

TONBRIDGE & MALLING BOROUGH COUNCIL

STREET SCENE and ENVIRONMENT SERVICES ADVISORY BOARD

06 November 2017

Report of the Director of Planning, Housing and Environmental Health

Part 1- Public

Matters for Recommendation to Cabinet - Non-Key Decision (Decision may be taken by the Cabinet Member)

1 AIR QUALITY UPDATE

Summary

Nitrogen Dioxide (NO₂) pollution arises primarily from the combustion of fossil fuels particularly in fuel for motors vehicles. As a result many roads in urban areas exceed statutory NO₂ objective limits. The *UK plan for tackling roadside nitrogen dioxide concentrations* was published by the Government on the 26th July 2017, this paper briefly summarises the published plan and provides an overview of TMBC's 2017 Annual Status report in respect of the Boroughs 7 Air Quality Management Areas (AQMAs).

1.1 Background

- 1.1.1 The Air Quality (Standards) Regulations 2010 transpose into English Law the requirements of European Directives on ambient air quality, and thereby set the current air quality standards to be met. EU countries were required to meet these limits by 1 January 2010: the UK was granted a limited time extension up to 2015. However, in 2015, 37 of the 43 zones which the country is divided into for air quality purposes continued to exceed the annual mean concentration levels of NO₂ (40µg/m³).
- 1.1.2 The EU directives and consequent UK Regulations exist to protect human health, and evidence from the Committee on the Medical Effects of Air Pollutants (COMEAP) has identified that NO₂ exposure can be attributed to an estimated 23,500 premature deaths annually in the UK. In addition to health implications air pollution also damages the wider environment.
- 1.1.3 Following a number of legal challenges to the Government about the adequacy of their initial plans, brought by the environmental charity Client Earth, the *UK plan for tackling roadside nitrogen dioxide concentrations* was published on the 26 July 2017, in response to a Supreme Court ruling which ordered the Government to produce plans to reduce NO₂ pollution to legal levels as quickly as possible.

1.2 UK Plan for tackling roadside nitrogen dioxide concentrations ‘the Plan’

- 1.2.1 The content of the plan is broadly the same as the May 2017 consultation draft, which was shared with Members at Board in June, but it does contain some additional new initiatives. In particular, the announcement of the Government’s intention to produce a new Clean Air Strategy in 2018, addressing not just NO₂ pollution but also other oxides of nitrogen (NO_x) particulate matter and sulphur dioxide amongst others.
- 1.2.2 The Plan acknowledges that the introduction of increasingly strict vehicle emission regulations (Euro Standards) has not delivered the expected reductions in emissions of Nitrogen Oxides (NO_x) which includes NO₂ from light passenger and commercial diesel vehicles in real world use. Therefore, despite the latest Euro Standards for heavy duty vehicles giving vast improvements over their predecessors, road transport is still the largest contributor to NO₂ pollution in local areas where the UK is exceeding limit values. Addressing road transport is therefore the most pressing area for action to tackle this exceedance problem.
- 1.2.3 In the longer term the Plan announces the Government’s intention to ban the sale of all new petrol and diesel vehicles from 2040. However there is recognition that road transport is key to almost everything we do either as individuals or businesses with social and economic impacts much wider than air quality. There is a clear move therefore, to the setting of new policies and incentives to promote new technology and innovation to speed up the move to cleaner vehicles.
- 1.2.4 Additional actions across the UK cited in the Plan include but are not limited to.
- more stringent laboratory testing requirements for type approval of new Light Duty Vehicles;
 - new real driving emissions requirements for light passenger and commercial vehicles;
 - support for low emission freight;
 - lorry emission technology checks at roadside;
 - additional funding to accelerate the uptake of low emission buses;
 - additional funding for retrofitting older buses supported by a new accreditation scheme;
 - additional funding to accelerate the uptake of hydrogen vehicles and infrastructure; and
 - the introduction of an Automated and Electric Vehicles Bill.

- 1.2.5 Separate to the funding streams for actions mentioned above, the Government intends to establish a Clean Air Fund to allow local authorities to bid for additional money to support the implementation of measures to improve air quality. Further details of this fund will be announced shortly.
- 1.2.6 One of the most significant new actions within the Plan is to require certain local authorities who are forecast to have the greatest exceedance problems over the next 3-4 years to produce local action plans containing measures to achieve statutory NO₂ limits in their area as quickly as possible; draft plans must be produced by March 2018, with final plans requiring Government (DEFRA) approval by December 2018. 29 local authorities are cited as requiring this course of action. **Neither Tonbridge and Malling Council nor any other authority in Kent and Medway are cited.**
- 1.2.7 Notwithstanding para 1.2.6 Officers in the EP Team are taking this opportunity to update the TMBC Air Quality Action Plan in line with the DEFRA target, and progress will be reported to Board in the New Year.
- 1.2.8 Members should note that in selecting the 29 Local Authorities cited in the Plan, DEFRA used the 'coarse grained pollution climate mapping' (PCM) model, which the accompanying technical report suggests is not highly accurate. This will have led to a high level of uncertainty. In addition the approach does not take into account the significant number of Air Quality Management Areas declared across numerous English Authorities including the 7 declared within Tonbridge and Malling, and the Plan says little about how these areas will be addressed.
- 1.2.9 Whilst TMBC is not directly targeted in the Plan, members may wish to note that the UK Government has identified Clean Air Zones (CAZs) which include charging as the measure it is able to model nationally which will achieve statutory NO₂ limit values in the shortest possible time. However the Government has acknowledged that this would impact on individuals and businesses and so has indicated that if other measures at least as effective at reducing NO₂ within the same timeframe can be found, those measures should be preferred.
- 1.2.10 The Plan also indicates that any local authority can implement a CAZ to address a local air quality issue; further details are outlined in the Clean Air Zone Framework in England published in May 2017. However, within TMBC those areas declared as Air Quality Management Areas are located on roads which, generally, take traffic through rather than into an area. In those circumstances the Plan acknowledges CAZs may not be appropriate, however there is an indication that government funding may be available to find local solutions for these circumstances and the feasibility of alternatives along with possible funding will be explored in more detail during the Action Planning process.
- 1.2.11 The latest update is that Client Earth have written a 'letter before action' to the Government this last week (18.10.17) following review of the July 'Plan' meaning it is possible a further judicial review will be launched shortly. The basis of their

complaint is that 45 local authorities are not being required to take any immediate action (and we are one of those) as a result of the Plan, although in breach of targets, and that national solutions are essential (including potential diesel scrappage).

1.2.12 A full copy of the Plan and associated documents can be found online at <https://www.gov.uk/government/publications/air-quality-plan-for-nitrogen-dioxide-no2-in-uk-2017>

1.3 Tonbridge and Malling Borough Council Annual Status report 2017

1.3.1 As reported to Board in May 2014 and March 2015 DEFRA instigated a review of the Local Air Quality Management (LAQM) regime as part of the governments 'Red Tape Challenge'. Arising from that, the Council is now required to submit a single 'Annual Status' report to DEFRA in place of numerous reports previously required.

1.3.2 The 2017 Annual Status Report on air quality was recently submitted to DEFRA has been appraised and is currently awaiting final sign off. This report provides an overview of air quality in Tonbridge and Malling during 2016, and fulfils the requirements of LAQM as set out in Part IV of the Environment Act 1995 and relevant Policy and Technical guidance documents. The data shows that there are improvements in NO₂ levels at a number of our AQMA's.

1.3.3 Members will recall the Council currently has 7 declared Air Quality Management Areas (AQMAs) declared for the exceedance of the annual mean of NO₂ (40µg/m³). These AQMAs are located at;

- M20: from the point it passes New Hythe Lane to the point it passes Hall Road,
- Wateringbury: Centred around the crossroads,
- Tonbridge High Street: From High Street/Vale Road roundabout to the Botany,
- Ditton: Centred around the A20 London Rd/Station Rd crossroads,
- Larkfield: Encompassing the junction with New Hythe Lane and East along the A20 towards Ditton,
- Aylesford: Encompassing the A20 from the junction with Halls Road and Mills Road towards Hermitage Lane,
- Borough Green: Including parts of A25 Sevenoaks Road, Western Road and High Street.

The M20 AQMA is also declared for Particulate Matter (PM₁₀). Detailed maps of all these AQMA locations can be seen in Annex 1.

1.3.4 Each AQMA was declared when monitoring in that area highlighted annual average NO₂ of around 40µg/m³ or above. The first AQMAs including the M20 and Ditton were declared in 2005, the most recent in Borough Green was declared in 2013. Each is dealt with in more detail in the following paragraphs.

1.3.5 In reviewing the AQ conditions and the most appropriate way forward in terms of AQMA boundaries and monitoring, careful regard must be taken of other work in hand by the Borough Council and the Highway Authorities that could have a future bearing on our approach. For example work towards a new local plan, the parallel work to model traffic levels on the A20 and the proposals to come forward by Highways England on the M20. So, in that respect our ongoing assessment should proceed with due caution, care and awareness of those factors.

1.3.6 M20 AQMA update

The table in 1.3.8 below summarises the NO₂ diffusion tube results from those tubes located in or close to the M20 AQMA, and gives an indication of the current status. All amber results indicate the result is within 10% of the statutory limit. As can be seen there have been no exceedances for around 5 years, however some tube results in new locations in 2016 show results within 10% of the objective.

1.3.7 Members will be aware that Highways England (HE) will from March 2018 be upgrading the M20 between junctions 3-5 to a 'Smart Motorway'. HE are soon to produce an Environmental Report which will include the effects of this upgrade on Air Quality. Officers are in liaison with HE to establish how this might affect the AQMA for both NO₂ and PM₁₀ levels. Therefore it is recommended that the M20 AQMA remain in force without changes, at least until the final impact of the forthcoming works are known.

1.3.8 Annual Mean (bias adjusted) of tubes located in or close to M20 AQMA

	2010	2011	2012	2013	2014	2015	2016
131 Hall Road, Aylesford	53.7	43.3	39.3	34.8	37.1	35.5	34.5
202 New Hythe Lane							38.0
Hall Rd (lampost)							38.1
218 Station Rd, Aylesford			38.4	35.6	38.8	35.1	34.4
108A Station Road	43.6	27.9	27.9	31.8	24.9	25.4	28.0
99 Teapot Lane, Aylesford	54.8	36.3	31.4	35.4	28.3	29.3	29.7
Rowan Close		33.1	31.2				

1.3.9 Wateringbury AQMA update

The table in 1.3.12 summarises the NO₂ diffusion tube results from those tubes located in or close to the Wateringbury AQMA, and gives an indication of the current status. As can be seen, most sites continuously exceed the statutory annual limit, some to the extent that it is possible the hourly mean of 200µg/m³ may also be being exceeded (legislation allows up to 18 exceedances of the hourly mean in any calendar year). However, without the presence of a continuous analyser it is not possible to state for certain that there have been any exceedances of the hourly mean. On the basis of diffusion tube results, Wateringbury crossroads remains the worst location for NO₂ levels within the Borough due to queuing traffic and the 'canyon' nature of the road at that point reducing the ability of pollutants to disperse.

1.3.10 The Council has access to one continuous analyser which can monitor hourly levels of NO₂. This is currently located in McDonalds within the Tonbridge High Street AQMA. However with McDonalds due to close shortly for an extensive refit officers are in discussion with Wateringbury Parish Council to move the analyser to the Village Hall located within the Wateringbury AQMA to establish hourly concentrations of NO₂. If this goes ahead which is looking positive at the time of writing, officers envisage leaving the analyser at Wateringbury for up to one year to establish an Annual Mean level of NO₂.

1.3.11 Officers are also aware that KCC highways have been able to secure some LEP funding to assess the crossroads junction and look at what changes (if any) could be made to help ease congestion and in turn AQ. Officers will seek to assist in any way we can in the work KCC do in this respect. It is hoped more detailed monitoring with a continuous analyser will also assist with this assessment, as well as provide developers of local sites with more accurate NO₂ data when assessing the impact of their developments on Air Quality within the Wateringbury AQMA.

1.3.12 Annual Mean (bias adjusted) of tubes located in or close to Wateringbury AQMA

	2010	2011	2012	2013	2014	2015	2016
Tonbridge Road, Wateringbury (Red Hill Corner)	73.0	54.3	56.4	61.1	52.7	51.9	56.4
Tonbridge Road, Wateringbury (Opposite Garage)(triplicate average)	82.9	60.9	62.8	67.2	64.8	63.5	64.9
Tonbridge Road, Wateringbury (Red Hill)	51.0	39.8	40.1	39.9	38.2	38.2	39.1
181 Tonbridge Rd, Wateringbury							23.0
Springfields, 3 Ton Rd, Wateringbury							16.7

1.3.13 Tonbridge High Street AQMA Update

The table in 1.3.15 summarises the NO₂ diffusion tube results from those tubes located in or close to the Tonbridge High Street AQMA, as well as the continuous analyser (ZT5) located in McDonalds which can also monitor hourly levels. Sites on the High Street continue to exceed statutory annual limits, and no changes to the AQMA boundaries are proposed. Ratified data from the ZT5 also showed 2 exceedances of the 200µg/m³ hourly mean during 2016.

1.3.14 Works to update the High Street were completed in around May 2016. To date monitoring has not shown significant AQ change generally, although the location around No 35 High Street (WH Smith) has shown a significant improvement over the past two years, possibly be linked to the removal of the pedestrian crossing and the queuing traffic it created. No changes to monitoring locations other than the removal of the ZT5 are proposed so this apparent decrease can be studied further.

1.3.15 Annual Mean (bias adjusted) of tubes and continuous monitor (ZT5) located in or close to Tonbridge High Street AQMA

	2010	2011	2012	2013	2014	2015	2016
ZT5 (McDonalds)			46.5	48.5	46.6	45.8	46.8
High Street, Tonbridge (no 35, WH Smith)	53.7	40.3	40.3	43.3	43.2	36.7	34.6
High Street, Tonbridge (no 46a)	55.8	41.4	43.3	43.3	42.0	40.1	40.5
High Street, (Tonbridge (no 10) (triplicate average)	56.3	44.9	44.7	44.9	42.7	41.6	40.4
88 High Street, Tonbridge							30.1

1.3.16 Ditton AQMA Update

The table in 1.3.18 summarises the NO₂ diffusion tube results from those tubes located in or close to the Ditton AQMA. As can be seen all results have fallen below the 40µg/m³ limit for at least the last 5 years.

1.3.17 On the basis of these results it can be argued that the Ditton AQMA is suitable for revocation and this course of action was supported by DEFRA when suggested in the Annual Status report. However in retrospect officers feel it is appropriate to maintain the status of the AQMA at this time, although some monitoring diffusion tubes may be moved to other sites. The reason for this is that whilst improvements in this area are positive, the A20 remains a heavily trafficked route which may be affected by a general increase in traffic in the area. The future impact of that factor is being closely considered through our local plan work. In addition, with the M20 between junctions 3-5 about to undergo a major works to

upgrade to a smart motorway, the implication is that more traffic will use the A20 at least in the short term. For these reasons officers believe the Ditton AQMA should remain in force at least in the short term.

1.3.18 Annual Mean (bias adjusted) of tubes located in or close to Ditton AQMA

	2010	2011	2012	2013	2014	2015	2016
London Road, Ditton (nos 516)	28.8	20.2	20.4	21.4	19.1	18.8	19.6
London Road, Ditton (nos 527/529) (triplicate average)	43.0	34.2	34.4	31.6	32.5	31.7	30.9
7 Station Road, Ditton							25.8
London Road (no559), Ditton Bus stop (W-bound) (triplicate average)				33.7	33.8	33.1	33.0

1.3.19 Larkfield AQMA Update

The table in 1.3.20 summarises the NO₂ diffusion tube results from those tubes located in or close to the Larkfield AQMA. As can be seen there are a mixture of results, however those at the eastern end are consistently below the annual mean objective and for that reason it is proposed that officers will begin to reassess the boundaries of this AQMA. The approach will, however, have regard to the work currently in hand to assess likely future traffic levels on the A 20 through this area.

1.3.20 Annual Mean (bias adjusted) of tubes located in or close to the Larkfield AQMA

	2010	2011	2012	2013	2014	2015	2016
London Road, Larkfield (no 743) (triplicate average)	49.5	35.7	36.7	37.0	36.5	34.0	33.7
London Road, Larkfield (no 606)	41.8	31.3	32.5	32.2	30.6	29.0	31.0
794 London Rd, Larkfield							43.9
London Road (by Wealden Hall), Larkfield Bus stop (W bound) (triplicate average)				36.4	36.5	35.2	41.8

1.3.21 Aylesford AQMA Update

The table in 1.3.22 summarises the NO₂ diffusion tube results from those tubes located in or close to the Aylesford AQMA. As can be seen there are a mixture of results, however with most still reading above the statutory limit Aylesford AQMA should remain unchanged.

1.3.22 Annual Mean (bias adjusted) of tubes located in or close to Aylesford AQMA

	2010	2011	2012	2013	2014	2015	2016
London Road, Aylesford (no 290) (triplicate average)	59.9	46.9	46.1	45.4	45.3	44.1	44.8
7 Hall Road, Aylesford	41.6	32.8	33.0	32.4	31.9	30.8	30.8
158 London Rd (E of mouth of Hermitage Lane)							37.3
Aylesford (Hall Road) junction Bus stop (E-bound) (triplicate average)				43.0	45.1	42.6	43.9

1.3.23 Borough Green AQMA Update

The table in 1.3.24 summarises the NO₂ diffusion tube results from those tubes located in or close to the Borough Green AQMA. As can be seen, failures are restricted to sites on Sevenoaks Road; it is therefore proposed that officers will begin to reassess the boundaries of this AQMA. In so doing the process will take care to consider the effect of any potential future development in the locality and the impact of that on AQ.

1.3.24 Annual Mean (bias adjusted) of tubes located in or close to the Borough Green AQMA

	2010	2011	2012	2013	2014	2015	2016
42, Sevenoaks Road, Borough Green							33.6
Corner Rock Road/ Sevenoaks Road, Borough Green	40.0	30.7	33.4	31.4	29.3	29.0	31.2
55, Sevenoaks Road, Borough Green	57.8	46.7	46.0	42.9	42.2	42.1	45.7
55, Sevenoaks Road, Borough Green	58.4						
55, Sevenoaks Road, Borough Green	56.2						
2 Maidstone Road, Borough Green	42.1		22.7	28.2	21.4	20.7	22.3
Flat 21 High Street, Borough Green			27.2	27.3	24.6	22.6	25.0
1 Western Road			27.5	27.3	24.9	23.8	26.8
54 Western Road			29.8	25.4	24.2	22.2	25.7
74 Sevenoaks Road			20.7	19.6	18.4	16.5	18.6
16 Sevenoaks Road			43.1	38.8	34.8	34.0	39.8
44 Maidstone Road, Borough Green	42.5	30.9	31.5	33.0	29.3	29.6	

1.3.25 All exceedances of the annual air quality objectives are listed above, and fall within an AQMA boundary. No other monitoring sites across the borough fail the objective or come within 10% of the objective limit.

1.4 Legal Implications

1.4.1 The Council has a statutory duty to implement the provisions of the Environment Act 1995 concerning air quality and to report progress and results to DEFRA on an annual basis.

1.5 Financial and Value for Money Considerations

1.5.1 All current activity will be carried out within allocated budgets, however, there may be opportunities to bid for further funding for specific initiatives to improve air quality.

1.6 Risk Assessment

1.6.1 Air quality work utilises the principles of risk assessment to determine the nature and extent of monitoring, action planning and reporting. This will be reflected in more detail in our Air Quality Action Plan, which will be presented to Members early next year.

1.7 Recommendations

1.7.1 Cabinet is **RECOMMENDED** to endorse the retention of all current AQMA's and bring forward a review of the boundaries of the Larkfield and Borough Green AQMA's.

The Director of Planning, Housing and Environmental Health confirms that the proposals contained in the recommendation(s), if approved, will fall within the Council's Budget and Policy Framework.

Background papers:

Nil

contact: Crispin Kennard
Jane Heeley
Chris Luche

Steve Humphrey

Director of Planning Housing and Environmental Health