Meeting: Environment Sub Committee

Date: 8th November 2017

Title: Air Quality Update Report

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Service Areas:

Environmental Health

Wards Affected: All

1. Purpose of Report

The purpose of the report is to provide an update on air quality issues and issues relating to odours at Northumbrian Water.

This briefing paper outlines an air quality and future actions.

- Air Quality Status Report
- Progress on the Air Quality Strategy
- Clean Air Zone Tackling NO2
- Odours issues at Northumbrian Water Sewage Works.

2. Recommendations

The Environment Sub Committee Members consider this report and any required actions.

3. Details

3.1 Air Quality Annual Status Report (ASR) 2017

The local authority air quality status report found no exceedances and there was no requirement for the Council to declare an air quality management area. This assessment was based upon the risk of air pollution exposure about the facades of properties for both Nitrogen Dioxide and Particulates against the national annual mean objectives.

The short term exposure limit was considered at locations where people are exposed to a pollutant for more than one hour for nitrogen dioxide. This is appropriate in

Wallsend and hence there is a real time monitoring station monitoring for nitrogen dioxide. No exceedances in the short term exposure limit for nitrogen dioxide and particulates were found.

The report discusses the development of the air quality strategy and air quality actions.

New Monitoring Points

New monitoring points have been identified about road junction improvements and about a school as shown in plan of NO₂ diffusion tube monitoring plan.



3.2 Air Quality Strategy Progress

A preliminary draft air quality strategy has been produced.

The Air Quality Strategy sets out measures that the Borough of North Tyneside will implement over the next 5 years. The strategies aim is to achieve reductions in the concentrations and exposure of air pollutants that can result in adverse health impacts, especially for those most vulnerable in society including children and older people and for those with health and lung conditions.

This Strategy has been developed to drive forward improvements in air quality and to ensure the air quality objective limits as set out under Part IV of the Environment Act 1995 are achieved.

Strategy Aims

The aims of the Strategy are being used to create actions and to identify the department to lead on that action.

The aims of the strategy are:

- To ensure that all UK statutory obligations for Local Air Quality Management are complied with.
- To improve air quality within the Borough and prevent any deterioration where air quality is currently satisfactory.
- To work in partnership with strategic planning, development control, transport planning, public health, and environmental protection.
- To ensure impacts on air quality are considered when making procurement decisions
- Improve public awareness and understanding of air quality and initiatives being implemented.
- Raise and maintain the profile of air quality and ensure it remains high on local and national political agendas.
- Empower businesses to implement improvements and to promote the benefits of changes, such as use of electric vehicles, travel plans, which result in improved air quality.

The actions plan identifies how the aims will be achieved, by whom and how it will be measured.

This action plan is currently being reviewed in light of "Air Quality Plan for Nitrogen Dioxide in UK" which identified an exceedance in the NO_2 limit to kerbside of the Wallsend A1058. This will lead to a delay in publishing the strategy as the focus is now on achieving compliance with NO_2 emission limits.

3.3 Air quality Plan for Nitrogen Dioxide (NO₂) in UK (2017)

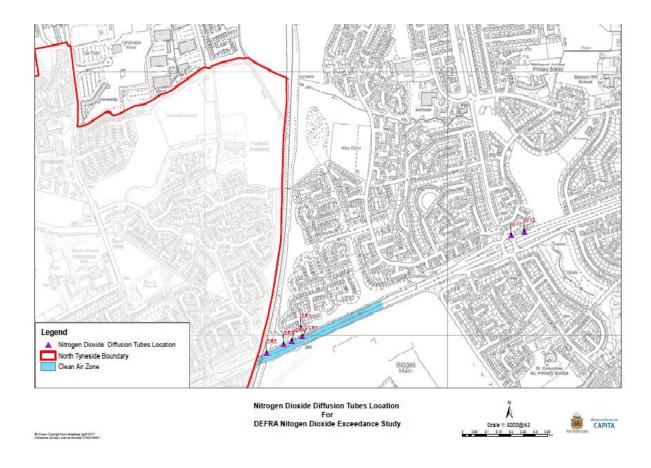
Defra published a revised action plan on the 26 July 2017. This plan provided updated air quality modelling for major roads from traffic flow data in 2015 and revised emission data.

The plan identified that:

- Road vehicles contribute about 80% of NO₂ pollution at the roadside and growth in the number of diesel cars has exacerbated this problem.
- Euro Standards have not been met as shown in the Volkswagen emissions scandal.

This lead to air quality modelling being revised to take into account the lower reductions in pollution emissions expected from vehicles and revised road traffic data.

The air quality modelling identified North Tyneside as exceeding the NO₂ annual emission limit at the footpath about the A1058 as shown in the following plan.



The North Tyneside Coast Road A1058 bordering the Newcastle City boundary for approximately 800 metres into Wallsend exceeds the annual NO₂ limit of 40µg/m3 and will continue to exceed the annual mean until 2022.

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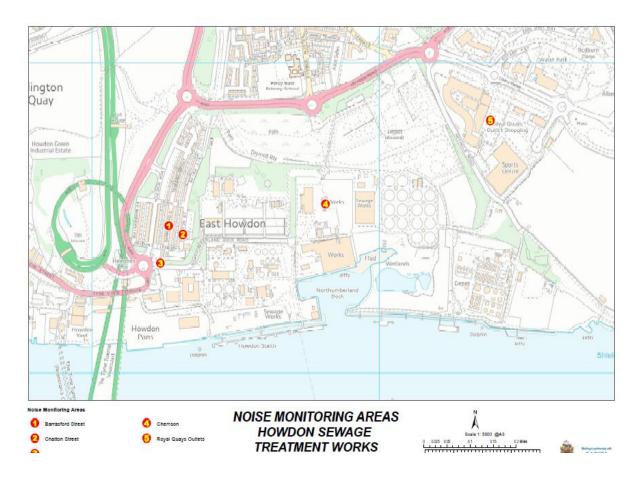
A direction has therefore been issued to all 29 authorities identified with exceedances to create a feasibility study within the next 18 months on the options to reduce the NO₂ to acceptable levels at the footpath in the shortest time possible.

Actions to Date

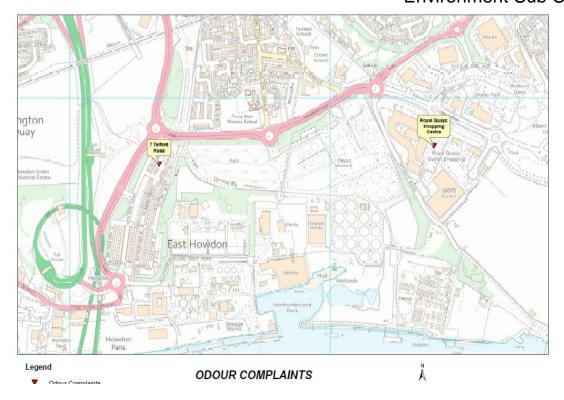
- A Steering Group has been set up to allow joint working with Gateshead and Newcastle to consider the options and complete a joint feasibility study.
- Additional NO₂ diffusion tube monitoring is now in place from August 2017, which will be used to validate and monitor any actions selected to "reduce the NO₂ within the shortest time possible".
- Clean Bus Technology Fund- This Clean Air Zone has provided an opportunity for North Tyneside to develop a bid for retrofitting buses to reduce NO₂ emissions. This requires the support and agreement of those identified Bus Companies utilising the A1058 and the transport team. Arriva and Go North East have expressed their support.

3.5 Odour Issues about Northumberland Sewage Works

Odour monitoring has been occurring. A joint visit with Environment Agency was carried out at locations set out below:



Over the last 10 months there have only been two complaints received by Environmental Health. One specific complaint was received direct from a complainant in East Howdon and another via the councillor regarding odours in the Royal Quays Shopping area.



Response to Odour Complaints

The gaseous odour complaint was determined to have arisen due to a failure in the odorising pump. This has now been rectified.

The odour complaint about the sewage works with regard to sulphur odours was found to have arisen from a foul gas line; this has now been resolved. The Environment Agency have noted issues with the odorising plant, which is in ownership of National grid, and advised that there was a localised odour about the entrance of Chemson.

Northumbria Water have an agreement to notify Environmental Health of all breakdowns and repairs and any odour complaints received by Environmental Health are reported to Northumbria water to investigate.

Northumbria Water reviewed the odour emissions about the abatement system to the sludge thickener store area, due to increased localised odour. It found that the abatement system was reducing the emissions measured, as the hydrogen sulphide levels at the stack outlet were within the parameters expected

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 2017 Air Quality Annual Status Report, NTC 2007.

UK Air Quality Plan For Tackling Nitrogen Dioxide Consultation, DEFRA 2017.