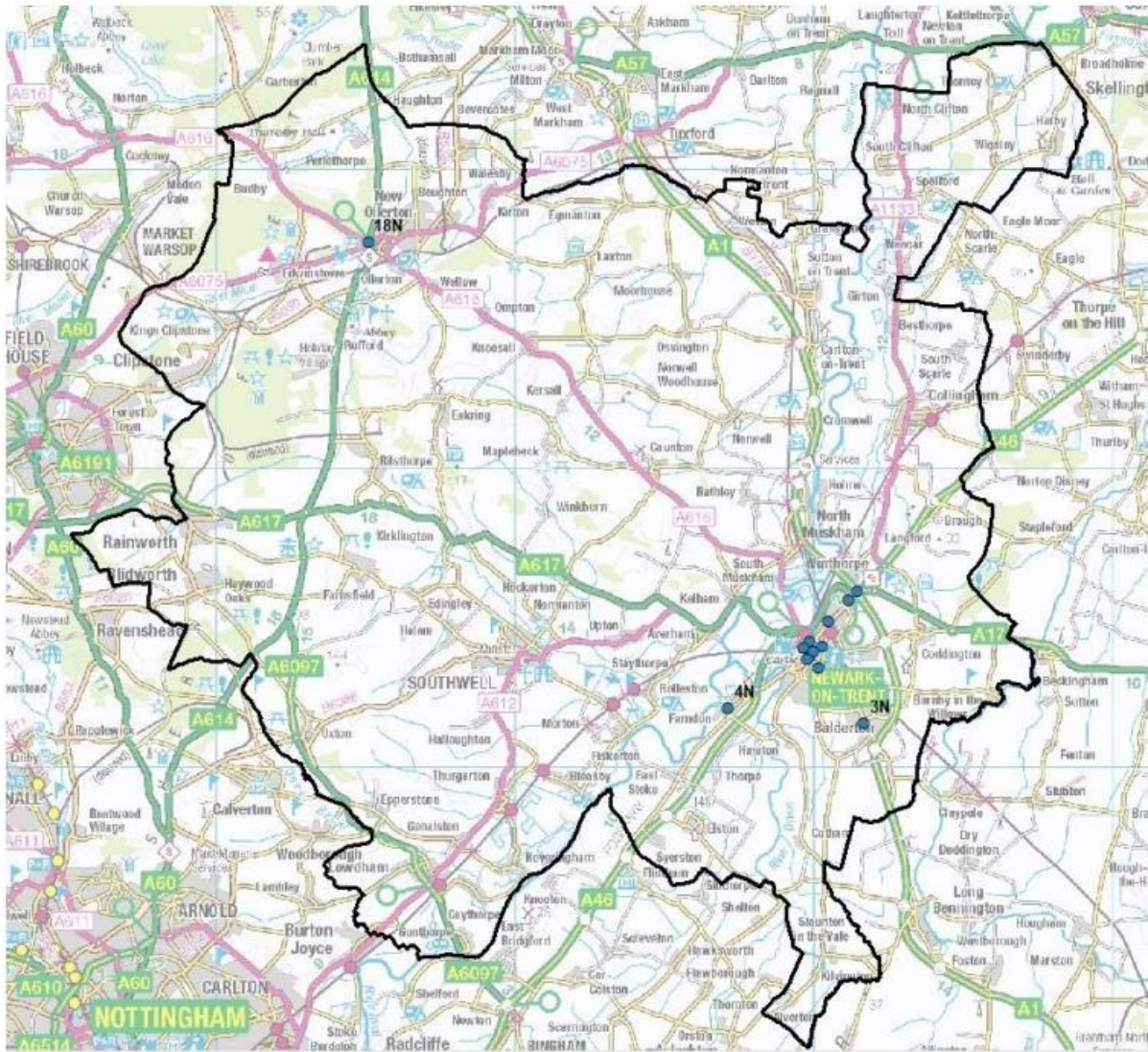
### **Financial Implications (FIN23-24/6513)**

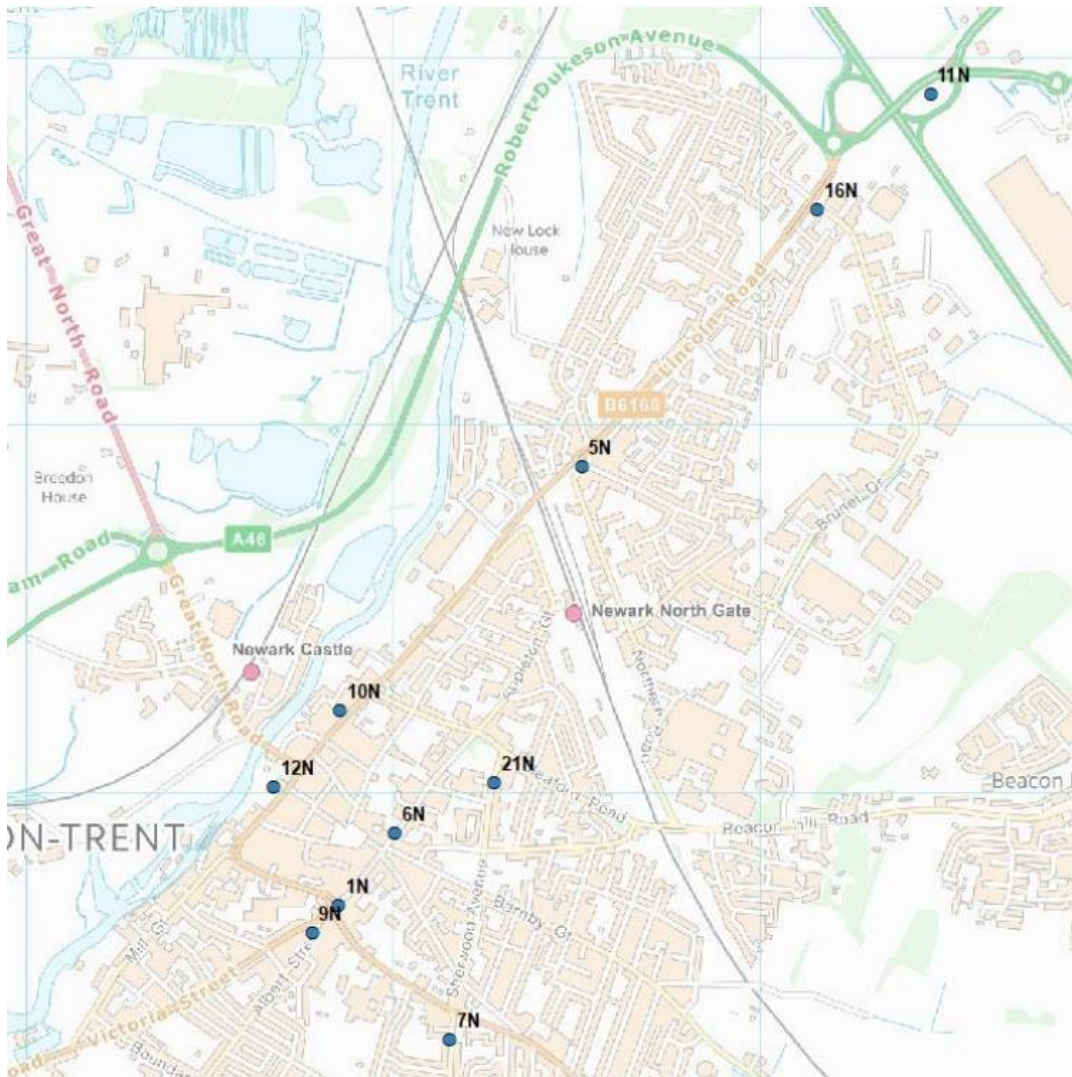
- 3.2 There are no direct financial implications arising from this report. Should the DEFRA grant be successful, another update shall be provided with Financial Implications around resourcing.

## **Background Papers and Published Documents**

Except for previously published documents, which will be available elsewhere, the documents listed here will be available for inspection in accordance with Section 100D of the Local Government Act 1972.

Diffusion Tube Locations





Orchard Way, Balderton

Northern Road, Newark

Bowbridge Rd, Newark

FADS, Cartergate, Newark

Hawthorn Crescent, Farndon

Friary Road (21N)

War Memorial, Appleton Gate, Newark

Albert Street, Newark

Handley Court, Newark

The Lodge, Newark

Newark Castle

Big Fish R'about (A614) Ollerton

Brunel Drive/Lincoln Road