

Thurrock - An ambitious and collaborative community which is proud of its heritage and excited by its diverse opportunities and future

# Cleaner, Greener and Safer Overview and Scrutiny Committee

The meeting will be held at **7.00 pm** on **7 February 2019**

**Committee Room 1, Civic Offices, New Road, Grays, Essex, RM17 6SL**

## Membership:

Councillors Lynn Worrall (Chair), Angela Lawrence (Vice-Chair), Qaisar Abbas, Mike Fletcher and Elizabeth Rigby

## Substitutes:

Councillors Alex Anderson, Leslie Gamester, Oliver Gerrish, Terry Piccolo and Gerard Rice

## Agenda

Open to Public and Press

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<b>1. Apologies for Absence</b>	
<b>2. Minutes</b>	<b>5 - 16</b>
To approve as a correct record the minutes of the Cleaner, Greener and Safer Overview and Scrutiny Committee meeting held on 6 December 2018.	
<b>3. Items of Urgent Business</b>	
To receive additional items that the Chair is of the opinion should be considered as a matter of urgency, in accordance with Section 100B (4) (b) of the Local Government Act 1972.	
<b>4. Declaration of Interests</b>	
<b>5. Violence Against Women and Girls Strategy Report</b>	<b>17 - 34</b>
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**Queries regarding this Agenda or notification of apologies:**

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Agenda published on: **30 January 2019**

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## DECLARING INTERESTS FLOWCHART – QUESTIONS TO ASK YOURSELF

Breaching those parts identified as a pecuniary interest is potentially a criminal offence

### Helpful Reminders for Members

- *Is your register of interests up to date?*
- *In particular have you declared to the Monitoring Officer all disclosable pecuniary interests?*
- *Have you checked the register to ensure that they have been recorded correctly?*

### When should you declare an interest at a meeting?

- **What matters are being discussed at the meeting?** (including Council, Cabinet, Committees, Subs, Joint Committees and Joint Subs); or
- If you are a Cabinet Member making decisions other than in Cabinet **what matter is before you for single member decision?**



**Does the business to be transacted at the meeting**

- relate to; or
- likely to affect

**any of your registered interests and in particular any of your Disclosable Pecuniary Interests?**

Disclosable Pecuniary Interests shall include your interests or those of:

- your spouse or civil partner's
- a person you are living with as husband/ wife
- a person you are living with as if you were civil partners

where you are aware that this other person has the interest.

A detailed description of a disclosable pecuniary interest is included in the Members Code of Conduct at Chapter 7 of the Constitution. **Please seek advice from the Monitoring Officer about disclosable pecuniary interests.**

**What is a Non-Pecuniary interest?** – this is an interest which is not pecuniary (as defined) but is nonetheless so significant that a member of the public with knowledge of the relevant facts, would reasonably regard to be so significant that it would materially impact upon your judgement of the public interest.

### **Pecuniary**

If the interest is not already in the register you must (unless the interest has been agreed by the Monitoring Officer to be sensitive) disclose the existence and nature of the interest to the meeting

If the Interest is not entered in the register and is not the subject of a pending notification you must within 28 days notify the Monitoring Officer of the interest for inclusion in the register

**Unless you have received dispensation upon previous application from the Monitoring Officer, you must:**

- **Not participate or participate further in any discussion of the matter at a meeting;**
- **Not participate in any vote or further vote taken at the meeting; and**
- **leave the room while the item is being considered/voted upon**

**If you are a Cabinet Member you may make arrangements for the matter to be dealt with by a third person but take no further steps**

### **Non- pecuniary**

Declare the nature and extent of your interest including enough detail to allow a member of the public to understand its nature



**You may participate and vote in the usual way but you should seek advice on Predetermination and Bias from the Monitoring Officer.**

## Our Vision and Priorities for Thurrock

An ambitious and collaborative community which is proud of its heritage and excited by its diverse opportunities and future.

1. **People** – a borough where people of all ages are proud to work and play, live and stay
  - High quality, consistent and accessible public services which are right first time
  - Build on our partnerships with statutory, community, voluntary and faith groups to work together to improve health and wellbeing
  - Communities are empowered to make choices and be safer and stronger together
2. **Place** – a heritage-rich borough which is ambitious for its future
  - Roads, houses and public spaces that connect people and places
  - Clean environments that everyone has reason to take pride in
  - Fewer public buildings with better services
3. **Prosperity** – a borough which enables everyone to achieve their aspirations
  - Attractive opportunities for businesses and investors to enhance the local economy
  - Vocational and academic education, skills and job opportunities for all
  - Commercial, entrepreneurial and connected public services

## **Minutes of the Meeting of the Cleaner, Greener and Safer Overview and Scrutiny Committee held on 6 December 2018 at 7.00 pm**

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<b>Present:</b>	Councillors Lynn Worrall (Chair), Qaisar Abbas and Elizabeth Rigby
<b>Apologies:</b>	Councillor Angela Lawrence
<b>In attendance:</b>	Councillor Rob Gledhill, Portfolio Holder for Public Protection and Anti-Social Behaviour DCI Jasmine Frost, Essex Police Julie Rogers, Director of Environment and Highways Michelle Cunningham, Thurrock Community Safety Partnership Manager Joanne Davies, Anti-Social Behaviour Service and Strategy Manager Fiona Kell, Housing ASB Officer Jason Read, Team Leader (Operations & Performance) Youth Offending Service Vincent Taylor, Strategic Lead - Clean and Green Services Jenny Shade, Senior Democratic Services Officer

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Before the start of the Meeting, all present were advised that the meeting may be filmed and was being recorded, with the audio recording to be made available on the Council's website.

### **14. Minutes**

The minutes of the Cleaner Greener and Safer Overview and Scrutiny Committee held on the 4 October 2018 were approved as a correct record.

### **15. Items of Urgent Business**

No matters of urgent business were received.

### **16. Declaration of Interests**

No interests were declared.

### **17. Gang Related Violence Update Report**

The Chair welcomed DCI Jasmine Frost, Essex Police and Councillor Gledhill, Portfolio Holder for Public Protection and Anti-Social Behaviour to the committee.

Michelle Cunningham, Thurrock Community Safety Partnership Manager, presented the report that addressed the issues of gang related violence in Thurrock.

Michelle Cunningham thanked the Chair for allowing the report to be deferred from the last meeting this had enabled Officers time to report on the injunction that had been put in place and the actions which had taken place following that. It was noted that there was a huge shift in the change of the dynamics of gangs now operating in Thurrock. Michelle Cunningham stated that the purpose of bringing the report was to assure Members that through partnerships the monitoring and recording of gangs had recognised the changes and that a strong partnership response was in place to address this issue. The funding received from the Council had allowed for a lot of the operations to be put in place. Michelle Cunningham stated that since the report had been written the Police Fire and Crime Commissioner had received confirmation that Essex had been successful in their bid for early intervention funding to which Thurrock would be part of and have access to that to be able to put in place the early intervention programmes which would include schools.

DCI Jasmine Frost stated there were currently 9 injunctions in place, which were for 5 adults and 4 young people. A further 13 community protection warnings and 2 community protection notices had been issued with 2 further gang applications which are currently at the application stage. In the operations undertaken with the injunctions there had been 5 arrests in relation to breaches, breaches such as wearing hooded tops or being associated with someone who they should not be associating with. This should assure Members that Essex Police are actively policing every breach that gang members had been involved with. Following these breaches there had been appearances at the county court and 2 people subject to a youth supervision order which are managed by the youth offending team. A custody sentence had also been given which had been suspended for 2 years. In relation to the additional funding received an additional 180 hours of foot patrols had taken place in Grays over the October and November period with more patrols planned over the next few months. DCI Jasmine Frost stated that the public feedback received had been overwhelmingly positive in relation to the town centre and how residents now felt safer going into the town centre. That the C17 gang had been displaced from Grays and that drug dealing had not been as visible as it had been before. The future plans would include the high-viz patrols and the other 2 gang injunctions being applied for those individuals who were heavily linked to anti-social behaviour currently in South Ockendon. That 7 members of the C17 gang were currently under investigation for possession with the intent to supply and weapon offences and expect that all those would result in charges from CPS once investigations are completed. That in the summer there had been 2 individuals who had been arrested following the recovery of shot guns, ammunition and drugs to which 1 of the individuals received 7 years in prison and the other received 3 years.

Jason Read from the Youth Offending Team stated that apart from managing a number of young people, who have potential gang affiliations or who were at



risk from gangs within the youth offending service, who had been subject to court orders, the team also offered support to the 4 children who had been made subject to the gang injunction with this support being named on that injunction. It had transpired that 2 of those young persons had breached the gang injunction, been sent to court and been subject to civil supervision orders which are now a legal duty that they must see the youth offending team. One of the young persons had not been engaging and he and his family would be visited this week to make contact and to encourage some engagement so that some of the issues can be addressed.

Councillor Abbas thanked Officers for the positive report and questioned whether the comparison of outcomes of 2017 to 2018 was due to less police presence. DCI Jasmine Frost clarified the figures in the report for 2017 were for a whole year and that 2018 was the figure for 6 months only. Michelle Cunningham stated that by the end of 2018 the figures would be superseded by the 2017 figures and would be like for like.

Councillor Abbas had concerns that the activities appeared to be spreading to Purfleet areas and questioned what action would be undertaken to prevent any such activities. DCI Jasmine Frost stated that Essex Police would be undertaking any investigation work but was confident that those involved in the anti-social behaviour were not the same people that were involved in the criminality around burglaries and theft offences with the crimes unlikely to be linked. That fortnightly tasking was used to look at all the crime types and the anti-social behaviour and on a 2 weekly cycle resources would be directed for that next period and this was how policing was undertaken through the year. Michelle Cunningham stated that an increase in anti-social behaviour had been picked up earlier in the year on the Garrison Estate, there had been a huge amount of work had gone into that area where target hardening and CCTV had been and would continue to be used to identify individuals. That the Housing Team had carried out a lot of work with extra police patrols being undertaken. That there was currently a list of young people who had been identified and been referred to Children's Social Services. Michelle Cunningham stated that the issues were known and were being addressed.

Councillor Worrall stated that the focus tonight had been on young people being part of gangs who moved from London and that Members should also be aware that not all gang members are young people. That gang relation activities are being carried out on Thurrock's housing estates, in Thurrock Council homes, those people were setting examples in young persons who were probably the young people being picked up by the youth offending service and questioned what was being done to keep on top of these activities and to break the trend. Jason Read stated it was important to stick to the Home Office definition of what a gang was and how they operated. Jason Read stated he had worked in Thurrock for nearly 20 years and could relate to Councillor Worrall's comment and agreed that some of the adults that would have been supervised about 15 years ago and would not put those people under the same umbrella as gangs.

Councillor Gledhill stated that for clarity the agenda outlined the Home Office definition of a gang and the report had been focused on what the agenda stated.

Michelle Cunningham stated that Jason Read chaired the Operational Gang Group for the past 3 years that meet monthly to discuss. That last year there had been 60 individuals who had gone through that group and that the demographics of that group were continually monitored, dominantly ages of 17 and 18 with the eldest being 37. If those individuals were affiliated with the gangs they would continue to be monitored.

Councillor Worrall asked what work was being undertaken with London Borough Councils and questioned at what time are gang members known for being in Thurrock where they have been involved in other gang related activities outside the borough. Jason Read stated that historically the situation had been known and the possible risks involved. Gang members were often not known about until they had offended. In the past a member had written to every London Borough to raise concerns about transfer of offenders and moving some difficult and challenging families into the borough without making the Council aware, only one response had been received back from one of those London boroughs. It was also stated that this affected not just Thurrock but a number of local authorities around the M25 with accommodation being cheaper in Thurrock compared to other areas.

Michelle Cunningham stated the development of the violence and vulnerability framework had been undertaken with the Police Fire and Crime Commissioners Office and as part of the funding a coordinator and a coordinator hub across Essex will pick up issues such as transferring of offenders into the borough as Thurrock would not have to tackle this issue on its own. DCI Jasmine Frost stated that from a police prospective this was a challenge as offenders would go missing in the evening when information required about them could not be obtained.

Councillor Gledhill stated he had attended a meeting with Essex Leaders today alongside the Police Fire and Crime Commissioner where this issue had arose and had become a regular item on the agenda. As a collective all members of the group will write one letter which would represent one voice from across Essex to the Mayor of London, all the London Authorities, Home Secretary and the Secretary of State for Housing and Local Government with the pressure being kept on for a response. The letter would state that every time an individual, either homeless or troubled families, had been moved into another area that London Borough when makes contact states that they are no longer their responsibility. That the process had got to stop as this had huge safeguarding issues not just with gangs but with vulnerable people and with the Police Fire and Crime Commissioner identifying that this had created some huge problems in Essex. That also the British Transport Police would be aware of some of these individuals with a good coordinated approach with all the relevant Police Forces.

The Chair stated that she felt comfortable that the Council were on top of the good work being undertaken. The Chair questioned whether there would be sufficient funding for all secondary school students to be able to undertake this work and this should not have to wait until students reach Years 10 and 11. This training was vital to ensure young people were given the opportunity to be able to recognise the signs of being tempted into gangs and signs of being part of a gang. DCI Jasmine Frost stated to ensure early intervention students should receive this training before they reach secondary school. That in Essex a presentation had been presented to all head teachers and senior leadership teams around county lines and gangs. DCI Jasmine Frost will shortly be undertaking work with school nurses about sharing information and suggested that several schools work as clusters to ensure that Police work can be undertaken to support staff and to get the intelligence into the system so that the appropriate referrals can be made. DCI Jasmine Frost agreed that there was a lot more that needed to be done.

Councillor Gledhill stated the violence and vulnerability framework was now available for the Council to work from and the training had been presented to 1100 pupils in Year 10 but it was Year 6 and up and down the school years that should be targeted. This will be a multi-agency approach as it could not fall just to the local authority or the Police Fire and Crime Commissioner paying for it; it needed to be built as one whole piece of work not just in Thurrock so that people are missed when they move. A paper will be presented on Funding to Cabinet going forward into next year but stated that Cabinet and the Administration were geared up to put money where it was needed to help prevent anti-social behaviour and gang violence and how to prevent people getting into that life style which would also include getting the voluntary sector involved.

Michelle Cunningham stated working with crucial crew and the road safety team they had delivered training to 1100 Year 6 pupils, provided by Youth Offending for 3 days and 2 days by the Police covering gangs and the consequences of gang crime. That the Walk on Line Roadshow that the LSCB would present, with contribution from the community safety partnership, will be held in March 2019 and would be aimed at Years 5 and 6. The remit this time would be broader to include gangs, grooming and prevent, with conversations will be held shortly.

The Youth at Risk project addressed those children that are not at present in schools and is looking to include pupils that are home schooled. That Active Citizens programme had 2 officers in Thurrock who had presented in schools to Years 4 and 6 and this will continue to be offered. Unfortunately the appetite for schools to engage was low and the need to address how these training sessions can be better badged and encourage more engagement. A community programme pilot was due to finish on Friday which was being run in the Harris Academy by the Chafford Hundred Church. That the Police Fire and Crime Commissioner would be evaluating some of the mentioned programmes as there was no national evaluation on what works and what did not work.

Councillor Gledhill stated that a large demographic missed was those residents that did not understand what county lines were or understood the name of something and what they do. These residents could be educated and become the eyes and ears of the community and the Police.

Michelle Cunningham stated another risk of the community were the vulnerable people where the crime stoppers campaign had been very targeted and work had been undertaken with Lifestyle Solutions and Sheltered Housing.

## **RESOLVED**

**That the Cleaner Greener and Safer Overview and Scrutiny Committee requested that:**

- (a) Noted the continually changing landscape and challenge in Thurrock and partnership working to combat an increase in violent crime.**
- (b) Noted the approach and resources identified to implement the action plan.**
- (c) Encouraged reporting by communities through the “Report It” campaign.**

*At 7.40pm Michelle Cunningham, DCI Jasmine Frost, Councillor Gledhill, Jason Read, Fiona Kell and Joanne Davis left the committee room.*

## **18. Grounds Maintenance, Street Cleansing and Fly Tipping Update**

Julie Rogers, Director of Environment and Highways, gave apologies for Daren Spring and presented the report that provided Members with an update on the progress made by the Cleaning and Greening services and outlined the service aspirations for the future. Julie Rogers referred Members to Appendix 2 the Communication Plan and stated that this was a draft plan but was provided to give a flavour of what would be launched in January 2019.

Councillor Abbas thanked Officers for the report and questioned how effective the street cleansing was. Julie Rogers stated that the Council was only responsible for roads in their portfolio and not for private housing estates where this would fall under management companies to maintain the cleansing of roads. Julie Rogers stated that if Councillor Abbas had concern over a certain road he should contact the team and they would investigate.

Councillor Abbas questioned whether there should be rules for those management companies to ensure they follow cleansing regulations. Vincent Taylor stated that this would be outside the remit of the Council.

Councillor Abbas questioned how effective fly-tipping removal was in particular abandoned vehicles, full of waste on the A1306 in Purfleet. Julie Rogers stated that the team were aware of known regular hot spots and used enforcement powers but the main problem had been proving who had

committed the crime. Mobile CCTV has been used in various locations to record such actions. Julie Rogers stated that a change in legislation proposed for next year would mean that the vehicle owner would be held responsible.

Councillor Abbas stated that it was alarming vehicles could be left for such a long time and was there a strategy to identify those through vehicle registration numbers. Vincent Taylor stated those that carried out fly-tipping activities undertook this for a living and were very clever knowing how to avoid prosecution. The Council do not have facility or funding to remove these vehicles, from private land and it would fall under specialists to take vehicles away.

Councillor Abbas referred to a large car showroom and how they used the road to park their vehicles on and questioned what could be done to stop this. Vincent Taylor asked Councillor Abbas to provide details and he would pass them onto the enforcement officers. Julie Rogers stated that the enforcement officers monitored and targeted certain areas and discussions were taking place on how to broaden the team so that it worked 24/7 more effectively and particularly through the night. Julie Rogers stated that safety was paramount in considering what activities should be monitored. Civil enforcement officers would also be attending training in January 2019 on hate crime and how to get into safe situations.

Councillor Abbas questioned whether mobile teams could undertake and monitor random site visits. Julie Rogers stated the civil enforcement team was small with less than 10 members with various priorities, including schools and monitoring known hot spot areas. Discussions were taking place to look at how much income was required to self-fund more civil enforcement officers so that more random checks could be undertaken.

Councillor Rigby had noted less fly-tipping and questioned whether it was the larger organised crimes that should now be targeted. Julie Rogers stated that small fly-tipping were still taking place but the Council had become smarter on picking these up. That educating people through social media, to ensure that waste carrier licences are asked for before any rubbish was removed from their property, as unfortunately it was still innocent residents who were getting fined.

Councillor Rigby asked what was the best action on dealing with dog faeces not being picked up by dog owners. Julie Rogers stated it was difficult to tackle and that an advertising campaign will follow the new public bin roll out to let residents know that dog faeces can be placed in household bins and incinerated alongside normal household rubbish. Julie Rogers stated that the enforcement team work tirelessly to address these issues.

The Chair questioned how we prosecuted those that fly-poster. Julie Rogers stated the process for fly-poster was very rigorous with any posters placed on street furniture would be removed and used for evidence. Fines would be issued and where not paid those individuals would be prosecuted.

The Chair questioned whether the Council had a good enough relationship with the Port of Tilbury to ensure those lorries that leave the port are sheeted-up. Julie Rogers stated that the Council had no powers in relation to moving vehicles this enforcement falls to the Police. That the Port of Tilbury undertook their own checks to ensure vehicles were sheeted-up.

The Chair questioned what was being done about graffiti in the borough as some buildings including Council buildings were not being cleaned. Julie Rogers stated that the process was that incidents would be reported and the Council would ensure they were cleaned. Julie Rogers stated that if the graffiti was on private property the enforcement officers would write to the land owner and ask that the graffiti be removed but unfortunately it would be there choice whether to remove it or not. Julie Rogers asked the Chair to provide her with the Council building in question.

The Chair asked whether the CCTV cameras could be strategically placed to ensure that the Council caught those perpetrators who fly-tipped. Julie Rogers stated that those captured on CCTV and recognised would be prosecuted. That unfortunately this tends to be organised crime with vehicles having false number plates. The Council were working in partnership with the Environment Agency to track down such groups.

Julie Rogers stated that the next stage would be to set up mobile cameras in known hot spot areas but by law residents would need to be told about them.

The Chair questioned whether small waste collection vehicles could be used to target those missed bins and help reduce the number of bins being missed. Julie Rogers stated that narrow access vehicles would be used to address those blocked areas and work was being undertaken with the design team on yellow lines coming into force on waste collection days. Some areas would have bag collections and wheeled containers could be used in cemeteries.

The Chair asked whether bins would be available in cemeteries before spring. Vincent Taylor confirmed that work was being undertaken with the design team to trial a new wheeled bin and these would be rolled out in the next financial year.

**RESOLVED:**

- 1. That the Cleaner Greener and Safer Overview and Scrutiny Committee noted the performance and service achievements in relation to Fly Tipping.**
- 2. That the Cleaner Greener and Safer Overview and Scrutiny Committee noted the performance in relation to the Grounds Maintenance and Street Cleansing section elements of the Clean It Cut It Fill It Programme since last reporting to the committee in July 2017.**

**19. Fees & Charges Pricing Strategy 2019/20**

Julie Rogers, Director of Environment and Highways, presented the report that set out the charges in relation to services within the remit of the Cleaner Greener and Safer Overview and Scrutiny Committee that will take effect from the 1 April 2019. Julie Rogers stated that the fees and charges crossed over with a number of directorates including housing, health and place, she would do her best to answer but where she couldn't, she agreed to take any questions away and provide follow up responses.

The Chair questioned Enforcement Fees – Fly-Posting – no discount for early repayment. Julie Rogers stated this was an automatic policy charge that had resulted in a slight decrease in payment but the Council continued to prosecute and advertised those court cases. Julie Rogers was pleased to advise a very high, if not 100% success rate on prosecutions.

The Chair questioned Cultural Services – Internet and Word Processing – Use of the Internet – per subsequent hour. The Chair stated that young people used the library as not everyone had the facility to access the internet at home and stated she was not happy about the new charge. Julie Rogers stated that Wi-Fi in libraries was currently provided by a code which entitled users 2 hours free Wi-Fi service, on their own devices or library PC's. To ensure fair access to all users the charge had been introduced to manage the risk of people staying logged onto library PC's without really using the PC and preventing someone else from having access.

The Chair questioned whether the charge would be applied to those residents who only used the Wi-Fi through their own devices. The Chair asked for further clarification from Officers and a meeting would be arranged for next week.

Councillor Rigby and Councillor Abbas agreed that as the Council was encouraging more residents to use on-line services it was unreasonable to ask residents to start paying for Wi-Fi in libraries and that further clarification was required.

The Chair questioned all the new charges for Cultural Services – Thameside Theatre and Central Complex. The Chair had concerns how these extra charges would affect smaller groups such as dancing and art groups in paying for facilities and questioned whether they had been consulted. Julie Rogers referred Members to page 133, paragraph 13.3 of the agenda which referenced the fees and charges that was undertaken for the 2017/18 financial year. The Chair thanked the Officer but stated further clarification was required and a meeting would be arranged for next week.

The Chair questioned the new charge Heritage - School Visits (Coalhouse Fort or Thurrock Museum) - per class and asked should the Council be charging schools for this facility. Julie Rogers stated that this was not a new charge to schools and was already been paid.

Councillor Abbas pointed out that no charges had been made to services such as adult gambling services and licensing but those local services for residents appeared to have been increased. Councillor Abbas felt that this was not fair and unreasonable.

Councillor Abbas questioned why there had been an increase in charges to the Residents Services – Registration of Marriage and Birth Certificates. Julie Rogers stated further clarification from Officers was required and a meeting would be arranged for next week.

**RESOLVED:**

- 1. That Members asked for clarity on a number of areas and a meeting would be arranged for next week before the recommendations are agreed.**
- 2. That the Cleaner Greener and Safer Overview and Scrutiny Committee noted the revised fees, including those no longer applicable and commented on the proposals currently being considered within the remit of this committee.**
- 3. That the Cleaner Greener and Safer Overview and Scrutiny Committee noted that director delegation authority will be sought via Cabinet to allow Fees and Charges to be varied within a financial year in response to commercial requirements.**

**20. Tree Planting Strategy**

Julie Rogers, Director of Environment and Highways, presented the report that outlined the future planting and maintenance options of the report in response to a Motion that had been raised at Full Council on the 25 July 2018 by Councillor Redsell. Julie Rogers stated that currently there was no tree replacement strategy in place or funding for planting of trees in the borough. That the Planning Team had been very supportive of Option 3 proposing that trees are planted as part of any new housing development. Julie Rogers also stated that a capital submission had been made and if successful would be included in the finance report at Budget Council in February 2019.

The Chair invited Councillor Redsell to speak.

Councillor Redsell thanked the Chair for allowing her to speak and stated that so many trees had been lost in the borough which had not been replaced. That 50 trees had been planted in her ward from funding and that trees were good for the environment with some trees being over 100 years old. Councillor Redsell stated that a provision should be place to replace those trees that had been lost.

Councillor Abbas agreed to the support of Option 3.



Councillor Rigby also agreed to the support of Option 3 and asked where the replacement trees would be planted. Julie Rogers stated that the proposed 66 trees in the first year would be planted, where possible, in the same place or close to where the trees were originally.

Julie Rogers referred Members to some good news that the Council were in the process of obtaining an arboriculture system, a full survey of all the trees in the borough will take place and the data uploaded into the system, which would provide a full understanding of the condition of trees. Currently this is a manually recorded and going forward this would provide a more efficient and effective monitoring and would identify any areas where there was a lack of trees.

The Chair asked for clarification that the 66 trees would be placed where they were originally planted and questioned where the remainder of those trees would go. Julie Rogers stated that the trees would be planted in the same location or as close as possible and the survey would identify any gaps. Any discussions on location would then take place with ward members.

The Chair stated it was great to report on nice items and obviously everyone wants a greener Thurrock and stated that Option 1 must be agreed before any plans for development are agreed.

The Chair would welcome a report back on this in a year's time.

**RESOLVED:**

1. **That the Cleaner Greener and Safer Overview and Scrutiny Committee considered the options available and recommend to Cabinet option 1 outlined in the report.**
2. **That the Cleaner Greener and Safer Overview and Scrutiny Committee considered option 3 and recommend to Cabinet for financial year 2019/20 subject to capital funding approval.**

**21. Work Programme**

Members agreed to the work programme published in the agenda.

**The meeting finished at 8.50 pm**

Approved as a true and correct record

**CHAIR**

**DATE**

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<b>7 February 2019</b>		<b>ITEM: 5</b>
<b>Cleaner, Greener and Safer Overview Scrutiny Committee</b>		
<b>Violence Against Women and Girls Strategy Report</b>		
<b>Wards and communities affected:</b> All		<b>Key Decision:</b> N/A
<b>Report of:</b> Michelle Cunningham, Thurrock Community Safety Partnership Manager		
<b>Accountable Assistant Director:</b> Daren Spring, Assistant Director Street Scene and Leisure		
<b>Accountable Director:</b> Julie Rogers, Director of Environment and Highways		
<b>This report is Public</b>		

## Executive Summary

This report provides Overview and Scrutiny Committee with an update on the areas of work associated with the Thurrock Violence Against Women and Girls Strategy 2017-2020. Whilst this Strategy is focused on the needs of women and girls as a deliberate response to the disproportionate impact of the crimes of domestic and sexual violence and abuse on them, it also fully recognises and responds to the fact that men can be victims of these crimes too. Similarly, it recognises that not all perpetrators are men.

The Thurrock Community Safety Partnership is committed to meeting the needs of both women and men by tackling all forms of exploitation and abuse across Thurrock and by delivering protection and legal redress for all.

### 1. Recommendation(s)

- 1.1 **Request that members champion the VAWG agenda and raise the profile of the services that are available to Thurrock residents.**
- 1.2 **Ensure that services are resourced adequately to help all victims of these crimes. In doing so Thurrock Council are addressing and preventing domestic and sexual violence and reducing demand on services.**

## **2. Introduction and Background**

### **2.1 National Legal Framework**

- 2.1.1 The role of local authorities in the prevention of crime and disorder became a legal requirement under section 17 of the Crime and Disorder Act 1998. To meet this obligation, Community Safety Partnerships (as they are now known) were created, ensuring that the named 'responsible authorities' worked together on a statutory basis.

In the years that followed a range of additional legislation strengthened and amended these arrangements. In most recent times, significant legislation and national strategies were introduced which stressed the importance of partnership working to help protect those most affected by specific crimes and actions.

- 2.1.2 Violence Against Women and Girls (VAWG) has multiple and long lasting impact on victims as well as society as a whole. Around 2 women are killed every week in England and Wales by a current or former partner<sup>1</sup>. It is estimated that 4.3 million suffer domestic abuse over their lifetime, 1.2 million women suffer domestic abuse each year and 3.4 million women are victims of sexual violence over their lifetime. Furthermore, violence against the person and sexual offences has the highest under-recording rates nationally, 33% and 26% respectively.<sup>2</sup>
- 2.1.3 The United Nations defines violence against women as: 'violence that is directed at a woman disproportionately' this includes a wide range of abusive behaviours including physical, sexual, financial, emotional and psychological abuse.<sup>3</sup>
- 2.1.4 VAWG is abuse that is targeted at women or girls because of their gender and it affects women and girls disproportionately but men can, and are, abused too. It is important that VAWG is not seen as a series of incidents or assaults which a woman or girl is expected to experience. VAWG has a very big impact on the physical safety, health and emotional well-being of individuals, as well as impacting on their families, carers, children and the community as a whole. Abuse can happen to anyone regardless of economic status, gender, ethnicity, faith, sexuality or age. It is also accepted that male on male and female on female abuse occurs. Whilst it is recognised that the issues across the VAWG agenda have a disproportionate effect on women it is also recognised that boys and men are victims of this violence too.
- 2.1.5 Domestic Homicide Reviews (DHRs) were established on a statutory basis under Section 9 of the Domestic Violence, Crime and Victims Act (2004). A DHR is a multi-agency review of the circumstances in which the death of a person aged 16 or over has, or appears to have, resulted from violence,

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<sup>1</sup> Office for national statistics (2016) Compendium – Homicide (average taken over 10 years)

<sup>2</sup> 2018 Women's Budget Group Briefing: Violence Against Women and Girls

<sup>3</sup> United Nations (1992) CEDAW General Recommendation No 19

abuse, or neglect by a person to whom they were related or with whom they were, or had been, in an intimate personal relationship, or a member of the same household as themselves. Section 9 of the Act came into force on 13 April 2011 which requires Community Safety Partnerships (CSPs) to undertake a DHR following a domestic homicide that meets the criteria set. Within Southend, Essex and Thurrock (SET) it was agreed that this process would be centralised and coordinated by the SET Domestic Abuse team, commencing July 2017.

Since April 2011 there have been over 400 completed DHR's nationally. Thurrock has not had a DHR since the introduction of this legislation. Across Essex there have been 31 reviews, 5 occurred in 2017/18<sup>4</sup>. DHR legislation applies to all victims, but the national analysis of reviews in 2014/15 revealed that there is over double the number of female victims (107) compared to male (50), and the majority of women are killed by a partner or ex-partner.<sup>5</sup>

- 2.1.6 In 2016 the government updated their approach to tackling domestic violence in the national Ending Violence Against Women and Girls strategy (2016-2020). This document recognised the scale of the problem, and went further than the 'traditional' scope of domestic abuse to look at a host of unacceptable and deeply distressing crimes that disproportionately affect women throughout life. Areas included in this strategy are: domestic violence and abuse; sexual violence; child sexual abuse; stalking; so-called "honour-based" violence – including forced marriage and female genital mutilation (FGM); gang-related violence; and human trafficking. Key terms and definitions are detailed in appendix 1. The strategy is focused on crimes that disproportionately affect women, but it is unequivocally clear in its support for men should they also find themselves a victim of these offences and require help from enforcement and supportive services.

Government initially committed 80 million to support this strategy, and in the 2017 Spring Budget a further 20 million was agreed. Although this level of funding is encouraging, sustainable funding is what is required to have an impact on the cost of these crimes to society. In 2008 domestic abuse was estimated to cost the UK 15.7 billion. This cost included 3.9 billion for the criminal justice system, civil legal services, healthcare, social services, housing and refuge, more than 1.9 billion for the economy (time off work/injuries) over 9.9 billion in 'human and emotional' costs (actual and attempted murders, threatening behaviour and suffering and fear caused)<sup>6</sup>. In 2016, the government recognised the impact of domestic abuse and the relationship to suicides and in response produced updated DHR statutory guidance to require a review in suicides where domestic abuse or controlling coercive behaviour had been a concern.

- 2.1.7 The VAWG agenda is supported nationally and locally by a number of other significant pieces of legislation which protects all victims of these crimes.

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<sup>4</sup> SETDAB

<sup>5</sup>Home Office: Domestic homicide reviews: key findings from research

<sup>6</sup> Sylvia Walby (2009) The cost of domestic violence up-date 2009

- The Equalities Act, 2010 which places a duty on all local authorities and other public bodies to eliminate unlawful victimisation, harassment and discrimination on the grounds of gender.
- The Care Act, 2014 which places adult safeguarding on a legal footing and directs the way in which it must be undertaken by local authorities.
- The Children Act, 1989 which places a responsibility on local authorities to safeguard children and, as amended by the Adoption and Children Act, 2002, adds to the definition of harm those children suffering impairment “from seeing or hearing the ill-treatment of another.”

## 2.2 Local Response

2.2.1 Thurrock Community Safety Partnership recognised the importance of addressing the wider issues that were disproportionately affecting women within the community and made a decision that the appropriate response would be to have a local strategy to tackle the issues. The strategy was developed and subsequently refreshed to reflect the national themes and the National Statement of Expectations for Violence Against Women and Girls Services (December 2016).

2.2.2 The core objectives of the VAWG strategy and action plan 2017-2020 are:

- Putting the Victim at the centre of Service Delivery
- Pursuing perpetrators in order to keep victims safe
- Safeguarding Individuals at every point
- Partnership Working: Communities and professionals have a greater awareness of what an abusive relationship is and how to report it

2.2.3 The strategy also supports the outcomes of the Southend, Essex and Thurrock Domestic Abuse Board (SETDAB), the delivery of the Board’s “Joint Commissioning Strategy for Domestic Abuse, 2015-20” as well as the Police Fire and Crime Commissioner’s (PFCC) Police and Crime Plan 2016-2020 and Essex Police Crime Prevention Strategy 2018-2021.

2.2.4 Partnership working is vital to ensuring the successful delivery of the VAWG strategy. This will be achieved through collaborative working alongside some of our key stakeholders and contributors. These include the VAWG Strategy Group, local providers such as South Essex Rape Incest Crisis Centre (SERICC), Changing Pathways and many internal departments such as the Housing Safeguarding Team. Essex wide there are close working relationships with the PFCC and the SETDAB.

## 2.3 Funding

2.3.1 In 2018/19 Thurrock Council allocated £549,113.72<sup>7</sup> towards the costs associated with commissioning VAWG services. Below is a summary of key contributions, financially and through service provision.

2.3.2 Thurrock is an active member of SETDAB. Whilst SETDAB have recently extended their remit to include some elements of VAWG, such as stalking, it is acknowledged that SETDAB does not look specifically at sexual violence and abuse and other crime types within the VAWG agenda.

Commissioner/Lead	Services that contribute towards VAWG
<b>Thurrock Council</b>  Children's commissioned services	<ul style="list-style-type: none"><li>• Brighter Futures programme (provider 1-£89,000)</li><li>• Brighter Futures programme (provider 2-£45,000)</li><li>• DV perpetrator programme (£25,000)</li><li>• Strategy Operational Support contract (£20,000)</li><li>• Children and Young People Specialist Counselling Service (£62,000)</li></ul>
Children's Social Care	<ul style="list-style-type: none"><li>• National Centre for FGM: Embedded case worker (£20,000)</li></ul>
Enforcement and Public Protection (Environment and Highways)	<ul style="list-style-type: none"><li>• Independent Domestic Violence Advocacy (IDVA) service (£17,000)</li><li>• VAWG coordinator total costs. (£35,500)</li></ul>
TCSP	<ul style="list-style-type: none"><li>• Domestic Abuse Advisor (40,000)</li><li>• VAWG related training for staff and partners (£7,985)</li></ul>
Housing  Housing Safeguarding Team	<ul style="list-style-type: none"><li>• Specialist domestic abuse refuge services – contract value £155,509 per annum</li><li>• 1x Domestic abuse officer (£40,000)</li><li>• 1x Safeguarding Manager (£45,000)</li><li>• 2x floating support officers (coming in-house 2019) – previously funded at £99,000 per annum when outsourced</li><li>• Sanctuary Scheme: enabling victims to stay in their home.- budget value £50,000 per annum</li></ul>
<b>PFCC-Commissioned Services</b>	<ul style="list-style-type: none"><li>• Independent Domestic Violence Advocates</li><li>• Independent Sexual Violence Advisers</li><li>• Victim Support</li><li>• Essex Sexual Abuse Referral Centre (SARC)</li></ul>

<sup>7</sup> Thurrock Council FOI response to information request for total figure spent on VAWG related services.

PFCC Grant funded Annual projects	<ul style="list-style-type: none"> <li>• DHR fund contribution (CSP's top sliced)</li> <li>• SETDAB partnership contribution</li> </ul>
<b>SET DA Partnership</b>  Thurrock is a partner of this partnership and benefit from the commissioning of the majority of services.	<ul style="list-style-type: none"> <li>• Perpetrators Pathway programme (£450,000 Home Office Transformation Fund)</li> <li>• MARAC/MARAT</li> <li>• Domestic Homicide Reviews</li> <li>• Drive Project (not in Thurrock)</li> <li>• Project MAYA (Department of Local Government and Communities funding)</li> </ul>

### 3. Issues, Options and Analysis of Options

- 3.1 The crimes and actions committed under the VAWG umbrella continue to have an impact on the demand of council services. Of the 4,961 Violence Against Person offences reported to Essex Police for 12 month period ending November 2018, 37.3% were domestic related (1850 crimes). In addition 35.5 % of the 121 reported rapes were domestic related (43).<sup>8</sup>

Across children's social care, the impact is especially noted. The latest report by the Association of Directors of Children's Services found that *'Of all the parental factors, domestic abuse was cited as the most prevalent, and is a prominent factor in re-referral of children to children's social care services, making it difficult to achieve sustainable change for some children. Children subject to repeat referrals and child protection plans are often children living in households with these factors'*. In Thurrock, 40% of all referrals to children's social care are domestic abuse related.<sup>9</sup>

- 3.2 This demand has knock on consequence for Thurrock Housing Team in terms of refuge provision, allocation of housing and the difficulties in working with the introduction of new government policies. The roll out of Universal Credit, for example, means that couples are given a single payment to one individual, which limits a victim's ability to have financial autonomy and escape an abusive situation.
- 3.3 Thurrock Community Safety Partnership is attentive to these strains which demonstrate the need for the robust strategy and action plan. The topics highlighted will form some of the additional and amended actions within the refresh of the VAWG action plan in 2019.

#### 3.4 Activity delivered in 2018/19

Some headline achievements across VAWG in Thurrock include:

<sup>8</sup> Essex Police: District briefing note November 2018

<sup>9</sup> Thurrock Children's Social Care



- Successful recruitment of a VAWG Coordinator to drive forward the delivery of the VAWG strategy.
- Continued working with the Thurrock Housing Safeguarding Team and Changing Pathways to provide support for all victims of domestic abuse, including standard and medium risk.
- Raising awareness of honour based abuse to professionals.
- Commissioning of a Domestic Abuse Advisor to work alongside Children's Social Care and Housing Teams enabling appropriate working with perpetrators.
- Continued roll out of J9 training, an initiative to raise awareness with professionals and the community and help victims of domestic abuse
- Development and delivery of a 'challenging myths, changing attitudes' programme of training, delivered by SERICC.
- Raising awareness of many VAWG crimes and issues, including stalking through the 16 days of action events.
- Support for project MAYA – a specific service for Black, Asian and Minority Ethnic (BAME) communities to tackle so called honour based abuse.
- Working with Public Health to support schools in the forthcoming delivery of mandatory Relationship Sex Education.
- Launch of 'Ask for Angela' safety campaign in conjunction with Pub Watch to promote a code word for people who feel unsafe on a date.
- Continued support for our partner Changing Pathways in raising awareness of the specialist stalking service.
- The action plan will be refreshed in 2019 to ensure it is relevant and that actions are appropriate.

### 3.5 The VAWG Equality Impact Assessment has highlighted:

- There is a gender imbalance in relation to reported VAWG: 77% of victims were female, 24% of perpetrators are male.
- Sexual exploitation adversely impacts young people.
- Elder abuse is acknowledged as under reported and is being highlighted for action.
- The scope of the strategy doesn't cover gender reassignment.
- Pregnant women are particularly vulnerable to domestic abuse.
- BAME communities are more at risk from Honour Based Abuse including FGM.
- None of the established religions recognise the abuse highlighted within this strategy.
- Whilst domestic abuse affects all communities, deprived wards have a higher reporting level.

The Thurrock Community Safety Partnership is committed to meeting the needs of both women and men by tackling all forms of exploitation and abuse across Thurrock and by delivering preventative measures, protection, and legal redress for all.

#### **4. Summary**

- 4.1 VAWG remains widespread and has a devastating impact on victims and families. Thurrock Community Safety Partnership remains committed, through its members and partnership to develop and implement innovative programmes to tackle these crimes.
- 4.2 Our multi-agency groups, both locally and Essex wide are established to tackle operational and strategic issues that impact the VAWG agenda. Working collaboratively in partnership will strengthen processes to help victims of these crimes. Every victim matters.
- 4.3 The appointment of a VAWG coordinator demonstrates the Council commitment to raising awareness of VAWG and delivery of our strategy.

#### **5. Reasons for Recommendation**

- 5.1 This report is to provide Overview and Scrutiny Committee the opportunity to review the performance of the VAWG strategy and note the crucial contribution that Thurrock Council makes to it.

#### **6. Consultation (including Overview and Scrutiny, if applicable)**

Not applicable

#### **7. Impact on corporate policies, priorities, performance and community impact**

- 7.1 The VAWG is central to delivering Thurrock Council's priority of:

**People** - a borough where people of all ages are proud to work and play, live and stay. All elements of this priority are relevant to VAWG

**Prosperity** - a borough which enables everyone to achieve their aspirations. In particular 'vocational and academic education, skills and job opportunities for all.' which provides victims with access further opportunities to help them rebuild their lives.

- 7.2 The VAWG action plan links closely to and supports delivery Southend, Essex and Thurrock Domestic Abuse Board (SETDAB) Joint Commissioning Strategy, the PFCC Police and Crime Plan 2016-2020 and Essex Police Crime Prevention Strategy 2018-2021.

## **8. Implications**

### **8.1 Financial**

Implications verified by: **Laura Last**  
**Management Accountant**

There are no financial implications arising from this report

### **8.2 Legal**

Implications verified by: **David Lawson**  
**Assistant Director of Law & Governance  
& Monitoring Officer**

There are no legal implications arising from this report.

### **8.3 Diversity and Equality**

Implications verified by: **Roxanne Scanlon**  
**Community Engagement and Project  
Monitoring Officer**

As outlined in the Equality Impact Assessment (EQIA) and 3.3 and which are reflected and recognised with the action plan

**Other implications** (where significant) – i.e. Staff, Health, Sustainability, Crime and Disorder

This report will help the Council and its Partners ensure that they are delivering on its commitments to Section 17.

## **9 Background papers used in preparing the report** (including their location on the Council's website or identification whether any are exempt or protected by copyright):

- Police and Crime Plan  
[www.essex.pcc.police.uk/priorities-for-essex/police-and-crime-plan/](http://www.essex.pcc.police.uk/priorities-for-essex/police-and-crime-plan/)
- Southend, Essex and Thurrock Joint Commissioning Strategy for Domestic Abuse 2015-20  
<https://setdab.org/wp-content/uploads/2018/06/Joint-Commissioning-Strategy-for-Domestic-Abuse-201516.pdf>
- Crime-recording: making the victim count

<https://www.justiceinspectorates.gov.uk/hmicfrs/publications/crime-recording-making-the-victim-count/>

- Domestic homicide reviews: key findings from research  
<https://www.gov.uk/government/publications/domestic-homicide-review-lessons-learned>
- 2018 Women's Budget Group Briefing: Violence Against Women and Girls  
<https://wbg.org.uk/analysis/2018-wbg-briefing-violence-against-women-and-girls/>
- ADCS Safeguarding Pressures: Phase 6, November 2018  
<http://adcs.org.uk/safeguarding/article/safeguarding-pressure-phase-6>
- Office for national statistics (2016) Compendium – Homicide (average taken over 10 years) [www.ons.gov.uk](http://www.ons.gov.uk)
- United Nations (1992) CEDAW General Recommendation No 19  
<http://bit.ly/1ple2Cz>
- Sylvia Walby (2009) The cost of domestic violence up-date 2009  
<http://bit.ly/2m5VXGM>

## **10 Appendices to the report**

Appendix 1 - Thurrock Violence Against Women and Girls Strategy- including VAWG terminology and definitions at appendix 3

[www.thurrock.gov.uk/sites/default/files/assets/documents/strategy-vawg-2017-v02.pdf](http://www.thurrock.gov.uk/sites/default/files/assets/documents/strategy-vawg-2017-v02.pdf)

Appendix 2 - Thurrock Housing Service Safeguarding Report 2015/18,

### **Report Author:**

Priscilla Tsang

Violence Against Women and Girls Coordinator

Environment and Highways

## Thurrock Housing Service

### Housing Safeguarding Performance Comparison Report

**1<sup>st</sup> April 2015 - 31<sup>st</sup> March 2016**

**1<sup>st</sup> April 2016 - 31<sup>st</sup> March 2017**

**1<sup>st</sup> April 2017- 31<sup>st</sup> March 2018**

***'Domestic Abuse:** any incident or pattern of incidents of controlling, coercive, threatening behaviour, violence or abuse between those aged 16 or over who are, or have been, intimate partners or family members regardless of gender or sexuality.'*

## 1.0 Introduction

The Housing Safeguarding (HS) Team work with reports of domestic abuse (DA), sexual abuse (SA), honour based crimes and forced marriage. The team began in 1<sup>st</sup> July 2015 with the Sanctuary Scheme being brought in-house from the provider Thurrock Women's Aid. As a result of referrals for DA casework, the team began to record the details of these cases in April 2015. As the team have been in existence for over three years, this report has been produced to highlight the evolution in the way the team now functions within the housing service.

The Multi Agency Safeguarding Hub (MASH) was introduced to Children's Social Care in 2014 and the HS Team became a core member. The team is also a core member of the Thurrock Multi Agency Risk Assessment Group (MARAC).

The team also work with internal partners within the Housing Options Team to carry out risk assessments for those who approach the service as homeless applicants who are survivors. The Sanctuary Scheme is a method of homelessness prevention, offering additional security measures to allow survivors to remain at home should they wish.

The team have oversight of the refuge contract which is currently provided by Changing Pathways. The contract will be renewed once it expires in January 2019. At this time the Floating Support service which is a part of the contract, will be brought into the Thurrock Housing Safeguarding Team. The plans for the team going forward are to prevent homelessness alongside the current role of integrating refuge leavers back into general needs accommodation.

The HS team are core members of the South Essex Domestic Abuse Hub with partners from Basildon, Brentwood, Tendring, Castle Point and Rochford.

This report draws on the definitions and categories recognised by the professionals and practitioners who form the Thurrock Violence Against Women and Girls Group (VAWG).

There are 10, 038 council owned properties in Thurrock and of these 904 are leasehold properties sold through the Right-To-Buy process.

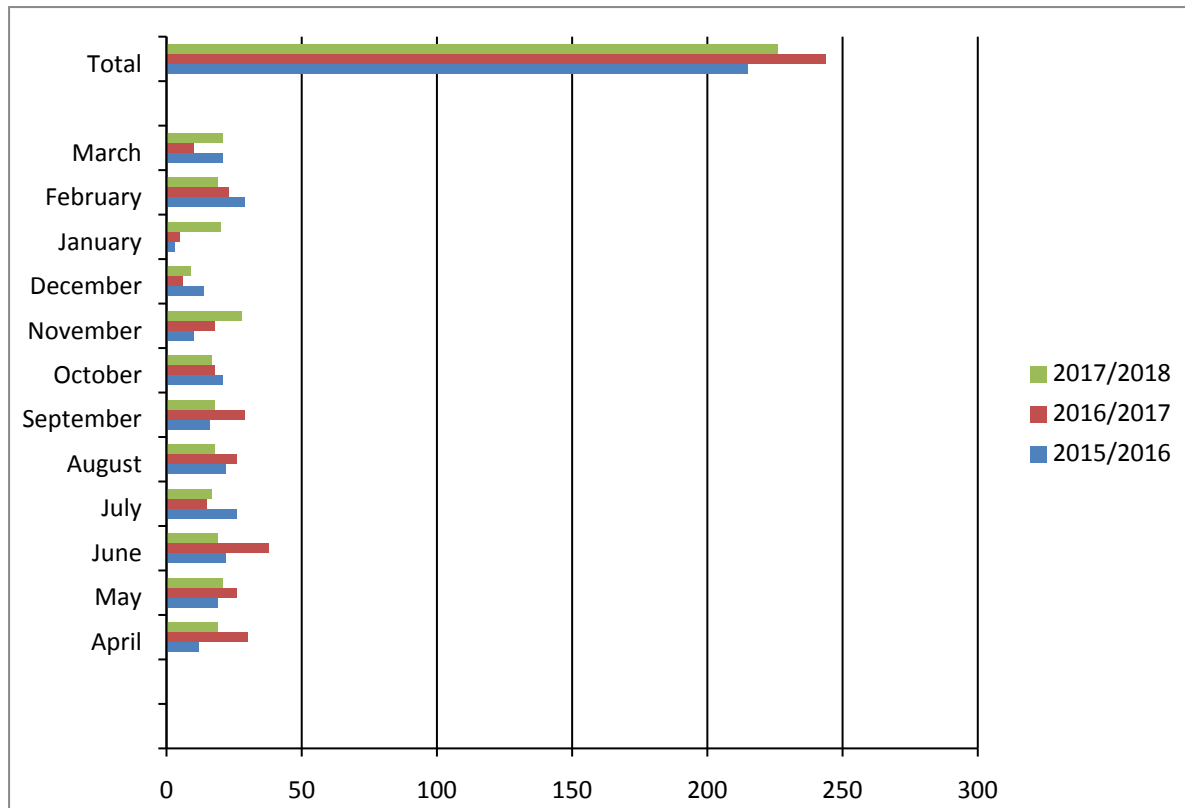
## 2.0 Case Numbers

During the three years from April 2015 to March 2018 the team have assisted 685 survivors:

2.1 The following table shows the case numbers over the period of this report (see below cases shown by month and year):

Case Numbers	2015/2016	2016/2017	2017/2018
April	12	30	19
May	19	26	21
June	22	38	19
July	26	15	17
August	22	26	18
September	16	29	18
October	21	18	17
November	10	18	28
December	14	6	9
January	3	5	20
February	29	23	19
March	21	10	21
<b>Total</b>	<b>215</b>	<b>244</b>	<b>226</b>

2.2 The spike in June 2016 coincided with the Euro 16 football tournament and England lost their final game on 27<sup>th</sup> June. The spike in the month of February 2017 is a peak which takes place every year and follows Christmas holidays and the month of January, when family finances are under pressure. The average number of cases the team receive on a monthly basis is 19.

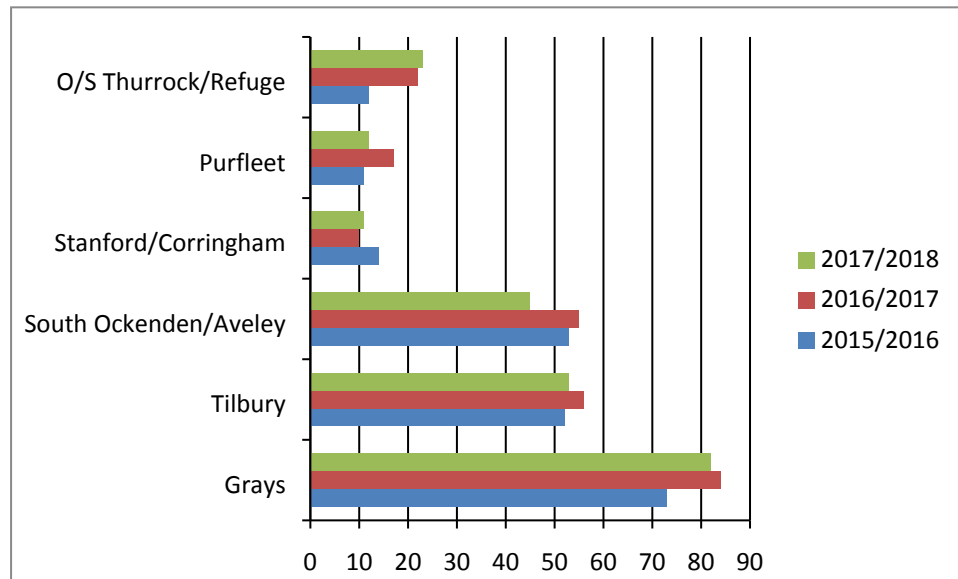


2.3 Three areas in Thurrock have consistently been identified as having the most number of disclosures of abuse: Grays 34%, Tilbury 23%, and South Ockenden /Aveley 22 %. The survivors who fled from outside the Thurrock borders have continued to increase over the three year period. The number has doubled and represents 8% of disclosures. The areas of Purfleet, Stanford Le Hope, Corringham and Chafford are mostly privately owned or rented and these areas have a comparatively low number of survivors accessing the service.

The following diagrams show cases broken down by location over the period 1 April 2015 to 31<sup>st</sup> March 2018:



Area	2015/2016	2016/2017	2017/2018
Grays	73	84	82
Tilbury	52	56	53
South Ockenden/Aveley	53	55	45
Stanford/Corringham	14	10	11
Purfleet	11	17	12
O/S Thurrock/Refuge	12	22	23
<b>Total</b>	<b>215</b>	<b>244</b>	<b>226</b>



An ambitious and collaborative community which is proud of its heritage and excited by its diverse opportunities and future

## 2.4 Cases by sexual orientation

The Housing Safeguarding Team has seen a marked increase in reports of domestic abuse from male survivors. During the year 2017/2018 a male graduate trainee was working within the team and this coincided with a steep rise in the number of disclosures from male survivors. The team have also received a disclosure from the LGBT+ community.

Case No. by sexual orientation	2015/2016	2016/2017	2017/2018
Female	210	240	210
Male	5	4	15
LGBT+	0	0	1
<b>Total</b>	<b>215</b>	<b>244</b>	<b>226</b>

## 2.5 Cases by category

The following diagram show reports to Housing Safeguarding broken down by category of case. The highest category is referrals from the Multi Agency Safeguarding Hub (MASH) and the team only record the enquiries with which the team are involved. Although, they do respond to all MASH enquiries, they only record the cases open to the team. This is also replicated in the MARAC casework.

Category	2015/2016	2016/2017	2017/2018
MARAC	60	69	64
MASH	70	60	77
Casework	25	43	35
Sanctuary Scheme	60	72	50
<b>Total</b>	<b>215</b>	<b>244</b>	<b>226</b>

### 3.0 Outcomes and actions

The Housing Safeguarding Team completed risk assessments in 100% of the cases referred to them. The team received a total of 7 sexual abuse cases in 2017/2018, which represents 3% of all cases. The team do not utilise Domestic Abuse Stalking and Honour-Based (DASH) risk assessments for measuring levels of risk in sexual abuse cases, we use the South Essex Rape Incest Crisis Centre (SERICC) referral form which is more specific to the level of risk to this particular client group.

The target hardening through the Sanctuary Scheme has fluctuated and there are fewer cases in the last financial year than the previous two years. It is possible that this is because there were more residents who wished to move rather than remain at the family home.

In the two previous years of 2015 to 2017 the team were carrying out risk assessments on behalf of the homeless team, however due to a lack of resources this function could not be offered from 2017/2018. It is anticipated that this function will be carried out by the Floating Support Service (FFS) when it comes back 'in house' from 31<sup>st</sup> January 2019. A further function provided by the FFS will be homeless prevention delivered by working with DA survivors threatened with homelessness. The key component of the role will continue to be resettling survivors into accommodation after they leave refuge.

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<b>7 February 2019</b>		<b>ITEM: 6</b>
<b>Cleaner Greener and Safer Overview and Scrutiny Committee</b>		
<b>Bartec Update</b>		
<b>Wards and communities affected:</b> All		<b>Key Decision:</b> Not applicable
<b>Report of:</b> Marcelle Puttergill, Project Manager, Environment and Highways		
<b>Accountable Assistant Director:</b> Daren Spring, Assistant Director Street Scene and Leisure		
<b>Accountable Director:</b> Julie Rogers, Director of Environment and Highways		
<b>This report is Public.</b>		

## Executive Summary

Bartec Collective is being implemented as a back office system for Environment and Highways services providing a digital scheduling and reporting tool and a means of allocating work packages to frontline staff via a mobile app or in-cab unit.

One of the key benefits of the system is that the work scheduled to be carried out by teams in all of the key front lines services (Waste Collection, Street Cleansing and Grounds Maintenance) is visible to all who have access. This means that queries about when work is scheduled and when tasks were last undertaken will be able to be answered far more efficiently and effectively than with paper records.

This report provides an update on progress of the implementation, next steps and the benefits that have been realised to date.

### 1. Recommendation(s)

**1.1 That the Cleaner, Greener and safer Overview and Scrutiny Committee consider and note the report.**

### 2. Introduction and Background

2.1 A decision was taken in 2017-18 to implement the Bartec Collective back office system for a number of services within the Environment and Highways Directorate including:

- Domestic Waste collection
- Commercial Waste collections

- Street Cleansing
  - Grounds Maintenance.
- 2.2 The implementation of Collective is a significant change for those teams in that it promotes and requires digital real time reporting of work completed, replacing historical paper based systems. The digital data provides better visibility of team's actions for Supervisors, enabling them to be aware of issues with daily loads more quickly and to intervene earlier.
- 2.3 Given the scope of the project and potential impact on the various front line teams, it was proposed that the implementation was staggered with each team having the system configured and deployed for their service individually.
- 2.4 The first team to adopt the system was the Commercial Waste Service which started using Bartec Collective in April 2018. The software has provided the team with a single database of customers. Processes relating to the setup of new and renewal of existing contracts have been streamlined. As part of the implementation the team was also able to review the invoice processes and have moved from a methodology of annual invoicing paid on a monthly pro rata basis to a system whereby customers are invoiced monthly in arrears, for the actual collections that have been completed. The invoicing process has been facilitated with the creating of an interface between Oracle and Collective which allows for invoices to be automatically created, based on collection records.
- 2.5 The system was then implemented for Street Cleansing staff who have had Collective available to them since May 2018. In addition to implementing the back office system that provides real time visibility of work completed, all staff within the Street Cleansing team have been issued with smartphones enabling them to receive and complete daily work packages digitally. An added advantage of the smartphones is that it has improved the communication with front line teams who are now able to receive corporate and other work related emails. Feedback from the teams suggest that seeing more of the corporate messaging in this manner has helped them to feel more engaged and included in Team Thurrock. Those staff members are now better equipped to respond to service requests allocated to them via their Supervisor. Furthermore staff are able to raise Service Requests themselves as they see additional work that needs to be undertaken, an example of this is that staff are able to report fly-tips as they clear them ensuring that we have accurate figures. They are also able to record when they undertake additional duties such as back lining or pruning that may not have been planned for that day.
- 2.6 Grounds Maintenance and Parks and Open Spaces teams were due to commence using Bartec in May 2018, mobile devices were introduced but the complexity of the work schedules has meant that the data set has had to be reviewed and will be re-implemented for April 2019. There has been intermittent use of the system by these teams since the original

implementation and the Grounds Maintenance and Parks and Open Spaces teams are already benefitting from improved communication.

- 2.7 The final team to have Collective implemented will be Domestic Waste Collection. The implementation date is planned for April 2019. The teams will use in-cab units, installed in the collection vehicles, to report on roads completed and individual bins not collected and the reason, as the rounds are taking place. The improved visibility of reasons for non-collection will help the Supervisory team to ensure that they are addressing issues more effectively and more quickly. The system will also be configured such that recycling bins not collected as result of contamination, can be logged and educational information sent to the property promptly. It is anticipated that this will support the service in tackling the issue of contamination that has been well documented.
- 2.8 As the Call Centre will be able to see on the system as whole roads are completed and any issues that have been raised by crews, they will immediately be able to inform residents who phone in to report missed collections of the status of the work for their road. This is a significant improvement to customer service and should help to reduce residents frustrations linked to a lack of information.
- 2.9 With the implementation to the Domestic Crews, work has commenced to link Love Clean Street with Collective. This will help to ensure that issues identified by residents and visitors to the Borough can be swiftly passed to the individual that can take the required actions to resolve them. As the work is done and the Service Request closed, it is intended that the update will be communicated directly to the resident.

### **3. Summary**

- 3.1 The Bartec Collective system implementation is progressing well with real time benefits for both residents and staff. These include improved access to information, a quicker turnaround for reporting and understanding reasons for work not completed and real time processing of work action plans, which can be updated after crews are deployed.

### **4. Reasons for Recommendation**

- 4.1 For Cleaner, Greener and Safer Overview and Scrutiny Committee to review the report and note the contents.

### **5. Consultation (including Overview and Scrutiny, if applicable)**

Not applicable

### **6. Impact on corporate policies, priorities, performance and community impact**

Not Applicable

## **7. Implications**

### **7.1 Financial**

Implications verified by: **Laura Last**  
**Management Accountant**

There are no financial implications relating to this report.

### **7.2 Legal**

Implications verified by: **David Lawson**  
**Assistant Director of Law & Governance**  
**& Monitoring Officer**

There are no legal implications relating to this report.

### **7.3 Diversity and Equality**

Implications verified by: **Becky Price**  
**Team Manager - Community Development and**  
**Equalities**

There are no specific Diversity or Equality implications relating to this report.

### **7.4 Other implications** (where significant) – i.e. Staff, Health, Sustainability, Crime and Disorder)

None.

## **8. Background papers used in preparing the report** (including their location on the Council's website or identification whether any are exempt or protected by copyright):

Not Applicable

## **9. Appendices to the report**

Not Applicable

## **Report Author:**

Marcelle Puttergill, Project Manager, Environment and Highways



<b>7 February 2019</b>		<b>ITEM: 7</b>
<b>Cleaner, Greener and Safer Overview and Scrutiny Committee</b>		
<b>Refuse Collections Update</b>		
<b>Wards and communities affected:</b> All		<b>Key Decision:</b> Report for noting
<b>Report of:</b> Claire Harvey, Strategic Lead – Waste Services		
<b>Accountable Assistant Director:</b> Daren Spring, Assistant Director for Street Scene and Leisure		
<b>Accountable Director:</b> Julie Rogers, Director Environment and Highways		
<b>This report is Public</b>		

## Executive Summary

This report provides an update on the performance of domestic waste collections, development of the commercial and business collection service and expansion of refuse collection services expected over the next year to accommodate forthcoming growth in the borough.

### 1. Recommendation(s)

- 1.1 That Cleaner, Greener and Safer Overview and Scrutiny Committee consider and note the report.**

### 2. Introduction and Background

- 2.1** Thurrock Council as a Unitary Authority has a statutory obligation under the Environmental Act 1990 to arrange for the collection and disposal of waste. The Council discharges these obligations by operating a weekly, in-house waste collection service for all streams for domestic collections. Trade waste is collected predominantly by two separate crews, with some domestic waste and recycling included.
- 2.2** The table below indicates the number of bin collections and tonnages disposed of in the last two years:

Function	2017/18 Output	2018/19 Output (YTD)
No of domestic bin collections per year	10,422,828	7,907,679
Annual household tonnage disposed (includes kerbside collections, Household Waste Recycling Centre (HWRC) and some street cleansing waste)	77612.30 tonnes	59678.98 tonnes

- 2.3 Disposal of household waste is managed through a range of contracts including Dry recycling, Composting and Energy from Waste. The combined annual disposal cost to the Council is circa £7.5million.
- 2.4 The Council has two options in managing the cost of disposal. The first is to reduce the overall volume of waste generated by each household and the second is to increase levels of recycling, re-use and composting. The table below details the current variations in gate fees for the three streams of kerbside collections:

Collection Stream	Cost per tonne*
Residual Waste (grey/green bins)	£100.38
Dry Recycling (blue bins)	£71.23
Kitchen and Garden Waste (brown bins)	£59.50

*\*Gate fees listed above are indicative only. There are a variety of factors that influence the costs paid for disposal, particularly dry recycling, including commodity value and level of contamination.*

### 3. Current Performance

- 3.1 The waste collection service has overcome a number of challenges this year which have impacted on performance levels. The service has implemented a number of mitigations to remedy the challenges faced, but despite doing so are still falling below the 98.5% target of collections made as scheduled.
- 3.2 For the last quarter of 17/18 and the first quarter of 18/19 the standard of performance was affected by balloted industrial action which was successfully mitigated. Other factors that have had impact on the collection service were difficulties in securing agency HGV drivers to cover annual leave etc., particularly over the summer periods, a trend seen nationally. The growth in the borough, higher than forecast when rounds were optimised in May 2017, has seen an increase in the number of properties being absorbed into existing rounds. Further development in the borough means that in 2019/20 additional collection resources may be required.

3.3 The table below indicates the comparative percentages of collections completed over the last two years:

	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bins to be collected 2018- 19	851,596	892,148	851,596	892,148	932,701	811,044	932,701	892,148	851,596
% Of Collections Made (target = 98.5%) 2017/2018	97.9%	99.5%	96.9%	98.6%	97.3%	95.4%	98.3%	98.9%	99.6%
% of Collections Made (target = 98.5%) 2018/2019	94.23%	98.29%	98.00%	93.67%	97.13%	98.24%	99.67%	99.16%	99.6%
2018/2019 - YTD/Cumulative figure	94.23%	96.31%	96.86%	96.05%	96.28%	96.58%	97.05%	97.32%	97.52%

The figures for the first six months of the year are not to the standard our residents expect, however mitigation is proving to be effective as can be seen from the above target performances in quarter 3.

- 3.4 The greatest impact was experienced by residents receiving a Friday collection. To address this issue, the service has reapportioned workload to provide a greater balance and achievable workload across each waste stream. The reintroduction of the Late crew came into effect in September to support any missed collections due to operational difficulties experienced during the normal working day, however this continues to be a challenge due to borough growth, particularly in the west side of Thurrock. The Waste Service continues to review and re-balance rounds to mitigate this.
- 3.5 The other area of focus for the service is communal bin stores, which bring challenges in relation to excess waste, fly tipping, blocked access and contamination. The service has been engaging with managing agents to address these concerns and the service is in the process of recruiting a Waste Services Engagement and Education Officer, for one year to concentrate efforts and focus on recycling, but will also support this work. Work is already underway with two local managing agents on a pilot project to improve collections and recycling.
- 3.6 In order to actively improve collection services, a number of new initiatives are being implemented, these include:
- The creation and recruitment of a bank team of rapid response HGV drivers
  - A number of drivers from all services have been cross service trained to enable them to support waste collection as needed
  - A pilot of two night Shunter drivers who transport the recycling to London is in progress, this has reduced the impact on recycling rounds
  - Continued regular review and re-optimising rounds, without direct impact to residents, ensuring that resources are sufficient and balanced
  - An additional refuse round has been added to the service to support service and growth
  - A Late Crew has been added to the service to support all three streams with mopping up collections as required.
  - Implementation of 'Blocked Access' postcards to raise awareness to residents about inconsiderate parking and impact on collections.

- Forthcoming implementation of the Bartec system.
- 3.7 Since the implementation of the above initiatives, there has been a significant improvement in performance in quarter 3 with KPI's being exceeded.
- 3.8 Further success has been seen over the last year with the increased growth of the commercial waste service which has been delivering over and above the forecasted business plans. Commercial waste collections are carried out in combination with domestic collections. Due to the success and significant growth in this service area an additional round was introduced in January 2018. The table below shows that the number of commercial waste customers has more than doubled over the last two years, and book value of the service is increased by approximately 300k.

Year	No of Customers
April 2017	347
April 2018	602
To date (January 2019)	713

#### **4. Issues for consideration**

- 4.1 With the increase in growth of the borough over the last year an additional refuse round has been introduced to manage demand. Growth in the borough is anticipated to be 32,000 additional properties over a twenty year period, which means an additional 96,000 collections per week. It is imperative that the service continually review growth in year and forecast future years to ensure appropriate resources are deployed to manage demand.
- 4.2 The introduction of the two night shunter drivers has positively impacted on missed bin collection performance and provided support to the recycling service. This is currently under review, along with the option of a further recycling round. Either option will support the service going forward and provide assurances of continued above target performance.

#### **5. Summary**

- 5.1 Whilst there have been a number of operational challenges this year, the service has reacted and reviewed and is currently performing well and above performance target. Continuous review and future planning will take place, giving consideration to key messages from the new "Waste, our resources: A Strategy for England" document released in December, to ensure the quality of service is maintained.

#### **6. Consultation (including Overview and Scrutiny, if applicable)**

- 6.1 This report is an update on the waste collections service. No consultation was required or undertaken.

#### **7. Impact on corporate policies, priorities, performance and community impact**

- 7.1 The implications of the recommendations in this report may require a review of local policies and procedures.

## **8. Implications**

### **8.1 Financial**

Implications verified by: **Laura Last**  
**Management Accountant (Environment and Highways)**

There are no financial implications relating to this report

### **8.2 Legal**

Implications verified by: **David Lawson**  
**Assistant Director of Law & Governance & Monitoring Officer**

There are no legal implications relating to this report

### **8.3 Diversity and Equality**

Implications verified by: **Becky Price**  
**Community Development Officer**

There are no specific equality and diversity implications relating to this report.

### **8.4 Other implications** (where significant) – i.e. Staff, Health, Sustainability, Crime and Disorder)

N/A

## **9. Background papers used in preparing the report** (including their location on the Council's website or identification whether any are exempt or protected by copyright):

There are no background papers used in preparing this report.

## **10. Appendices to the report**

None

### **Report Author:**

Claire Harvey  
Strategic Lead – Waste Services  
Environment & Highway

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<b>7 February 2019</b>		<b>ITEM: 8</b>
<b>Cleaner, Greener and Safer Overview and Scrutiny Committee</b>		
<b>Recycling Service Update</b>		
<b>Wards and communities affected:</b> All		<b>Key Decision:</b> Report for noting
<b>Report of:</b> Claire Harvey, Strategic Lead – Waste Services		
<b>Accountable Assistant Director:</b> Daren Spring, Assistant Director for Street Scene & Leisure		
<b>Accountable Director:</b> Julie Rogers, Director Environment and Highways		
<b>This report is Public</b>		

## Executive Summary

The 25 year Environment plan, published in December 2018, sets out the government pledge to leave the environment in a better condition for the next generation. The new “Waste, our resources: A Strategy for England” document sets the vision for all waste collection and disposal authorities to meet this commitment. The document sets out strategic ambitions, targets and key milestones up until 2050 and the service is in the process of reviewing this document to establish the possible implications for Thurrock.

Thurrock is committed to improving recycling rates, residents continue to provide circa 37% recycling, however focus needs to be on the quality of recycling to ensure costs for disposal are kept to a minimum. In the past recycling waste disposal costs were significantly lower, circa 50% of residual which have been increasing and currently sit around 70-75%, primarily due to the changing markets and international influences.

The recycling rate reported over the last five years has shown steady decline from 40.93% in 2013/14 to 36.97% in 2017/18, with the more significant decrease in 2015/16, however since then the recycling rate has remained consistent.

Thurrock Council remains committed to weekly residual and recycling collections and this report provides an update on performance in 2018/19 and the focus for 2019/20.

## 1. Recommendation

- 1.1 **It is recommended that Cleaner, Greener and Safer Overview and Scrutiny Committee review the report for information and comment.**

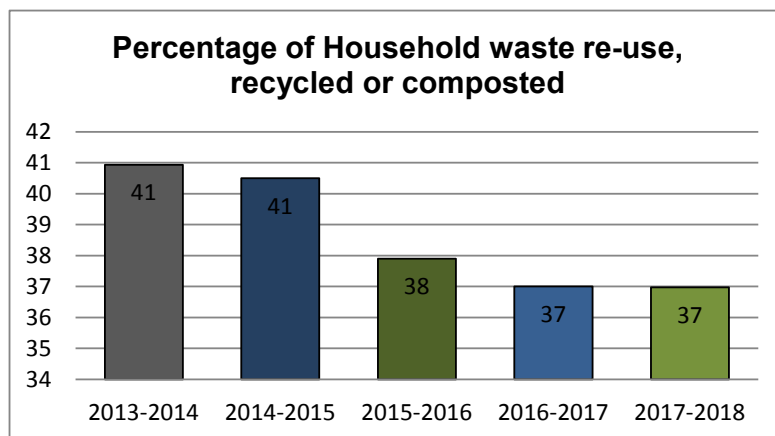
## 2. Introduction and Background

- 2.1 Thurrock Council as a Unitary Authority has a statutory obligation under the Environmental Act 1990 to arrange for the collection and disposal of waste. The Council discharges these obligations by operating a weekly, in-house waste collection service for all streams.
- 2.2 The overall household tonnage disposed of in 2017/18 was 77,612 tonnes; of this 28,431 tonnes were recycled, reused and composted.
- 2.3 The Resources and Waste Strategy for England sets out a number of recommendations to *'drive better quantity and quality in recycling.... To help local authorities and waste management companies act in the most sustainable and resource efficient way possible'*. This includes:

To improve recycling rates by ensuring a consistent set of dry recyclable materials is collected from all households and businesses. A circular economy for plastics is the ambition where:

- products are made from the same recycled materials and are easy to recycle
- Some products are no longer made from plastics but from alternative materials
- More plastics are reused, repaired or recycled
- Consumers use more reused items and know what can be recycled

- 2.4 The recycling rate reported over the last five years has shown steady decline from 40.93% in 2013/14 to 36.97% in 2017/18, with the more significant decrease in 2015/16, however since then the recycling rate has remained consistent.



The change in 2015/16 was primarily due to a change in legislation and a directive which placed increased pressure on Material Recovery Facilities (MRF's) to improve the quality of processing such that the quality and quantity of output is suitably high. Comingled collections routinely have higher levels of contamination than separate collections. However comingled collections typically attract greater quantities of recyclate substantially more than offsetting the higher contamination



level.

- 2.5 A number of interventions have been actioned by the council to mitigate the declining recycling rate locally. The key focus of the activity has been an ongoing and dedicated communication programme across a number of channels.
- 2.6 Evidence and experience from other authorities that are achieving much higher recycling rates are that there are two key service changes which have led to improvements: smaller residual bins for all residents and fortnightly waste collections.
- 2.7 Since 2010, 180 litre residual bins have been issued to customers as replacements for the 240 litre residual bins. 240 litre recycling and food/garden waste bins continue to be provided in order to support and encourage recycling.
- 2.8 The two key approaches for this coming year will focus on continuing to increase recycling rates and improving the quantity and quality of dry recycling material by reducing the levels of contamination and targeting communications to poor performing areas.

### 3. Current performance

Thurrock has set a target of 41% of all household waste to be recycled, re-used and composted in 2018-19. The table below shows the monthly recycling performance, including previous years' performance:

	2016/17 Outturn	2017/18 Outturn	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	YTD
% of household waste, reused, recycled & composted	37.62 %	36.97 %	43.25 %	46.39 %	40.24 %	45.52 %	39.40 %	39.86 %	38.46 %	33.63 %	39.88 %

Despite decreases in the tonnages of total household waste collected in the last few months, the cumulative figure (39.88%) remains at a similar level as the same point in the previous reporting year (39.83%). The pattern follows the trend of performance of the last few years and which indicates some seasonal trends especially during winter months when recycling levels decline, primarily due to lower levels of garden waste. The service remains committed to improving this figure, mindful of package reduction, e.g. thinner glass packaging and thinner aluminium cans which reduce the weight in the kerbside bin.

- 3.1 A number of additional recycling initiatives will be implemented in the forthcoming year to influence continuous improvement via a twofold approach:

#### Broad recycling messages

These have been re-enforced and communicated to all residents with Council Tax information, poster boards in waste collection vehicles, regular Social Media messaging, eNewsletters, etc.

### Targeted recycling messages

These are on specific items of recycling which will have the biggest impact on overall rates. By targeting through a range of location, channel and message, the same level of resource which would be allocated to a broad campaign can have a focussed impact on behaviour change. Some very successful targeted campaigns completed include the WEEE Amnesty and provision of blue bags for additional recycling side waste collections over Christmas and the New Year.

The 'Ooops' bin tags campaign was launched on 10<sup>th</sup> December 2018. The bright orange bin tags were designed as an eye catching, easy to understand visual aid to help residents understand about contamination and alert them if their recycling bins were not emptied. The introduction of the bin tag campaign was preceded by a comprehensive Communications campaign across a variety of information channels. The bin tags have been very well received by residents to date and early indications are that there has been no rise in service requests or complaints. The 'recycling in flats' pilot scheme is currently ongoing and the Managing Agents and residents we are working with are keen to work in partnership with Thurrock Council to improve their recycling arrangements, tackle bin shed fly tipping and engage with residents. The launch of the pilot is expected to take place in the last quarter of this year.

Further targeted work will focus on specific campaigns around plastics and metal recycling. We will be aiming to educate where there is current confusion about recycling which leads to contamination.

The introduction of the Bartec Waste management system across the domestic waste collections service will allow collection of key service data, including recycling participation levels and contamination information. This means we will be able to particularly target our efforts in areas of the borough where recycling rates are low and contamination rates are high. Bartec is already being used very successfully by the two crews to manage all the commercial waste collections for both refuse and recycling collections. A separate update Bartec report will also be considered at this meeting.

The Service has invested in a one year fixed term contract for a Waste Services Education Officer to carry out the following activities:

- Support for the programme of encouraging recycling in multi-occupancy buildings
- Engagement with housing and managing agents
- Review of bin stores to assess adjustments needed to support recycling (e.g. different bins, better lighting and signage)
- Developing educational material and ensuring distribution within communal/high rise buildings
- Engaging with residents to understand and address potential blockers
- Feasibility study into the options regarding recycling of fabrics
- Introduction of other tailored schemes that are more likely to have the greater impact on Thurrock residents.
- Support for the bin tag recycling contamination programme and other activities included in the 'Recycle it' Plan.

- Social media campaigns to highlight contamination and impact on the environment

The draft 'Recycle it' Plan for the forthcoming year is attached as Appendix 1 and gives a more detailed update of the recycling schemes that have been introduced, are ongoing and future projects.

#### **4. Summary**

- 4.1 Thurrock Council and its residents continue to be committed to weekly recycling collections which provides a greater challenge in considering opportunities that many authorities have taken to fundamentally reduce the amount of residual waste being presented, resulting in increased recycling rates.

A number of broad and targeted initiatives have been introduced and a range of new initiatives will be implemented to continue efforts to improve Thurrock's recycling rates.

Improving recycling rates will be an ongoing challenge for the authority, particularly in light of the new Resources and Waste Strategy. Emphasis is on quality of recycling and producer responsibility, this has been seen in the reduction of packaging and thickness of glass products previously. Focus will be to continue to reduce packaging waste, removing non recyclable products from the market, e.g. the potential introduction of a plastic bottle deposit scheme which has the potential to reduce the level of recycling in the kerbside bin.

Improving recycling rates relies heavily on really good communication, education and most importantly the willingness and participation of our residents to reduce contamination and increase recycling.

#### **5. Consultation (including Overview and Scrutiny, if applicable)**

- 5.1 This report is an overview of recycling in Thurrock, including the current position and planned actions. No consultation was required or undertaken.

#### **6. Impact on corporate policies, priorities, performance and community impact**

- 6.1 The implications of the recommendations in this report may require a review of local policies and procedures.

#### **7. Implications**

##### **7.1 Financial**

Implications verified by: **Laura Last**  
**Management Accountant (Environment and Highways)**

The Service has invested in a one year fixed term contract for a Waste Services Education Officer to carry out the various activities to try to improve recycling rates.

## **7.2 Legal**

Implications verified by: **David Lawson**  
**Assistant Director of Law & Governance**  
**& Monitoring Officer**

There are no direct legal implications arising from this report.

## **7.3 Diversity and Equality**

Implications verified by: **Becky Price**  
**Community Development Officer**

There are no specific implications for equality and diversity arising from the report.

## **7.4 Other implications** (where significant) – i.e. Staff, Health, Sustainability, Crime and Disorder)

There are no other implications arising from this report.

## **8. Background papers used in preparing the report**

The Resources and waste strategy for England, December 2018.  
<https://www.gov.uk/government/publications/resources-and-waste-strategy-for-england>

## **9. Appendices to the report**

Appendix 1 - 'Recycle It' Plan

## **Report Author:**

Claire Harvey  
Strategic Lead – Waste Services  
Environment & Highways

## **‘Recycle it’ Plan 2017-19**

‘Recycle it’ is the overarching behaviour change campaign around household waste. It seeks to assist the service in addressing issues including:

- Recycling rates
- Contaminated bins
- Blocked access
- Missed collections

### **Aims**

- Increase recycling rates in the borough
- Reduce the number of contaminated collections
- Reduce the number of failed collections due to blocked access
- Improve the communications around missed bin collections

The people who live, work and visit Thurrock produce the borough’s waste and the Council collects and disposes of it. Both need to play their part to work towards keeping Thurrock clean and green and maximise participation in waste prevention, re-use and recycling.

### **Recycle-It – Activity which has taken place 2018/19**

- Regular items or banner ads in the council’s e-newsletter which is distributed to around 13,000 residents every month.
- Repeated and scheduled social media posts featuring key recycling messages, shared as part of the council’s social media activity. Linking to information on the Thurrock.gov.uk website. Since 28 June recycling messages have reached 680,300 people through our Facebook and Twitter feeds generating nearly 1,500 interactions.
- Visits to a number of primary schools to teach year six students about waste and recycling
- Opportunity for residents to collect and recycle more over the Christmas/ New Year period. Blue recycling bags distributed to libraries and Community Hubs across the borough, for residents to present side recycling waste for excess recyclables during one of our busiest periods.

- Week-long event for residents to bring old and unwanted electrical items for recycling. Publicity via website, Social Media, libraries and hubs. Donation locations publicised across the borough. Social media posts reached nearly 195,000 people generating over 500 interactions.
- The service engaged with local primary schools as an initiative to raise awareness of recycling, by asking schools to get children to colour in a poster of a waste collection vehicle, as well as suggest a name for it. The competition was a resounding success receiving more than 1,000 entries from Thurrock primary schools students aged 8 to 11 years. 28 designs now appear on the new fleet of bin lorries. This received widespread coverage in the local media including spots on local radio. There were follow-up reports when prizes were presented to the competition winners.
- A leaflet which accompanied the council tax bills was sent to every household in Thurrock carrying 'Recycle it' key messages. Leaflet is sent to all homes in Thurrock - over 63,000 households, in printed form to reach non-internet users
- New fleet of 28 waste collection vehicles received in March/ April 2018, feature full side panel 'Recycle it' messages aimed at increasing dry recycling rates. New adverts also fitted to all existing lorries advertising garden and food waste.
- Postcard produced with message regarding blocked access and considerate parking, "if a bin lorry can't get down this road, neither can a fire engine". Provided to crews and is left on vehicles blocking roads.
- Utilised internal channels to raise awareness of key recycling messages, including Inform, #TeamThurrock, the Chief Executive's blog and posters in communal staff areas 80% of staff are local residents who will adopt information at home and share with neighbours.
- Introduction of 'Ooops!' bin tag explaining nature of contamination and alerting residents that materials have not been disposed of in the appropriate stream, action required to be left on contaminated blue recycling bins. This was preceded by a clear campaign detailing the reasons for the bin tags. There will be no change to current procedure regarding contamination. Briefing created for members, customer services team and waste collection crews. Social Media campaign reached 192.7k people and generated nearly 450 engagements. This targets the right person with the right information at the right time and place.

## Planned Activity 2019/20

Activity	Outline	Delivery	Audience
Web page videos	Create bright, vibrant and shareable mini information short videos to be used online as part of the 'Recycle It' campaign.	February 2019	Social media reach of over 17,000 followers. Council website visited by 1559944 people per annum
Council tax leaflet	A leaflet to accompany all council tax bills going to every household in Thurrock including 'Recycle it' key messages. Main focus will be on quality of waste in line with new national KPIs	February 2019	Printed materials. Delivered directly to residents. More than 63,000 households
Bin Tags	Garden Waste bin tags to be introduced.	March 2019	Printed information delivered directly to residents contaminating waste
Introduction of Bartec	<p>The introduction the Bartec Waste management system will allow collection of key service data, including contamination information to further target campaigns to specific locations and contaminates.</p> <p>Bartec will automatically generate letters to residents where contaminated bins are identified. Monitoring of households not responding to additional information and blue bin tags, further action taken through direct communication with residents, e.g. non emptying of bins until contaminates removed etc. yet to be approved. Targeted press releases and publicity when lettering residents is introduced.</p>	<p>March 2019</p> <p>April/ May 2019</p>	Direct mail to residents or managing agents.
Recycling in Flats Pilot	To set up a pilot project to improve recycling in flatted buildings where contamination levels are high. Meetings have been held with managing agents and residents in August and October 18 to agree the pilot with the aim of improving recycling in two blocks in Grays (St Leonards Close and Worthing Close). Outcomes and learning from the pilot will be used to expand the scheme to all flatted schemes in the borough.	February 2019	Engage with residents to test processes and tailor future communication methods to best reach those living in flats.

Roadshows and Local Forums	<p>Waste service team to participate in service promotion events (Community Fun days), including bringing waste vehicle to events to demonstrate how vehicle works, encourage recycling and talk about services.</p> <p>Waste Services to attend Tenants Conference as stall holders and promote waste services to residents as well as interact with other services and build good working relationships.</p> <p>Attend local forums and engage with local resident groups to raise awareness of recycling messages, contamination</p>	<p>March 2019</p> <p>Summer 2019</p>	Direct face-to-face interaction with residents and community groups
External Poster campaign	Poster publicity campaign at libraries, hubs, community forums, schools, colleges, managing agents, bin stores.	March 2019	Poster campaign aimed directly at residents taking advantage of existing sites to reach a larger audience
Recycling messages to Trade customers	Recycling leaflets to be designed to promote key messages and encourage higher uptake of local businesses.	April 2019	Local businesses and business forums.
Website refresh	Web page for "Recycle it" which features all 'Recycle it' key messages and links to service pages with more detail. Update links to local re-use and recycle facilities and bring banks.	April 2019	Visitors to <a href="http://thurrock.gov.uk">thurrock.gov.uk</a> website
Employment of Recycling Engagement & Education Officer	<p>Funding has been secured for a fixed term contract for Waste Services Recycling Engagement &amp; Education Officer to be recruited to carry out the following activities:</p> <ul style="list-style-type: none"> <li>Support for the programme of encouraging recycling in multi-occupancy buildings, including: Engagement with housing and managing agents, review of bins stores to assess adjustments needed to support recycling (e.g. different bins, better lighting and signage), developing educational material and ensuring distribution within flat building, engaging with residents to understand and address potential blockers</li> <li>Feasibility study into the options regarding recycling of</li> </ul>	April – October 2019	Working directly with residents and community groups



	<p>fabrics, including: Introducing fabric recycling trial, research in contracts and mechanisms for collecting fabrics needs to be undertaken. Develop a range of initiatives to focus on improving the quantity and quality of dry recycling material by reducing the levels of contamination and targeting communications to poor performing areas. Address confusion about recycling to improve recycling rates and reduce contamination</p> <ul style="list-style-type: none"> <li>• Focussed campaigns on plastics and metal recycling</li> <li>• Social media key messaging and seasonal prompts</li> </ul>		
Blocked access plan	Review locations where blocked access is most frequent to identify potential solutions to improving clear access for collections. Working with Highways to consider installation of parking restrictions and colleagues in Enforcement to ensure these are adhered to.	June 2019	Internal process
Thurrock Crucial Crew	Visits to a number of primary schools to teach year six students about waste and recycling	July 2019	Primary school pupils. Direct contact.
Recycling week	Specific campaign to raise awareness of recycling key messages. In line with national messages to take advantage of national campaigns.	September 2019	Full suite of communication activity including printed, web and social media
Seasonal Recycling promotion opportunities	Take advantage of seasonal events to promote recycling as part of ongoing national conversations. For example Christmas promotions around side waste and waste electricals at Christmas, recycling Easter egg packaging, disposing of flowers as part of garden waste following Mother's Day, spring cleaning etc.	Year round	Local media press release and social media reach of over 17,000 followers. Council website visited by 1559944 people per annum.
Re-Use at HWRC	Encourage residents to re-use items rather than dispose of them		Signage at the HWRC backed up by web and social messaging
Plastics and metals campaign	Campaign highlighting the proper way to dispose of plastics and metals to encourage recycling	September 2019	Full campaign including press, social media, online content and physical advertising. Social media reach of over 17,000 followers. Council website visited by 1559944 people per annum

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<b>7 February 2019</b>		<b>ITEM: 9</b>
<b>Cleaner, Greener and Safer Overview &amp; Scrutiny Committee</b>		
<b>Update on Air Quality and Health</b>		
<b>Wards and communities affected:</b> All		<b>Key Decision:</b> Key
<b>Report of:</b> Mat Kiely – Transportation Services Strategic Lead		
<b>Accountable Assistant Director:</b> Andrew Millard – Assistant Director, Planning, Transport and Public Protection		
<b>Accountable Director:</b> Steve Cox – Corporate Director, Place		
<b>This report is</b> public		

## Executive Summary

Members have highlighted concerns in relation to air quality in Thurrock and have requested an update in relation to plans to combat issues.

This report provides an update in relation to the actions, measures and initiatives that have been undertaken by the Council to tackle Air Quality issues, within specific AQMAs and for the Borough in general and sets out what is being done to support and promote healthier lifestyles and tackle health inequalities in Thurrock.

The update also includes information from the 2018 Air Quality Annual Status Report (ASR) which identifies the actions and progress towards monitoring air quality across the borough.

### 1. Recommendation(s)

- 1.1 That the Cleaner Greener and Safer Overview and Scrutiny Committee note and consider the monitoring regime, measures and initiatives set out in this report.**

### 2. Introduction and Background

- 2.1** In 2017 the Cleaner, Greener and Safer Overview and Scrutiny committee endorsed the Air Quality and Health Strategy which highlighted the key aims and objectives for Thurrock as follows:

- a) Implement measures for managing air quality throughout the Borough to prevent new AQMAs from arising;
- b) Implement measures contained within the action plans for existing AQMAs; and
- c) Work with external bodies to reduce background pollution from inside and outside of the Borough.

In order to meet the above aims and objectives, the strategy adopted the following four policies in order to facilitate decision-making on air quality issues and work to prevent new AQMAs from arising wherever possible. Those policies are as follows:

	Policy	Summary
AQS 1	Tackling Transport Emissions	<p>The Council will deliver transport interventions aimed at:</p> <ol style="list-style-type: none"> <li>I. Reducing vehicle trips and promoting a modal shift where possible to active modes of travel to future proof Thurrock's transport network for sustainable growth.</li> <li>II. The business community and transport service providers to discourage the use of polluting vehicles travelling within Thurrock.</li> <li>III. Rerouting vehicles, particularly HGVs, to avoid residential dwellings.</li> <li>IV. Reducing its own emissions and to influence emission reductions through its own procurement and operations.</li> </ol>
AQS 2	Tackling health inequalities	<ol style="list-style-type: none"> <li>I. The areas of highest need, highest deprivation and poorest health outcomes in relation to air quality will be prioritised for action on initiatives to mitigate the impact of poor quality on health.</li> <li>II. Work with health partners to improve long-term condition management in primary care through the implementation of the GP balance scorecard and the development of integrated healthy living centres in areas of highest need (Tilbury and Purfleet).</li> </ol>
AQS 3	Thurrock Clean Air Zones/ Low Emissions Zones	<p>The Council will undertake a detailed review of the merits of the wider use Clean Air Zones or Low Emission Zones within Thurrock. A range of options for implementing a Clean Air Zone or Low Emission Zone in Thurrock to tackle poor air quality will be appraised. A firm proposal for a Clean Air Zone or Low Emission Zone will be developed provided that detailed consideration suggests that it is:</p> <ul style="list-style-type: none"> <li>• Feasible and practicable;</li> <li>• Represents value for money; and</li> <li>• Likely to have local support and improves public health.</li> </ul>
AQS 4	Future Developments and Planning	<p>Air quality policies will be incorporated into the preparation of the new Local Plan. This is to provide the planning framework to safeguard existing areas and to ensure that the type or location of proposed development will not adversely impact air quality and where possible bring about improvements, through either relocation of polluting activities or negotiation of appropriate mitigation.</p>

These policies have been translated into actions and measures that are Borough-wide, including specific actions within the existing AQMAs where pollutant concentrations are highest and within the 20% most health deprived output areas in England.

The strategy recognises the need for monitoring of air quality in order to determine whether the actions and interventions are achieving success on the ground. This report identifies the actions, measures and initiatives that have been progressed.

### **Clean Air Strategy 2019**

- 2.2 On 14th January 2019 the Government launched its Clean Air Strategy 2019 which sets out plans for dealing with all sources of air pollution, making our air healthier to breathe, protecting nature and boosting the economy. The strategy sets out the comprehensive actions required across all parts of government and society to improve air quality.

The strategy sets out how Government will:

- protect the nation's health
- protect the environment
- secure clean growth and innovation
- reduce emissions from transport, homes, farming and industry
- monitor our progress

The Clean Air Strategy underpins much of what has been identified within the Thurrock Air Quality and Health Strategy. It is encouraging to see that the Government strategy identifies a range of important and relevant areas for action and identifies a range of new legislation, powers and guidance which will be influential in how we will tackle all sources of air pollution, make our air healthier to breathe, protect nature and boost the economy.

### **3. Issues, Options and Analysis of Options**

- 3.1 The following section of the report sets out the work that has been progressed across the Place, Environment and Highways directorates to support the four policy areas as set out in the Air Quality and Health Strategy.

#### **Tackling Transport Emissions**

- 3.2 Within the previous O&S report, a number of measures and initiatives were set out in order to identify where improvements were required, to specifically address transport emissions. The following section provides an overview of the work that has been undertaken to progress and implement those measures.

Updates and actions specific to AQMAs are set out in Table 1 below.

<b>Table 1</b>	
<b>AQMA 25 – Aveley High Street</b>	AQMA 25 – Aveley High Street: the council introduced westbound width restrictions on Aveley High Street in 2016/17. These restrictions were intended to ameliorate some of the air quality issues that arise from

	<p>HGVs in the area. Furthermore, the Council is investigating measures to prevent HGV traffic movements along Ship Lane, Aveley from being undertaken. Consultation on options commences on 16th January 2019.</p>
<b>AQMA 26 – Purfleet Bypass</b>	<p>AQMA 26 – Purfleet Bypass: the council continues to develop plans to deliver cycleway improvements as part of the Cycle Infrastructure Programme. A new cycle path and two new Toucan crossings have been implemented along Purfleet bypass. Additional improvements including a proposed one-way system and closure of northbound lane of Stonehouse Lane have been explored and the funding required to implement a scheme is subject to an internal funding bid.</p>
<b>AQMA 23 – London Road, Grays -</b>	<p>AQMA 23 – London Road, Grays: the council continues to investigate measures to control HGV movement on London Road, however these works have been interrupted as the Council awaits the completion of a private development. Investigation for a viable scheme is ongoing.</p>
<b>AQMA 2 – London Road, Grays -</b>	<p>AQMA 2 – London Road, Grays: the council will implement bus lane camera enforcement in London Road. “Go-live” date scheduled for 1st March 2019 with full enforcement and issue of PCNs from 1st April 2019.</p>
<b>AQMA 10 – London Road, Purfleet -</b>	<p>AQMA 10 – London Road, Purfleet: the council is investigating feasibility options for restrictions to the west of AQMA 10 and east of Botany Way. As part of port enhancements at CRo Ports Purfleet, the main port entrance is to be moved away from the AQMA with a new dedicated port entrance preventing HGV’s from idling along London Road awaiting entry to the port. Additionally, the Council is investigating measures to control HGV movements along London Road within the AQMA to control transient movements.</p>
<b>AQMA 3 – Hogg Lane/Elizabeth Road -</b>	<p>AQMA 3 – Hogg Lane/Elizabeth Road: the council is considering options to widen</p>

	parts of the A1306 to improve traffic flows. This is the subject of VISSIM modelling work, which is being jointly undertaken with Highways England. An internal capital bid has been submitted in order to allocate required funding for this scheme.
<b>AQMA 24 – Calcutta Road, Tilbury</b>	AQMA 24 – Calcutta Road, Tilbury: The council is progressing a scheme as part of the Cycle Infrastructure Programme. This is expected to commence in April 2019, with a new off-road cycle path running along Calcutta Road and Dock Road. Additionally, the Council is launching a new Cycle hub on Calcutta Road in March/April 2019, to help further encourage cycling and modal shift.

### Borough-wide Actions

3.3 A programme of borough-wide initiatives have also progressed to support air quality and health inequalities. These are summarised below.

3.4 **South Essex Active Travel (SEAT)** – the council, along with Southend-on-Sea and Essex County Council are delivering the £3.3m SEAT programme, which targets people in a transitional stage of life to encourage sustainable travel options prior to key behavioural decision-making processes, such as commencing new employment or education. The SEAT project has reached out to local people and employers to provide Personalised Journey Planning advice, cycle training and health walks. The Tilbury Cycle Hub has been funded by Public Health S106 contribution and will be open for business this year, providing local people with the opportunity to loan or purchase recycled bikes, undertake maintenance & services and gain cycle training where needed so that local people can become more physically active.

Significant events have been held at the Orsett Show, Amazon and intu Lakeside and the SEAT programme has also seen the delivery of pool bikes, cycle hangers, E-bikes, healthy walks and bike events across the borough. More events and initiatives are planned for 2019.

The SEAT programme has also focussed efforts towards developing contactless payment options for rail stations in Thurrock. DfT are developing a consultation document to identify existing issues and requirements and the Council will be meeting with DfT colleagues as part of this process to highlight what is needed in Thurrock.

3.5 **Weight Restrictions and HGV Management Schemes** – implemented schemes include the completion of Towers Road HGV routing scheme

(phase1), Rectory Road width restriction scheme, Stifford Road Aveley Width restriction scheme, Ship Lane Freight Management Scheme and feasibility options for London Road, Purfleet Freight Management Scheme. The Transport Development team continue to administer the Freight & Logistics Partnership and a refreshed version of the Freight Strategy is to be developed in 2019.

- 3.6 **Improvements to Walking and Cycling** – the Council continues to deliver an extensive programme of walking and cycle infrastructure improvements secured as part of planning consents, grant funding from Public Health and the Cycle Infrastructure Development Programme (CIDP).

To date the Major Schemes team have implemented schemes at Sandy Lane, Botany Way and Purfleet bypass, Daiglen Drive, Tamarisk Rd and South Rd, Stifford Rd and West Thurrock Way.

In 2019, improvements will include Aveley bypass, Dock Road, Brentwood Rd, Orsett Heath Rd and Stonehouse Corner.

- 3.7 **School and Workplace Travel Plans** – the council secures travel plans and monitoring provisions as part of development consents. 35 out of 51 schools in the borough are actively working on their School Travel Plans and many have achieved a Bronze Accreditation.

Workplace travel plans have been adopted at numerous locations across the borough (including London Gateway, Amazon and intu Lakeside). They help to assess and mitigate the negative transport impacts of development and promote sustainable travel behaviour.

- 3.8 **Road Safety** - The Road Safety team continue to deliver a wide-ranging programme of educational and practical initiatives, with a focus placed on encouraging and enabling sustainable travel choices for future generations. The initiatives include road safety walks in all schools, roadside activities, and road safety campaigns to promote safer & sustainable journeys to school/colleges.

Some recent Road Safety highlights include:

- Bikeability Cycle Training (including Level 1 & 2, Balance Bike and Learn to Ride) in 41 Schools covering 2,400 pupils.
- Road Safety Pedestrian training in 45 Schools for 8,400 pupils
- Twilight Trail events (awareness of being Bright and Being Seen during the Winter months) held in 14 schools for 213 Yr 3 pupils and parents.
- 15 School Crossing Patrol (SCP) sites
- 15 School Travel Plans completed on-line with Modeshift STARS

Engine switch-off zones at schools will be supported again in 2019. Suitable locations will be identified using information from school travel plans and where we are aware of idling issues.



Looking forward to the current academic year and into 2019, the Road Safety team are committed to delivering even more support and initiatives across the borough. Their efforts will see the continuation of work in schools to enable all schools to achieve accreditation with a sustainable travel plan. Bikeability, Learn to Ride and Balance Bike sessions will continue to be offered to schools. Scooter Training will be offered to all pupils in Year 3 and one additional School Crossing Patrol is to be provided at Warren Primary School.

- 3.9 **Highways Development Management** – the Development Management and Traffic team continue to deliver a programme of work which supports the Council's Air Quality and Health objectives. These schemes range from new cycle routes to junction improvement schemes and tackling HGV parking issues in Grays, Corringham, Ockendon and Aveley.

Over £1m has been secured for the A126 through the DfT Safer Roads Fund and a package of safety measures will commence next year.

£1.4m of external funding has been allocated for bus priority in the Lakeside basin and additional bus priority is to be explored so that suitable funding can be sought.

The Rectory Road Freight Management scheme was delivered in 2018 following engagement with local residents, members, schools and businesses. The resulting scheme has removed HGV movements from the northern end of Rectory Rd, forcing larger vehicles to use the designated route for this area.

- 3.10 **Freight Quality Partnership (FQP)** – the council has re-established its Freight Quality Partnership to help manage the impact of HGVs in Thurrock. This group will reconvene in February to discuss the emerging Freight Strategy and to discuss issues arising from the Council's Road User Group and Congestion Task Force.
- 3.11 **A13 East facing Slip roads** - Following the announcement by the Secretary of State in October 2018 in support of the delivery of the East Facing Slips schemes, officers have been developing a process to move the scheme forward to ensure it can be delivered to the appropriate timescales. This scheme will provide relief to the road network in West Thurrock and Lakeside and will remove traffic flows from areas such as London Rd, Chafford Hundred and A1306.
- 3.12 **Vehicle Fleet** - The councils Environment and Highways directorate have now completed the replacement of over 100 vehicles across all directorates. This process has now moved the council to almost a 100% euro 6 fleet which is the cleanest emission technology at this time for standard vehicles. The council have also steered away from diesel where possible using petrol alternatives in populated areas.

- 3.13 **Variable Message Signing (VMS)** – The council has acquired three (3) VMS signs that have been deployed at strategic locations on the network. The VMS are used as a traffic management tool which supports minimising traffic impacts arising from incidents in the borough and at Dartford Crossing.
- 3.14 **Electric Vehicle Charging** – the council has undertaken a tender exercise for EV charging in 2018. However, a suitable provider could not be identified. We are therefore progressing discussions with Southend Council to identify collaborative working opportunities and to understand if an in-house option can be developed.  
Progress has been made in relation to the Council advising on the requirement for EV charging and car clubs (using EVs) within the larger development agreements that are received.

Local bus operators are also adopting cleaner fleets with both Ensign and First using hybrid buses on selected routes.

- 3.15 **National Clean Air Day (NCAD)** – National Clean Air Day will be held on 20 June 2019. The Council will explore a programme of delivering anti-idling and no-smoking outside schools and engaging with children via assemblies, t-shirt design competitions, flyers, banners and car stickers. A communications plan will also be established to raise awareness.

### **Tackling Health Inequalities**

- 3.16 Air pollution has a significant effect on public health, and poor air quality is the largest environmental risk to public health in the UK. In 2010, the Environment Audit Committee considered that the cost of health impacts of air pollution was likely to exceed estimates of £8-20 billion.

Groups that are more affected by air pollution include:

- older people
- children
- individuals with existing CVD and/or respiratory disease
- pregnant women
- communities in areas of higher pollution, such as close to busy roads
- low income communities

Everyone has a role to play in improving air quality. Local authorities have a vital role in monitoring and improving local air quality, and the cumulative effects of local action can be significant.

The Council's Public Health, Air Quality, Planning and Transport Development teams are working collaboratively to identify the areas of highest need in order to deliver focussed measures, initiatives and events such as the Tilbury Bike Hub, healthy walks, cycle training and a comprehensive communication and education programme.

Public Health continue to be pivotal in the screening of pre-application and full applications of planning in the borough through continued presence at the Housing, Planning Advisory Group and have advanced an informal Interim Planning Guidance Note (IPGN) with Planning. This details information on the wider determinants of health and communication on whether there is the need to do a Health Impact Assessment. Air Quality mitigation measures such as Active travel, greener open space, Public rights of way (PROW) will be part of the dialogue with planning and the developers.

The Public Health team continue to use the Long Term Conditions Profile card (the 'scorecard') to monitor management of long term conditions by GPs. It gives Public Health an insight into inequalities and variation across the borough, enabling us to target areas of greatest need, and an element of improvement/deterioration over time.

Public Health are part of the Board of the network group for Active Thurrock whose aim is to make sport and physical activity accessible to all Thurrock residents. The network whilst new in its implementation works with Active Essex and Sport England to get residents who are inactive Active, further working on the wider determinants of health and impact on decreasing health inequalities in the borough.

### **Thurrock Clean Air Zones / Low Emissions Zones**

- 3.17 A Clean Air Zone or Low Emission Zone is a vehicle restricted area where vehicles not meeting a specific emission standard, or other criteria, are not allowed to enter the specified area without incurring a penalty. Local conditions will determine the scope of the emission based access controls, underpinned by national and local monitoring and modelling. Restrictions can be linked to specific vehicle types and related to Euro emission standards, vehicle age or technology. They can also be in the form of an outright ban or through variable charging. Emission based access controls can be aimed at various vehicle types from heavy duty vehicles, such as buses, taxis, lorries, vans and cars. They can also be used as a tool to incentivise the cleanest vehicles.

The concept of a Clean Air Zone has been considered by Thurrock to primarily deal with the significant number of HGV movements in the borough. Policy AQS 3 below outlines how the Council will investigate Clean Air Zones further.

#### Policy AQS 3: Clean Air Zone

The Council will undertake a detailed review of the merits of the wider use Clean Air Zones or Low Emission Zones within Thurrock. A range of options for implementing a Clean Air Zone or Low Emission Zone in Thurrock to tackle poor air quality will be appraised. A firm proposal for a Clean Air Zone or Low Emission Zone will be developed provided that detailed consideration suggests that it is:

- Feasible and practicable;
- Represents value for money; and
- Likely to have local support and improves public health.

The Council is progressing the alternative measures and initiatives, set out within this report, to tackle air quality issues. If these measures are determined as insufficient over time the introduction of Clean Air Zones will be explored further

### Air Quality Monitoring

- 3.18 Air Quality officers are monitoring and assessing progress on air quality throughout the Borough, including the implementation, delivery and success of the Air Quality Action Plans in terms of improvements to air quality within AQMAs. The assessment and reporting of progress are reported through the AQ Annual Status Report (attached as Appendix A). The key findings / updates from the ASR are summarised below.

The main pollutant of concern in Thurrock is nitrogen dioxide (NO<sub>2</sub>) and to a lesser extent particulate matter (PM<sub>10</sub>); both of these pollutants arise from road traffic emissions. Thurrock only has AQMAs which are declared for road traffic based emissions, there are no industrial based AQMAs. The AQMAs are primarily related to NO<sub>2</sub> and the long-term objective or annual mean 40 µg/m<sup>3</sup> objectives, which is the principal issue in all 18 AQMAs. Out of these AQMAs there are currently four declared for PM<sub>10</sub>, for the short-term objective or daily mean objective of 35 permitted exceedances of >50 µg/m<sup>3</sup>.

The total number of AQMA's has not changed and Thurrock still has 18 AQMA's all declared for annual mean NO<sub>2</sub>, and four of these AQMA's (5,7,8 & 10) are declared for Daily Mean PM<sub>10</sub>.

In 2016 the Council undertook a detailed modelling assessment to re-determine the extent of NO<sub>2</sub> & PM<sub>10</sub> exceedances over most of the borough and including all 18 AQMA's. This assessment found that 8 AQMA's (including the four identified for PM<sub>10</sub> and four identified for NO<sub>2</sub>) could be revoked if additional motoring data supported this. However following on from this Defra recommended that the Council place further monitoring in these AQMA's to establish if they were no longer breaching the air quality objective. Once this is established they could be revoked.

In 2018 the air quality monitoring team instigated additional monitoring sites using NO<sub>2</sub> diffusion tubes in AQMA's 3,4,5,8,9 & 12. This has enabled additional data trends to be understood so that revocations can be explored on the basis that monitoring shows that they are well below the annual mean objective limit of 40 µg/m<sup>3</sup> for NO<sub>2</sub>. Likely candidates for revocation are AQMA's 4,5,8,9,12,15,16 and possibly 21, and 26. In addition some AQMA's may be reduced in size: AQMA's 1,3,13 & 24.

The Air Quality Team intend to review data through to 2020 in order to confirm which AQMA's can be revoked.

### **Future Developments / Planning**

3.19 **Major Developments** - The Council's Highways Development Management team play a key role in ensuring that new development mitigates its impact on the highway network and wider communities. This is achieved by utilising a range of development management tools such as travel plans, development contributions for highway improvements and the provision of construction management plans where construction traffic is significant enough to impact the highway network.

3.20 **Lower Thames Crossing (LTC)** – the Council's consultation response to LTC identified a number of potential significant impacts that are misrepresented or excluded from the LTC consultation scheme.

The LTC consultation material puts a strong reliance on developing a Code of Construction Practice (CoCP) in order to control environmental impacts during construction. Technical meetings have been arranged with Highways England and Thurrock Council in order to identify how construction impacts will be addressed and designed-out from the outset to ensure that adverse environmental issues are not only being mitigated, but avoided entirely where possible.

The Council will be formally consulted on the Environmental Impact Assessment (EIA) and Health Impact Assessment (HIA) for LTC and invited to make comments on the adequacy of the data collection and analysis which is proposed. The council has engaged independent subject matter experts to inform the council's response in these areas.

The Council passed a resolution to ask Highways England to jointly establish with the council a process for independent air quality testing and provide the council with access to all data used to reach decisions. This request has been passed on to Highways England and the details as to what this means in practice are currently under discussion.

The extensive list of actions, measures and initiatives set out within this section of the report identify the comprehensive approach that the Council is taking to addressing air quality issues and health inequalities. The cross-departmental approach identifies that the responsibility for tackling these matters is something that many departments and directorates can support. There is a focus on monitoring and collecting effective data and supporting sustainable travel measures, and this report brings together the integrated package of actions that the Council will continue to deliver in order to improve air quality and tackle health inequalities in Thurrock.

## **4. Reasons for Recommendation**

- 4.1 Cleaner, Greener and Safer Overview and Scrutiny Committee are invited to comment on progress made against this strategy as part of the council's commitment to appropriate scrutiny of its actions.

**5. Consultation (including Overview and Scrutiny, if applicable)**

- 5.1 N/A

**6. Impact on corporate policies, priorities, performance and community impact**

- 6.1 Better management of Air Quality in Thurrock plays a very important part in meeting the Council's priorities; particularly to improve health and well-being and protect and promote our clean and green environment.

**7. Implications**

**7.1 Financial**

Implications verified by: **Laura Iast**  
**Management Accountant (Environment & Highways Directorate and Place Directorate)**

There are no financial implications. The actions defined in the Air Quality and Health Strategy will be delivered through existing resources.

**7.2 Legal**

Implications verified by: **David Lawson**  
**Assistant Director of Law & Governance & Monitoring Officer**

There are no legal obligations. This report relates only to an update on the actions defined in the adopted Air Quality and Health Strategy.

**7.3 Diversity and Equality**

Implications verified by: **Natalie Warren**  
**Community Development and Equalities Manager**

Adoption and subsequent implementation of the measures identified in the Strategy and Action Plans will support the wellbeing of some vulnerable members of the local community including those suffering from health conditions affecting the upper-respiratory system. Associated AQAPs will tackle existing air quality problems and help to bring down levels of nitrogen dioxide which may reduce the number of health impacts for people living and working in and around these AQMAs.

7.4 **Other implications** (where significant) – i.e. Staff, Health, Sustainability, Crime and Disorder)

N/A

8. **Background papers used in preparing the report** (including their location on the Council's website or identification whether any are exempt or protected by copyright):

- 2018 Air Quality Annual Status Report (ASR)
- Thurrock Air Quality & Health Strategy
- Clean Air Strategy 2019

9. **Appendices to the report**

- Appendix 1 – 2018 Air Quality Annual Status Report (ASR)

**Report Author:**

Mat Kiely

Transportation Services Strategic Lead

Transport Development

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# 2018 Air Quality Annual Status Report (ASR)

In fulfilment of Part IV of the  
Environment Act 1995  
Local Air Quality Management

**September 2018**

Local Authority Officer	Dean Page
Department	Environmental Protection Team
Address	Thurrock Council , Civic Offices, New Road, Grays, Essex RM17 6SL
Telephone	01375 652 096
E-mail	Air.Quality@thurrock.gov.uk
Report Reference number	ASR 2018 TBC
Date	September 2018

## Executive Summary: Air Quality in Our Area

### Air Quality in Thurrock

Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often the less affluent areas<sup>1,2</sup>.

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion<sup>3</sup>.

Thurrock currently has 18 Air Quality Management Areas (AQMAs); these are a result of traffic related pollution along busy roads. Many of these roads are the main commuter routes or used for logistical purposes. They are often saturated with traffic during peak hours and in many of these areas there is relevant public exposure, predominantly in the form of residential dwellings which are in relatively close proximity to these roads. A full list of the AQMAs can be found on the Defra Air Quality website via this web-link: - [https://uk-air.defra.gov.uk/aqma/local-authorities?la\\_id=282](https://uk-air.defra.gov.uk/aqma/local-authorities?la_id=282)

The main pollutant of concern in Thurrock is nitrogen dioxide (NO<sub>2</sub>) and to a lesser extent particulate matter (PM<sub>10</sub>); both of these pollutants arise from road traffic emissions. Thurrock only has AQMAs which are declared for road traffic based emissions, there are no industrial based AQMAs. The AQMAs are primarily related to NO<sub>2</sub> and the long-term objective or annual mean 40 µg/m<sup>3</sup> objectives, which is the principal issue in all 18 AQMAs. Out of these AQMAs there are currently four declared for PM<sub>10</sub>, for the short-term objective or daily mean objective of 35 permitted exceedances of >50 µg/m<sup>3</sup>.

In 2016 two AQMAs were declared in Thurrock for breaching the annual mean objective for NO<sub>2</sub>; one in Aveley High Street and Ship Lane, Aveley and a second declared along the Purfleet By-pass, north of Purfleet. Air Quality Action Plans

<sup>1</sup> Environmental equity, air quality, socioeconomic status and respiratory health, 2010

<sup>2</sup> Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

<sup>3</sup> Defra. Abatement cost guidance for valuing changes in air quality, May 2013

(AQAPs) along with a new Air Quality & Health Strategy Document (AQHSD) have already been devised and can be viewed via the Thurrock Council Website links here:- <https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy>  
[thurrock.gov.uk/air-quality](https://www.thurrock.gov.uk/air-quality)

The Council works in collaboration with the Environment Agency (EA) on any air quality issues from industrial activities within the borough, consulting as necessary on these industrial activities, that is permitting variations/applications which the EA are responsible for under the Integrated Pollution Prevention & Control Directive (IPPC). The Council also carries out its statutory duties under Local Authority integrated Pollution & Prevention Control Regime (LA-IPPC).

In 2016 the council undertook a detailed modelling assessment to re-determine the extent of NO<sub>2</sub> & PM<sub>10</sub> exceedances over most of the borough and including all 18 AQMA's. The report found that 8 AQMA's should be revoked for NO<sub>2</sub> and all four for PM<sub>10</sub> should also be revoked. However on submission of the report to Defra they did not agree with the method the council had used in the model, as it did not strictly follow the procedures laid out in the Defra Local Air Quality Management (LAQM) Technical Guidance (TG16).

The Council had manually adjusted emission rates on the roads modelled until it got agreement with nearby monitoring results in order to validate the model against. In many cases increasing them drastically to account for the discrepancies within the in-built emission factors which grossly under-estimate real world emissions. The Council did this as it wanted to avoid using any correction factors applied to the results which would not be representative across all the monitoring locations.

The modelling had to be done differently in order to generate a valid exceedance line over a geographical area, something which the TG16 guidance does not take into account at present. Also the current emission factor toolkit and previous versions used in the base model runs is not fit for purpose within the current Atmospheric Dispersion Model System (ADMS) model and does not represent real world driving emissions.

Even though the report was not accepted, the modelling did highlight that many of these AQMAs are no longer likely to be in exceedance. Based on the feedback given by the LAQM Helpdesk from the modelling assessment, the Council has therefore set up 12 additional monitoring locations from 2017 using NO<sub>2</sub> diffusion tubes within many of these locations. It is hoped that these areas in the future will be revoked. The Council will monitor at these locations for at least three years to get a trend and will make a determination in 2020 as to whether these AQMAs can be revoked for NO<sub>2</sub> on the back of monitoring results instead of modelling.

Thurrock Council as of 2018 has recently joined the AirTEXT service which is provided by Cambridge Environmental Research Consultants (CERC). This service will allow members of the public to see air pollution forecasting based on detailed dispersion modelling for the area in which they live. They can also sign up to AirTEXT pollution alerts and receive voice, email or text messages when air pollution is forecast to be moderate or higher. This service is aimed to provide people who suffer with respiratory illnesses, as well as those which suffer with heart problems, detailed information about air quality on a given day, and alert them when not to go outside. Further information can be found at: <http://www.airtext.info> & <http://www.cerc.co.uk/forecasting/air-quality/united-kingdom.html>

## **Actions to Improve Air Quality**

In 2016, the council, in consultation with stakeholders, produced a strategy that frames its approach to tackling poor air quality and reducing exposure to safe levels across the borough. The Health and Air Quality Strategy sets out the council's overarching objectives for air quality and contains policies and actions that the council will take to improve air quality.

The actions contained in the Health and Air Quality Strategy consists of borough-wide actions and specific actions to improve air quality in prioritised AQMAs in the borough. The creation of the Congestion Task Force (CTF), which brings together stakeholders with a major stake in the strategic road network, such as Highways England, Kent County Council, Essex County Council and Thurrock Council and the Police collaborate together to formulate and implement actions to better manage the

road network following incidents at Dartford Crossing. This engagement is on-going and seeking to eliminate other pinch-points which contribute to poor air quality, such as devolving powers to enforce yellow box junctions at Junctions of the M25, which cause significant congestion. Additional measures to be implemented by the Council include investment in new technologies to help dynamically tackle congestion, limiting the impact of traffic on air quality.

In 2016, a review of HGV routing in Thurrock was undertaken. This review identified areas where specific actions need to be taken to reduce the air quality impacts of the HGVs. To date, the council has implemented width and weight restrictions, camera enforcement, parking restrictions and other measures that seek to reduce the air quality issues created by HGVs.

As part of the South Essex Active Travel (SEAT) Programme the council continues to work with people in a transitional stage of life to encourage sustainable travel options prior to behavioural decision-making processes e.g. commencing new employment/education. These measures are to continue until March 2020. Other actions aimed at encouraging a shift towards sustainable modes of travel include the Cycle Infrastructure Programme that seeks to deliver new and improved cycle infrastructure to encourage a mode shift towards cycling, and consequently a reduction in car trips and reduced air pollution. The Council continues to invest in its cycle infrastructure, and seeking additional funds to create new and enhanced cycle paths and priority crossings.

The Council continues to engage with Highways England in discussions regarding the air quality and other environmental and social impacts of the long-proposed Lower Thames Crossing, as well as other schemes which will help to alleviate traffic, including new slip roads linking the A13 with the A126, helping to mitigate traffic at J30 and J31 of the M25.

## **Conclusions and Priorities**

This year's ASR report has not identified any new areas of exceedance of the Air Quality Objectives (AQOs). The air quality objectives continue to be breached in

most of the council's AQMA's with only slight decreases or no change in pollution concentrations in most of these.

However there are some AQMA's in which monitoring is below the AQOs and has been for some time, this was also verified by the Council's own air quality modelling conducted in 2016, which concluded that 8 AQMA's would be revoked for NO<sub>2</sub> and PM<sub>10</sub>, however Defra did not agree with the Council's approach to this modelling work due to not following the guidelines of the TG16 guidance on emission factors used within the modelling, and thus these AQMA's still remain in place.

The Council will in 2020 review and decide whether these AQMA's are still valid or not, and subsequently revoke those that have shown levels to be below the air quality objective for NO<sub>2</sub>. The Council has therefore decided to continue monitoring at these locations and will in the future revoke some of these AQMA's if the monitoring data shows them to be below the AQOs. It will make a judgement in some of its AQMA's where there are multiple monitoring locations where there is exceedance in part of an AQMA and not an exceedance in another part of the AQMA, and will redefine the AQMA's boundary, based on the monitoring data. In addition the Council in 2017 setup more passive NO<sub>2</sub> diffusion tube sites in AQMA's 3,4,5,8,9 & 12. The Council will continue monitoring at these locations for the next few years to establish a trend and based on these results, and will review these in 2020 and decide if these AQMA's should be revoked or not?.

## **Local Engagement and How to get Involved**

The public can assist in air pollution matters by continuing to address concerns when they think there is an air quality issue in the borough by reporting it via the web: <https://www.thurrock.gov.uk/report> or by contacting our contact centre Tel: 01375 652955. The Environmental Health Team will continue to assist and address any such concerns as necessary.

The public can keep informed on local air quality matters from accessing a wealth of information, firstly from the Council's air quality webpage:

<https://www.thurrock.gov.uk/air-quality/air-quality-monitoring>

They can find out what air quality is in there region from the London Air Quality Network (LAQN):

[http://www.londonair.org.uk/london/asp/publicbulletin.asp?la\\_id=34&MapType=Google](http://www.londonair.org.uk/london/asp/publicbulletin.asp?la_id=34&MapType=Google) or from the EssexAir website: <http://www.essexair.org.uk/>

The Public can also keep informed on the latest air quality forecasting from the Defra UK-AIR website: <https://uk-air.defra.gov.uk/>

The public can now access the latest forecasting information for air quality which uses detailed dispersion modelling to predict air quality in near real-time using the newly subscribed AirTEXT service for Thurrock. [www.airtext.info](http://www.airtext.info)

The public can also subscribe free to an AirTEXT alert service using a free mobile app. [www.airtext.info/signup](http://www.airtext.info/signup)



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## 1 Local Air Quality Management

This report provides an overview of air quality in Thurrock Council during 2017. It fulfils the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995) and the relevant Policy and Technical Guidance documents.

The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where an exceedance is considered likely the local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives. This Annual Status Report (ASR) is an annual requirement showing the strategies employed by Thurrock Council to improve air quality and any progress that has been made.

The statutory air quality objectives applicable to LAQM in England can be found in Table E.1 in Appendix E.

## 2 Actions to Improve Air Quality

### 2.1 Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. After declaration, the authority must prepare an Air Quality Action Plan (AQAP) within 12-18 months setting out measures it intends to put in place in pursuit of compliance with the objectives.

A summary of AQMAs declared by Thurrock Council can be found in Table 2.1. Further information related to declared or revoked AQMAs, including maps of AQMA boundaries are available online at [https://uk-air.defra.gov.uk/aqma/local-authorities?la\\_id=282](https://uk-air.defra.gov.uk/aqma/local-authorities?la_id=282)

Alternatively, see Appendix D: Map(s) of Monitoring Locations and AQMAs, which provides for a map of air quality monitoring locations in relation to the AQMA(s).

Table 2.1 – Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	City / Town	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance (maximum monitored/modelled concentration at a location of relevant exposure)		Action Plan (inc. date of publication)
						At Declaration	Now	
AQMA 1	2004	NO2 Annual Mean	Grays Town Centre	An area encompassing a number of properties along London Road Grays, Orsett Road & Stanley Road Grays	NO	48.8 µg/m <sup>3</sup> (NAS1)	33.7 µg/m <sup>3</sup> (NAS1) 39.2 µg/m <sup>3</sup> (LRG)	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016
AQMA 2	2004	NO2 Annual Mean	Grays, South Stifford	An area encompassing Residential properties along London Road South Stifford.	NO	48 µg/m <sup>3</sup> (LRSS)	42.8 µg/m <sup>3</sup> (LRSS)	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016
AQMA 3	2004	NO2 Annual Mean	Grays	An area encompassing Residential properties along Hogg Lane & Elizabeth Road.	NO	49 µg/m <sup>3</sup> (ER)*	50.8 µg/m <sup>3</sup> (ER)* new monitoring has been setup at façade level to determine if there is exceedance 36.7 µg/m <sup>3</sup> (ERFA) & 35.6 µg/m <sup>3</sup> (ERFB) **annualised data based on 6 months only	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016
AQMA 4	2004	NO2 Annual Mean	Grays, Chafford	An area encompassing Residential properties along A1306 west of Chafford Hundred Visitor	NO	No Data in AQMA 4 use (NAS2 AQMA 5 as proxy 65.5	New monitoring has been setup to determine exceedance or	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016

# Thurrock Council

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	City / Town	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance (maximum monitored/modelled concentration at a location of relevant exposure)		Action Plan (inc. date of publication)
						At Declaration	Now	
			Hundred	Centre		µg/m3)	not? 23.5 µg/m3 (CC) **annualised data based on 6 months only	
AQMA 5	2004	NO2 Annual Mean	Grays, Chafford Hundred & North Stifford	An area encompassing Residential properties along Warren Terrace A1306 & A13	NO	65.5 µg/m3 (NAS2)*	54 µg/m3 (NAS2)* new monitoring has been setup at façade level to determine if there is exceedance or not? 36.1 µg/m3 (HD) & 34 µg/m3 (GRPL) **annualised data based on 6 months only	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016
AQMA 7	2004	NO2 Annual Mean	West Thurrock	A Hotel (IBIS) near to M25 north of the Dartford Crossing	YES	52 µg/m3 (IBIS)	47.5 µg/m3 (IBIS)	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016
AQMA 8	2004	NO2 Annual Mean	West Thurrock / Purfleet	A Hotel next to Jct 31 of the M25	YES	No Data exceedance was based on 2004 modelling only	(New monitoring has been setup to determine exceedance or not? 33.1 µg/m3	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016

# Thurrock Council

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	City / Town	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance (maximum monitored/modelled concentration at a location of relevant exposure)		Action Plan (inc. date of publication)
						At Declaration	Now	
							(PIH) **annualised data based on 6 months only	
AQMA 9	2004	NO2 Annual Mean	West Thurrock / Aveley	A Hotel next to Jct 31 of the M25	YES	No Data exceedance was based on 2004 modelling only	New monitoring has been setup to determine exceedance or not? 31.8 µg/m3 (THA) & 31.2 µg/m3 (THB) **annualised data based on 6 months only	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016
AQMA 10	2004	NO2 Annual Mean	Purfleet	An area encompassing Residential properties along London Road Purfleet near to Jarrah Cottages	NO	69.8 µg/m3 (TK2 automatic site)*	51.4 µg/m3 (TK8 automatic site)* ***Council modelling in 2016 confirmed still exceedance at relevant public exposure	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016
AQMA 12	2004	NO2 Annual Mean	Purfleet	An area encompassing Residential properties along A1306 on the Watts Wood Estate	NO	50.5 µg/m3 (WC)*	41 µg/m3 (WC)* new monitoring has been setup at façade level to determine if there is exceedance or not?	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016

# Thurrock Council

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	City / Town	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance (maximum monitored/modelled concentration at a location of relevant exposure)		Action Plan (inc. date of publication)
						At Declaration	Now	
							32.1 µg/m3 (WCF)**annualised data based on 6 months only	
AQMA 13	2004	NO2 Annual Mean	Purfleet / Aveley	An area encompassing Residential properties along A1306 London Road Aveley Arterial Road	NO	55.2 µg/m3 (LRAR)*	59.5 µg/m3 (LRAR)* at places of relevant public exposure 34 µg/m3 (LRARN) & 31.4 µg/m3 (LRARS)	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016
AQMA 15	2004	NO2 Annual Mean	South Ockendon	1 residential dwelling near the M25 on the edge of Irvine Gardens	YES	40 µg/m3 (GDSO)	28.1 µg/m3 (GDSO)	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016
AQMA 16	2004	NO2 Annual Mean	Near North Ockendon	1 residential dwelling near the M25 off Dennis Road	YES	42.6 µg/m3 (KCNO)	34.3 µg/m3 (KCNO)	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016
AQMA 21	2004	NO2 Annual Mean	Purfleet	A former Hotel on Stonehouse Lane	NO	[44.6 µg/m3 in 2005] (STON)	No longer relevant public exposure / no monitoring since 2013	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016
AQMA 23	2004	NO2 Annual Mean	West	An area encompassing Residential properties along London Road West Thurrock	NO	55.1 µg/m3 (WT)*	40 µg/m3 (WT)*	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016



## Thurrock Council

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	City / Town	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance (maximum monitored/modelled concentration at a location of relevant exposure)		Action Plan (inc. date of publication)
						At Declaration	Now	
			Thurrock					
AQMA 24	2012	NO2 Annual Mean	Tilbury	An area encompassing Residential properties along Calcutta Road, Dock Road & St Chads Road	NO	40.5 µg/m3 (TL)*	35.8µg/m3 (TL)* 38.5 µg/m3 (TILB) & 41.9 µg/m3 (TILA)	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016
AQMA 25	2016	NO2 Annual Mean	Aveley	An area encompassing Residential properties along Aveley High St & Ship Lane	NO	41.9 µg/m3 (AVSL)	43 µg/m3 (AVSL)	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016
AQMA 26	2016	NO2 Annual Mean	Purfleet	An area encompassing Residential properties along the Purfleet By-pass	NO	38.6 µg/m3 (PBP)	37.6 µg/m3 (PBP)	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016
AQMA 5	2004	PM10 24 Hour Mean	Grays, Chafford Hundred & North Stifford	An area encompassing Residential properties along Warren Terrace A1306 & A13	NO	No Data exceedance was based on 2004 modelling only	No Data *** (although modelling work in 2016 which was rejected by Defra shows no exceedance)	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016
AQMA 7	2004	PM10 24 Hour Mean	West Thurrock	A Hotel (IBIS) near to M25 north of the Dartford Crossing	YES	No Data exceedance was based on 2004 modelling only	No Data *** (although modelling work in 2016 which was rejected by Defra shows no exceedance)	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016

## Thurrock Council

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	City / Town	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance (maximum monitored/modelled concentration at a location of relevant exposure)		Action Plan (inc. date of publication)
						At Declaration	Now	
AQMA 8	2004	PM10 24 Hour Mean	West Thurrock / Purfleet	A Hotel next to Jct 31 of the M25	YES	No Data exceedance was based on 2004 modelling only	No Data *** (although modelling work in 2016 which was rejected by Defra shows no exceedance)	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016
AQMA 10	2004	PM10 24 Hour Mean	Purfleet	An area encompassing Residential properties along London Road Purfleet near to Jarrah Cottages	NO	No Data exceedance was based on 2004 modelling only	12 Days of 35 permitted (TK8) automatic & *** (modelling work in 2016 which was rejected by Defra shows no exceedance)	<a href="https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy">https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy</a> 2016

☒ Thurrock Council confirm the information on UK-Air regarding their AQMA(s) is up to date

(\*) Represents a location in the AQMA but is not relevant public exposure

(\*\*) Represents annualised data only based on 6 months or less of data

(\*\*\*) Represents where modelling work was undertaken recently instead of actual monitoring

**PLEASE NOTE:** The council data shows that some monitoring at places of relevant public exposure falls under the objective in some AQMA's however most of these sites have less than 12 months data and have annualised results. These will be looked at more closely in the next ASR report.

In addition it is the Council do not normally revoke AQMA's solely based on diffusion tube data alone as the results are not very reliable. For any such revocation the data would have to fall below 10% of the objective level i.e. ( $<36 \mu\text{g}/\text{m}^3$ ), and would need to consistently stay below this level for some years before it was decided to revoke any AQMA's based on diffusion tube results. Alternatively the council may look into doing detailed dispersion modelling to assess whether any exceedance of the air quality objectives is still likely at a given location.

## 2.2 Progress and Impact of Measures to address Air Quality in Thurrock Council

### Defra's appraisal of last year's ASR concluded:-

The report is well structured, and provides the information specified in the Guidance, using the latest template. The following comments are designed to assist in the production of future reports.

1. The current ASR highlights some areas that should be given further consideration in future reports.
2. The Council has established a policy of declaring a large number of AQMAs throughout the Borough which require detailed review in relation to the status of each AQMA.
3. Some of the AQMA's were apparently designated on the basis of modelling, and there is no current evidence that current AQMA status is justified. This has been taken up in previous discussions following the detailed assessments that were carried out in 2016.
4. The Council are at liberty to maintain separate AQMAs, but may still wish to consider, when there are a relatively large number of AQMAs, many of which are only a small distance apart, that a single area wide AQMA may provide a greater degree of flexibility.
5. There also appears to be a degree of inconsistency in the way monitoring results are being recorded in relation to reporting against air quality objectives. For instance, in Table 2.1 requests results to be presented to represent the level of exceedance at a location of relevant exposure.
6. Table A.3 lists annual monitoring results for the last 5 years, and Table B1 in Appendix B shows results for 2016 including corrections for distance.
7. The Council should be clear in how monitoring results are presented and interpreted.
8. Monitoring results for comparison to air quality objectives, and hence also for reviewing the status of AQMAs should be presented as results that have had all appropriate corrections applied.
9. Results in Table 2.1 are clearly not all presented as results of relevant exposure, where distance corrections are required. This gives a false impression in relation to exceedance of objectives in AQMA, when this is largely not the case.

10. The results that are fully corrected, including corrected for distance show that there are now only two AQMAs, AQMA 2 (NAS2), and AQMA 13 (LRAR, LRARMN) with monitoring results above objective levels.
11. Future reports must be consistent in the way results are presented.
12. There appears to also be a question in relation to the relevance of many of the monitoring locations as listed in Table A2. There are large numbers of sites listed as "N" under distance to relevant exposure, suggesting they are not representative.
13. The value of these sites may be limited in relation to designating AQMAs and making assessments in relation to meeting air quality objectives.

In this instance we suggest that the current monitoring regime should be reviewed, in order that an adequate number of monitoring sites are chosen that are representative of relevant exposure within each AQMA.

Thurrock Council has taken forward a number of direct measures during the current reporting year of 2017/18 in pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in Table 2.2 & Table 2.3.

More detail on these measures can be found in their respective Action Plans, Details of the Council's latest Air Quality Health Strategy can be found via this link:- [thurrock.gov.uk/air-quality](http://thurrock.gov.uk/air-quality) and the council's latest AQAPs can be found via this link:- <https://consult.thurrock.gov.uk/portal/tc/pt/transport/aqstrategy>

Key completed measures are:-

The following action specific to AQMAs were taken during 2017/18:

AQMA 25 – Aveley High Street: the council introduced westbound width restrictions on Aveley High Street in 2016/17. These restrictions were intended to ameliorate some of the air quality issues that arise from HGVs in the area. Furthermore, the Council is investigating measures to prevent HGV traffic movements along Ship Lane, Aveley from being undertaken

AQMA 26 – Purfleet Bypass: the council continues to develop plans to deliver cycleway improvements as part of the Cycle Infrastructure Programme. A new cycle

path and two new Toucan crossings are expected to be completed along Purfleet Bypass prior to April 2019.

AQMA 23 – London Road, Grays: the council is continues to investigate measures to control HGV movement on London Road, however these works have been interrupted as the Council awaits the completion of a private development. These works are expected to commence in 2019.

AQMA 2 – London Road, Grays: the council is progressing bus lane camera enforcement in London Road. “Go-live” date scheduled for 1<sup>st</sup> March 2019 with full enforcement and issue of PCNs from 1<sup>st</sup> April 2019.

AQMA 10 – London Road, Purfleet: the council introduced width restrictions to the west of AQMA 10 and east of Botany Way. As part of port enhancements at CRO Ports Purfleet, the main port entrance is to be moved away from the AQMA with a new dedicated port entrance preventing HGV's from idling along London Road awaiting entry to the port. Additionally, the Council is investigating measures to control HGV movements along London Road within the AQMA to control transient movements.

AQMA 3 – Hogg Lane/Elizabeth Road: the council is considering options to widen parts of the A1306 to improve traffic flows. This is the subject of VISSIM modelling work, which is being jointly undertaken with Highways England.

AQMA 24 – Calcutta Road, Tilbury: The council is progressing a scheme as part of the Cycle Infrastructure Programme. This is expected to commence in April 2019, with a new off-road cycle path running along Calcutta Road and Dock Road. Construction is scheduled for three months. Additionally, the Council is launching a new Cycle hub on Calcutta Road in November/December 2018, to help further encourage cycling and modal shift..

HGV parking enforcement activities in the area continue with increased activity in order to address the current issues related to roadside HGV parking.

In addition to the AQMA-specific actions detailed above, the council has taken the following borough-wide actions to address poor air quality:

Variable Message Signing (VMS): the council has acquired three (3) VMS signs that can be deployed in locations across its road network as needed, towards minimising traffic impacts arising from incidents across the road network. These have now been deployed on numerous occasions, most notably when an incident occurs at the Dartford Crossing or within its vicinity. Additionally, the Council continues to explore opportunities to invest and implement new “SMART” technology to help manage traffic flows, and dynamically tackling congestion.

Weight Restrictions and HGV Management Schemes: The council continually reviews current HGV routing options and the introduction of measures to minimise air pollution from HGVs, such as weight restrictions and turning bans through dynamic engagement with the local residents and the community.

Improvements to Walking and Cycling: these include the walking and cycle infrastructure improvements secured as part of planning consents; and the Cycle Infrastructure Programme. The £5m Cycle Infrastructure Programme is currently in process of delivery and will be completed by March 2019. To support the successful investments the Council has made to date, there is a push to seek additional funds to expand the cycle infrastructure programme across the Borough, and to deliver schemes which were planned but were a lower priority and not able to be funded by the initial Cycle Infrastructure Programme. Softer measures are also being implemented, with the Council employing a new Walking and Cycling Co-ordinators to engage with residents and local businesses to encourage active and sustainable travel across the borough, enabling travel behaviour change and modal shift.

School and Workplace Travel Plans: the council secures travel plans and monitoring provisions as part of development consents. Schools currently monitor their travel plans via Modeshift STARS web-tool which provides a national framework for the implementation of sustainable and active school travel activities. This is the only national accreditation scheme for rewarding sustainable School Travel Plans (STP) and 35 out of 51 schools in the borough are actively working on their School Travel Plans and many have achieved a Bronze Accreditation for their STP. Arthur Bugler has joined the Woodside Academy in achieving Gold accreditation in their STP.

Freight Quality Partnership (FQP): the council re-established its Freight Quality Partnership to work collaboratively with freight and logistics operators to jointly formulate actions aimed at managing and mitigating the air quality impacts of HGVs in Thurrock. The Council is using the meetings to help develop a new Freight and Logistics Strategy for the borough.

South Essex Active Travel (SEAT): the council, along with Southend-on-Sea and Essex County Council was successfully awarded approximately £3.3 million in 2017/18 to deliver this programme, which targets people in a transitional stage of life to encourage sustainable travel options prior to key behavioural decision-making processes, such as commencing new employment or education.

Since the early achievements of the project working with Amazon to help influence travel behaviour of staff at its new Fulfilment Centre in Tilbury, the SEAT project is continuing to support a range of projects across the borough. As part of the project, the Council will deliver a new cycle hub in Tilbury, which will provide opportunities for people to purchased low-cost new and refurbished cycles, to access training and sign post residents to support programmes to encourage modal shift. The cycle hub will also support a programme of up-skilling local volunteers in cycle repairs, to encourage enterprise and reemployment, as well as offering a community space,

cycle recycling and cycle exchange programme for families (i.e. as a child grows older, a smaller cycle can be exchanged for a more suitable bike). Additionally, the SEAT programme will provide a cycle loan opportunity to encourage cycle ownership at a low monthly rate. Similar to the programme implemented at Amazon, SEAT engagement offices continue to work with key business, colleges and sixth forms to provide travel planning advice, as well as hosting road shows at key locations, such as intu Lakeside.

The SEAT project has also provided a substantial grant to support the delivery of a new bus service linking London Gateway Port and Park development with the local residential community of Stanford le Hope and the nearby station – a link which didn't exist.

The programme also includes a range of other measures, including a target to provide adult cycle training to 200 people over the three years to encourage cycling to work.

The South Essex Active Travel (SEAT) programme offers a range of benefits to residents by providing improved travel information and advice on travel to the workplace, not just within Thurrock, but across the south Essex corridor, the promotion of lifelong skills in cycling and cycle confidence, and cycle repairs and maintenance, as well as cycle loans to new job seekers who do not have access to their own transport. The SEAT programme has also engaged with public transport operators to provide free travel tickets to job seekers or new employees to help them commence employment using public transport at a low cost which may otherwise be unaffordable in the first few weeks of employment. The scheme will result in approximately £400,000 worth of investment per annum in Thurrock over three years.

Electric Vehicle Charging – the council has been out to tender on a new contract for electrical charging infrastructure. New EV charging points will be introduced where demand justifies, and will aim to consolidate the market for charging infrastructure in the borough, reducing barriers for residents. We are aiming to have an approved contract set up for December 2018.



Car Club – The Council is exploring the opportunity of launching a car club within the borough, primarily located within new developments and expanded across the borough. The Council is seeking to appoint a single contract for all cars across Thurrock, tackling the potential issue on interoperability between different providers, which can create a barrier for users. A car club will be seeking to launch in 2019/20.

### Impacts of Actions

The strategy sets out the need to monitor and measure air pollution levels in AQMAs where actions are focussed, in order to determine whether the actions being implemented are achieving success in terms of a reducing NO<sub>x</sub> levels. We currently monitor air quality in all AQMAs in the borough. As NO<sub>x</sub> is measured and reported on an annual basis, the monitoring data for 2018 will not be available until 2019. However, since traffic emissions, especially from HGVs, are a major source of air pollution in the borough, we can make some assumptions that some improvements have been realised in those AQMAs where actions such as weight restrictions were introduced. We expect the data for 2017 and 2018 to support these assumptions.

Thurrock Council expects the following measures to be completed over the course of the next reporting year:

South Essex Active Travel (SEAT): this programme continues for a further two (2) years and it is envisioned that a mode shift from car to more sustainable modes of travel will be achieved, and consequently a reduction in vehicle emissions, almost a modest reduction. These will be measured through monitoring and evaluation reports of the scheme, which is a mandatory requirement of the DfT. First year progress reports are showing good progress, taking into consideration the mobilisation effort required in the first year of the project.

Freight Strategy: Thurrock Council are seeing to develop a new freight strategy, which will provide a relevant and up-to-date policy framework to promote the

movement of goods and freight within and beyond the borough boundary. This strategy will set out how the council proposes to support and manage freight and industry in Thurrock, whilst promoting measures to address air quality issues arising from these activities. The projected adoption of this strategy is expected to be in 2019.

Electric Vehicle Charging – Following the tender process for a new borough-wide EV Charging Infrastructure contract, new electric vehicle charging points will be introduced where demand justifies. The council have an approved contract set up for December 2018. The introduction of electric vehicle charging infrastructure is expected to promote the use of electric vehicles in Thurrock, which will have positive impacts on air quality.

Urban Traffic Management Control: Thurrock Council is engaging with Highways England to implement new technologies on the road network to help improve traffic flows and minimise the impact on air quality through congestion. As part of our collaborative working, the Council is seeking to establish a new suite of Intelligent Transport Systems infrastructure, including a new UTMC which will help this objective to creating better and more reliable journeys. The key objective of this new UTMC is to integrate with the systems of adjoining highway authorities (incl. Highways England, Kent County Council and Essex County Council) in order to better manage the local road network, particularly in response to incidents at Dartford Crossing, with the aim of minimising traffic congestion and associated air pollution. One specific example the Council is working with Highways England is on Junction 31 of the M25, which regularly sees congestion, due to traffic flows and a lack of adherence to yellow box junction markings. The two authorities will aim to develop plans which will help clear the junction immediately, via dynamic management of traffic signals, rather than relying on manual intervention on site or awaiting for traffic flows to decrease.

Thurrock Council's priorities for the coming year are to ensure delivery of these proposed action measures, and review post implementation whether they have

delivered noticeable improvements in air quality, if not then additional measures may need to be required in due course.

The principal challenges and barriers to implementation that Thurrock Council anticipates facing are: - Challenges in identifying funding sources, and lack of resources to plan and implement measures.

Progress on the measures which may have rolled over from previous years has been slower than expected due to challenges in securing identified funding resources from external partners. Additionally, due to the increasing demands on Council resources, there has been the risk of some schemes slipping in previous years, however the Council expects to target delivery on its action plan measures in this year.

Whilst the measures stated above and in Table 2.2 and Table 2.3 will help to contribute towards compliance, Thurrock Council anticipates that further additional measures not yet prescribed will be required in subsequent years to achieve compliance and enable the revocation of AQMA's 1,2,3,4,5,10,13,23,24,25 in particular, the other remaining AQMAs may be revoked due to monitoring data falling below the objectives, if this trend continues, the council will revoke them.

Table 2.2 – Progress on Measures to Improve Air Quality

	No.	Action	Lead Authority	Outcome	Delivery Date	Reference to existing strategy or plan
AQMA 10 – London Road, Purfleet Page 98	1	Engine Switch-Off Switch Zone	Highways / Strategic Planning	0.5 – 1.0 $\mu\text{g}/\text{m}^3$ (Actions 1 and 2 combined)	Mar 2020	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	2	Roadside Emissions Testing	Highways / Strategic Planning		Mar 2020	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	3	HGV Distributor Road/ Duelling	Highways / Strategic Planning	15.0+ $\mu\text{g}/\text{m}^3$ (Actions 3 and 4 combined)	2021	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	4	Weight Restriction	Highways / Strategic Planning		Ongoing	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	5	Land Use Planning	Highways / Strategic Planning	No increase	Ongoing	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	6	Freight Quality Partnership	Highways / Strategic Planning	Inform routing strategies, awareness and liaison	Ongoing	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	7	Eco-Driver Training	Highways / Strategic Planning	0.5 $\mu\text{g}/\text{m}^3$	Ongoing	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	8	Pollution Retrofit Equipment	Highways / Strategic Planning	15.0+ $\mu\text{g}/\text{m}^3$ (Actions 8 and 9 combined)	TBD – Dependent on availability of external funding	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	9	Clean Air Zone	Highways / Strategic Planning		TBD – Monitoring of AQ and with regard to updated national policy	
	10	Personalised Journey Planning	Highways / Strategic Planning	3.0 $\mu\text{g}/\text{m}^3$ overall	TBD – Subject to outcome of volunteer recruitment	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	11	Business Travel Plans	Highways / Strategic Planning	1.0 $\mu\text{g}/\text{m}^3$	Ongoing	Thurrock Air Quality and Health Strategy and AQMA Action Plans
AQMA 3 – Hogg Lane/El	12	Investigate Mature Landscaping Barrier	Highways / Strategic Planning	5.0+ $\mu\text{g}/\text{m}^3$ *	Nov 2019	Thurrock Air Quality and Health Strategy and AQMA Action Plans

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	13	30 mph limit	Highways / Strategic Planning	5.0+ $\mu\text{g}/\text{m}^3$ *	Ongoing	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	14	School Travel Plans (modeshift)	Highways / Strategic Planning	0.5 $\mu\text{g}/\text{m}^3$	Ongoing	Thurrock Air Quality and Health Strategy and AQMA Action Plans, Sustainable Modes of travel to Schools strategy (SMOTS)
	15	A1012/A1306 Priority 'hamburger' roundabout feasibility	Highways / Strategic Planning	5.0+ $\mu\text{g}/\text{m}^3$ *	Sep 2019	Thurrock Air Quality and Health Strategy and AQMA Action Plans
AQMA 5 – A1306 (Pilgrims roundabout) Page 99	16	Investigate Mature Landscaping Barrier	Highways / Strategic Planning	5.0+ $\mu\text{g}/\text{m}^3$ *	Nov 2019	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	17	Variable Message Signing for Lakeside	Highways / Strategic Planning	1.0 $\mu\text{g}/\text{m}^3$	2021	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	18	Business Travel Plans	Highways / Strategic Planning	1.0 $\mu\text{g}/\text{m}^3$	Ongoing	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	19	Pilgrims Roundabout Signalisation	Highways / Strategic Planning	5.0+ $\mu\text{g}/\text{m}^3$ *	Sep 2019	Thurrock Air Quality and Health Strategy and AQMA Action Plans
AQMA 24 – Tilbury (Calcutta Road)	20	Engine Switch Off Zone	Highways / Strategic Planning	3.0+ $\mu\text{g}/\text{m}^3$ *	Mar 2020	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	21	School Travel Plans (modeshift)	Highways / Strategic Planning	3.0 $\mu\text{g}/\text{m}^3$ overall	Ongoing	Thurrock Air Quality and Health Strategy and AQMA Action Plans, Sustainable Modes of travel to Schools strategy (SMOTS)

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Page 100	22	Improved Walking and Cycling Infrastructure and marketing and promotion campaign	Highways / Strategic Planning	3.0 µg/m3 overall	April 2019	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	23	Personalised Journey Planning	Highways / Strategic Planning	3.0 µg/m3 overall	Apr 2017-Mar 2020	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	24	Eco Driving	Highways / Strategic Planning	3.0 µg/m3 overall	Ongoing	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	25	AQ Mitigation in new developments	Highways / Strategic Planning	No increase in at risk population	Ongoing	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	26	Personalised Journey Planning	Highways / Strategic Planning	3.0 µg/m3 overall	Apr 2017-Mar 2020	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	27	Business Travel Plans	Highways / Strategic Planning	1.0 µg/m3	Ongoing	Thurrock Air Quality and Health Strategy and AQMA Action Plans
AQMA 25 - Aveley	28	HGV Traffic Management Scheme: Stifford Road	Highways / Strategic Planning	8.0 µg/m3 (Actions 24 and 25 combined)	April 2017	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	29	HGV Traffic Management Scheme: Ship Lane	Highways / Strategic Planning		April 2019	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	30	Engine Switch Off Zone	Highways / Strategic Planning	3.0+ µg/m3*	Mar 2020	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	31	School Travel Plans	Highways / Strategic Planning	3.0 µg/m3 overall	Ongoing	Thurrock Air Quality and Health Strategy and AQMA Action Plans, , Sustainable Modes of travel to Schools strategy (SMOTS)
AQMA 26 – Purfleet Bypass	32	Mature Landscaping Barrier	Highways / Strategic Planning	2.0+ µg/m3*	Nov 2019	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	33	Land Use Planning	Highways / Strategic Planning	No further increases	Ongoing	Thurrock Air Quality and Health Strategy and AQMA Action Plans

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AQMA 1, 2, 23 Grays (London Road) Page 101	34	Eco-Driver Training	Highways / Strategic Planning	0.5 µg/m3	Ongoing	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	35	Engine Switch Off Zone	Highways / Strategic Planning	0.5 µg/m3	Mar 2020	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	36	School Travel Plans	Highways / Strategic Planning	0.5 µg/m3	Ongoing	Thurrock Air Quality and Health Strategy and AQMA Action Plans, Sustainable Modes of travel to Schools strategy (SMOTS)
	37	Enforcement of Weight Restriction	Highways / Strategic Planning	3.0 µg/m3	April 2019	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	38	Land Use Planning (Gumley Road and Askey Farm Lane)	Highways / Strategic Planning	No increase	Ongoing	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	39	Eco-Driver Training	Highways / Strategic Planning	0.5 µg/m3	Ongoing	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	40	Personalised Journey Planning	Highways / Strategic Planning	3.0 µg/m3 overall	Apr 2017-Mar 2020	Thurrock Air Quality and Health Strategy and AQMA Action Plans
	41	Business Travel Plans	Highways / Strategic Planning	1.0 µg/m3	Ongoing	Thurrock Air Quality and Health Strategy and AQMA Action Plans

**Table 2.3 – Additional more generalised Measures & Progress on Measures to Improve Air Quality**

Measure No.	Measure	EU Category	EU Classification	Organisations involved and Funding Source	Planning Phase	Implementation Phase	Key Performance Indicator	Reduction in Pollutant / Emission from Measure	Progress to Date	Estimated / Actual Completion Date	Comments / Barriers to implementation
1	Public Awareness Raising & Education	Public Information	via the Internet	Env Protection Team/ Highways & Public Health	Date	Ongoing	N/A	N/A	Effects not quantifiable but may encourage modal shift and	Ongoing	To Inform the Public of the state of Air Quality dissemination of

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									lead to long-term improvements		air quality reports and download of AQ data from Thurrock Council website/ LAQN, EssexAir & Defra
2	Smarter Choices-Work Place Travel Planning : Action to road vehicle emissions	Promoting Travel Alternatives	Workplace Travel Planning	Strategic Planning		2012/13	N/A	<1%		Ongoing	Encourage modal shift (13 organisations supported since beginning of Local Sustainable Transport Fund (LSTF))
Page 102	Action to road vehicle emissions	Promoting Travel Alternatives	Promotion of cycling	Highways / Strategic Planning		Ongoing	N/A	<1%		Ongoing	Encourage modal shift
	Action to road vehicle emissions	Promoting Travel Alternatives	School Travel Plans	Highways / Strategic Planning		2004	N/A	<1%		Complete	Encourage modal shift
5	Action to road vehicle emissions	Promoting Travel Alternatives	Promotion of walking	Highways / Strategic Planning		Ongoing	N/A	<1%		Ongoing	Encourage modal shift
6	Action to road vehicle emissions Public Transport (Metrorail)	Promoting Travel Alternatives	Promote use of rail and inland waterways	Highways / Strategic Planning		Ongoing	N/A	<1%		Ongoing	Encourage modal shift
7	Action to road vehicle emissions	Promoting Travel Alternatives	Personalise d Travel Planning	Highways / Strategic Planning		2010/11	N/A	<1%		2015/16	Encourage modal shift



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8	Action to road vehicle emissions	Promoting Travel Alternatives	Intensive active travel campaign & infrastructure	Highways / Strategic Planning		2010/11	N/A	<1%		Ongoing	Encourage modal shift
9	Action to road vehicle emissions	Transport Planning and Infrastructure	Cycle network	Highways / Strategic Planning		Ongoing	N/A	<1%		Ongoing	Encourage modal shift
10	Action to road vehicle emissions	Transport Planning and Infrastructure	Public transport improvements - interchange stations and services	Highways / Strategic Planning		Ongoing	N/A	<1%		Ongoing	Encourage modal shift
11	Action to road vehicle emissions	Transport Planning and Infrastructure	Bus route improvements	Highways / Strategic Planning		Ongoing	N/A	<1%		Ongoing	Encourage modal shift
12	LAPC Inspections, of local industry	Environmental Permits	Other	Environmental Protection team		1990	N/A	N/A	Effects not quantifiable, but probably limits local component of background pollution	Ongoing	Prevention of Pollution & Nuisance
13	Action to road vehicle emissions (116 drivers trained by SAFED up to March 2013)	Vehicle Fleet Efficiency	Driver training and ECO driving aids	Highways / Strategic Planning		2010/11	N/A	<1%		2014/15	Improve HGV driving efficiency to improve vehicle emissions

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14	Action to road vehicle emissions (ECO Stars Freight Accreditation Scheme, 42 businesses currently have accreditation from the scheme)	Vehicle Fleet Efficiency	Fleet efficiency and recognition schemes	Highways / Strategic Planning		2010/11	N/A	<1%		2014/15	Improve HGV driving efficiency to improve vehicle emissions (funding available until March 2015)
15	Enforcement of local Taxi licencing	Promoting Low Emission Transport	Taxi Licencing conditions	Licencing		Ongoing	N/A	<1%	Effects not quantifiable	Ongoing	Ensure that Road vehicles are road worthy and EU compliant vehicles
Page 104	Provision of Electric vehicle car charging points around the borough	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Highways / Strategic Planning		2009	N/A	<1%		Ongoing	Alternative fuelled vehicles
17	Council Introduced Home working / flexible working hours	Promoting Travel Alternatives	Encourage / Facilitate home-working	TBC		2014	N/A	N/A		Ongoing	To reduce and save money on unnecessary vehicle journeys
18	Introduction of Hybrid Buses into the fleet	Alternatives to private vehicle use	Other	Highways / Strategic Planning		Ongoing	N/A	<1%		Ongoing	Switch from Diesel to less polluting alternatives

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19	Cycle Parking for AQMA 5	Transport Planning and Infrastructure	Other	Highways / Strategic Planning		2013/2014	N/A	<1%		Completed	Increase capacity for cycle network
20	Local Sustainable Transport Fund (LSTF) Improvement of Transport infrastructure (Boroughwide) Initiative	Transport Planning and Infrastructure	Other	Highways / Strategic Planning		2010/2014	N/A	<1%		Completed	Improvement of Transport Infrastructure
Page 105	Freight Quality Partnership (FQP) Expansion of FQP (as of 2014 were 45 members in the FQP in Thurrock (AQMA 23)	Freight and Delivery Management	Freight Partnerships for city centre deliveries	Highways / Strategic Planning		2010/11	N/A	<1%		2015/16	Partnership with local freight and logistic industry to provide discussion platform around freight issues.
	22	Pollution absorbent paint barrier (AQMA 13)	Transport Planning and Infrastructure	Other	Environmental Protection Team /Highways / Strategic Planning	2013	Monitor NO2 diffusion tube results, see if there is an improvement	1-2%	No noticeable improvement	Complete	Experimental mitigation measure to attempt to reduce NO2 pollution within AQMA 13
23	Public Transport - Eco driver training	Transport Planning and Infrastructure	Public transport improvements-interchange stations	Highways / Strategic Planning		2014	N/A	<1%		ongoing	Improve driver efficiency in the bus fleet (limited application only 16 drivers trained, Ensign bus fleet

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			and services								operators)
24	Improve traffic signalling at traffic light junction within (AQMA 13)	Traffic Management	Other	Highways / Strategic Planning		2013	N/A	<1%		2013	Improve flow of stationary traffic for smoother driving, hence attempt to lower emissions
25	SCOOT/ UTM (AQMA 1 & AQMA 5)	Traffic Management	UTC, Congestion management, traffic reduction	Highways / Strategic Planning		2014	N/A	<1%		2014	
Page 106	HGV weight restriction (AQMA 1, 2)	Traffic Management	Other	Highways / Strategic Planning		2013	N/A	<1%		2013 / 2014	Divert HGVs away from AQMA along Devonshire road, to alleviate London Road from HGVs & Congestion
27	Improve Bus / Rail interchange (AQMA 5)	Transport Planning and Infrastructure	Public transport improvements- interchange stations and services	Highways / Strategic Planning		Ongoing	N/A	<1%		Ongoing	Improve accessibility of public transport :Completed scheme, but will make future improvements as part of the Masterplan for Thurrock
28	Road layout review - future bus priority measures (AQMA 23)	Transport Planning and Infrastructure	Other	Highways / Strategic Planning		?				? Future	

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29	Air Quality Officer Working Group	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	Environmental Protection Team		2014/15	n/a	n/a		2015/16	To coordinate action between council departments (Health, Transport & Environment) and determine focus areas/initiatives
30	Air Quality Study	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	Highways / Strategic Planning		2014/15	n/a	n/a		2015/16	To investigate improvement options in AQMA 3, 4 and 5.

## 2.3 PM<sub>2.5</sub> – Local Authority Approach to Reducing Emissions and/or Concentrations

As detailed in Policy Guidance LAQM.PG16 (Chapter 7), local authorities are expected to work towards reducing emissions and/or concentrations of PM<sub>2.5</sub> (particulate matter with an aerodynamic diameter of 2.5µm or less). There is clear evidence that PM<sub>2.5</sub> has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

Thurrock Council is taking the following measures to address PM<sub>2.5</sub>: As set out previously, the Council has been working on a new integrated Health and Air Quality Strategy to renew its approach to addressing poor air quality and reduce exposure across its area. The focus of the air quality policies and actions are targeted at exceedances of NO<sub>2</sub> in individual AQMAs, however it is acknowledged that many of the interventions proposed will also have beneficial reductions in PM<sub>2.5</sub> also. The following measures are examples of interventions proposed to also address PM<sub>2.5</sub> (see Table 2.2 for full list of interventions proposed):

- Land Use Planning (no increase): Policies focusing on avoiding exacerbating existing AQMAs such as car free developments and promoting sustainable transport.
- HGV Traffic Management (10.0+ µg/m<sup>3</sup>): Introduction of weight restrictions/enforcement to discourage HGVs
- Engine Switch-off Zones (3.0+ µg/m<sup>3</sup>): Traffic orders and publicity to reduce idling at level crossings e.tc
- Speed limit reduction (5.0+ µg/m<sup>3</sup>): Localised traffic enforcement and speed reductions
- Clean Air Zone (15.0 µg/m<sup>3</sup>): Traffic enforcement/management to prevent or charge high polluting vehicles for using certain roads.

The Council also has a number of Smoke Control Areas, in order to prevent any use of unauthorised domestic heating appliances and fuel substances within residential buildings within these areas. The Council's Environmental Protection Team can provide details on Smoke Control Areas via its email address [Air.Quality@thurrock.gov.uk](mailto:Air.Quality@thurrock.gov.uk) Additional information on Smoke Control Areas i.e.

registered appliances & fuels e.tc can be found at:- <https://www.gov.uk/smoke-control-area-rules>

## 3 Air Quality Monitoring Data and Comparison with Air Quality Objectives and National Compliance

### 3.1 Summary of Monitoring Undertaken

This section sets out what monitoring has taken place and how it compares with objectives.

Thurrock Council undertook automatic (continuous) monitoring at four sites during 2017. Table A.1 in Appendix A shows the details of the sites and also provides the latest monitoring results for these sites. NB. Local authorities do not have to report annually on the following pollutants: 1,3 butadiene, benzene, carbon monoxide and lead, unless local circumstances indicate there is a problem, these pollutants have been screened out in previous reports as the levels were low or non-existent within the borough, and no new sources have been identified since for these pollutants so they are no longer deemed as being an issue. National monitoring results are available at <https://uk-air.defra.gov.uk/data/>

The Council does at currently operate a Heavy Metals Partisol Monitor on behalf of Defra, as part of Defra's Heavy Metals Monitoring Network. The current monitoring site is located in Chadwell St Mary. Monitoring results from this site can be downloaded via the UK-Air website: - <https://uk-air.defra.gov.uk/data/metals-data>

Maps showing the location of the monitoring sites are provided in Appendix D. Further details on how the monitors are calibrated and how the data has been adjusted are included in Appendix C.

#### 3.1.1 Non-Automatic Monitoring Sites

Thurrock Council undertook non- automatic (passive) monitoring of NO<sub>2</sub> at 58 sites during 2017 Table A.2 in Appendix A shows the details of the sites.

Maps showing the location of the monitoring sites are provided in Appendix D. Further details on Quality Assurance/Quality Control (QA/QC) for the diffusion tubes, including bias adjustments and any other adjustments applied (e.g. "annualisation" and/or distance correction), are included in Appendix C.



## 3.2 Individual Pollutants

The air quality monitoring results presented in this section are, where relevant, adjusted for bias, “annualisation” and distance correction. Further details on adjustments are provided in Appendix C.

### 3.2.1 Nitrogen Dioxide (NO<sub>2</sub>)

Table A.3 in Appendix A compares the ratified and adjusted monitored NO<sub>2</sub> annual mean concentrations for the past 5 years with the air quality objective of 40µg/m<sup>3</sup>.

For diffusion tubes, the full 2017 dataset of monthly mean values is provided in Appendix B.

Table A.4 in Appendix A compares the ratified continuous monitored NO<sub>2</sub> hourly mean concentrations for the past 5 years with the air quality objective of 200µg/m<sup>3</sup>, not to be exceeded more than 18 times per year.

All of Thurrock’s AQMA’s are declared for the annual mean objective for NO<sub>2</sub> recent monitoring suggests that this is still the case in most of these AQMA’s however for the last few years there has been slight reductions in concentrations in most of these AQMA’s and some have been consistently below the objectives for a number of years now. 12 new monitoring sites were setup in 2017 to further assess whether these AQMA’s still warrant this status or not, this will likely be reviewed in 2020 once a firm baseline trend has been established at these sites.

The highest recorded 1-hour concentration in 2017 for NO<sub>2</sub> was at Thurrock 8 at 218 µg/m<sup>3</sup> there were a total of 2 exceedences above the 200 µg/m<sup>3</sup> limit of 18 permitted exceedences annually at this site over 2017. There are no diffusion tube measurements above 60 µg/m<sup>3</sup> where there is relevant public exposure. It is therefore unlikely that the 1-hour objective is being breached currently within the borough.

### 3.2.2 Particulate Matter (PM<sub>10</sub>)

Table A.5 in Appendix A compares the ratified and adjusted monitored PM<sub>10</sub> annual mean concentrations for the past 5 years with the air quality objective of 40µg/m<sup>3</sup>.

Table A.6 in Appendix A compares the ratified continuous monitored PM<sub>10</sub> daily mean concentrations for the past 5 years with the air quality objective of 50µg/m<sup>3</sup>, not to be exceeded more than 35 times per year.

2017 monitoring confirms that there are currently no areas breaching the air quality objectives for PM<sub>10</sub>. However there are some exceedences from automatic monitoring stations over 2017. Thurrock 8 had (12 exceedences of the permitted 35 exceedences), Thurrock 1 had (5 exceedences of the permitted 35 exceedences), and Thurrock 3 had (5 exceedences of the permitted 35 exceedences).

### **3.2.3 Particulate Matter (PM<sub>2.5</sub>)**

Table A.7 in Appendix A presents the ratified and adjusted monitored PM<sub>2.5</sub> annual mean concentrations for the past 5 years.

Thurrock Council currently has one automatic monitoring station (Thurrock 3; Stanford Le-Hope), which is a roadside site that monitors PM<sub>2.5</sub>. The site has seen a year on year decrease in concentrations of PM<sub>2.5</sub> since it first started operating. PM<sub>2.5</sub> concentrations have reduced from: 17.93 µg/m<sup>3</sup> in 2011, and decreased to 9.84 µg/m<sup>3</sup> in 2015, however this increased slightly in 2016 to 13.41 µg/m<sup>3</sup> and decreased once more over 2017 to 11.05 µg/m<sup>3</sup>.

### **3.2.4 Sulphur Dioxide (SO<sub>2</sub>)**

Table A.8 in Appendix A compares the ratified continuous monitored SO<sub>2</sub> concentrations for year 2016 with the air quality objectives for SO<sub>2</sub>.

There is currently one location monitoring SO<sub>2</sub> within the borough, Thurrock 1, Grays. The council has monitored for SO<sub>2</sub> at other locations in recent years, most recently in Tilbury at the Thurrock 4 site. As of early 2017 monitoring ceased due to there being no exceedances reported at this location. There have been no pollution incidences regarding this pollutant since monitoring began back in 1996 at Thurrock 1, SO<sub>2</sub> concentrations fall year on year and remain very low, well below the air quality objectives.

## Appendix A: Monitoring Results

Table A.1 – Details of Automatic Monitoring Sites

Site ID	Site Name	Site Type	X OS Grid Ref	Y OS Grid Ref	Pollutants Monitored	In AQMA?	Monitoring Technique	Distance to Relevant Exposure (m) <sup>(1)</sup>	Distance to kerb of nearest road (m) <sup>(2)</sup>	Inlet Height (m)
<b>Thurrock 1 (TK1)</b>	Thurrock, Grays AURN	Urban Background	561066	177894	NO <sub>2</sub> PM <sub>10</sub> O <sub>3</sub> SO <sub>2</sub>	No	Chemiluminescent TEOM FDMS UV absorption UV Fluorescence	38	Y	3.5
<b>Thurrock 8 (TK8) &amp; Formerly *(TK2)</b>	Purfleet, London Road	Roadside	556701 *(556737)	177937 *(177928)	NO <sub>2</sub> PM <sub>10</sub>	Yes	Chemiluminescent Beta Attenuated Mass	2.6	Y	1.5
<b>Thurrock 3 (TK3)</b>	Stanford-le-Hope, Manorway	Roadside	569358	182736	NO <sub>2</sub> PM <sub>10</sub> PM <sub>2.5</sub>	No	Chemiluminescent TEOM FDMS TEOM FDMS	3	Y	2.8
<b>Thurrock 4 (TK4)</b>	Tilbury, Calcutta Road	Roadside	563900	176282	NO <sub>2</sub>	Yes	Chemiluminescent UV Fluorescence	5.5	Y	1.5

**Notes:**

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

(2) N/A if not applicable.

Table A.2 – Details of Non-Automatic Monitoring Sites

Site ID	Site Name	Site Type	X OS Grid Ref	Y OS Grid Ref	Pollutants Monitored	In AQMA?	Distance to Relevant Exposure (m) <sup>(1)</sup>	Distance to kerb of nearest road (m) <sup>(2)</sup>	Tube collocated with a Continuous Analyser?	Height (m)
LRAR	London Road Arterial Road	R	555301	179438	NO <sub>2</sub>	13	N	0.5	N	1.5
PRS	Purfleet Rail Station	R	555389	178145	NO <sub>2</sub>	No	N	1.5	N	2
WC	Watts Crescent	R	556314	178765	NO <sub>2</sub>	12	N	2	N	2
JC	Jarrah Cottages	R	556701	177937	NO <sub>2</sub>	10	N	2.6	Y (TK8)	1.5
STON	Stonehouse Lane	R	557132	177970	NO <sub>2</sub>	21	N	30	N	1.5

IBIS	Ibis Hotel	UB	557570	177789	NO <sub>2</sub>	7	Y (0m)	52	N	2
GDSO	Gatehope Drive	UB	557595	181060	NO <sub>2</sub>	15	Y (23m)	105	N	1.25
LT	Lakeside Tesco Roundabout	R	557981	178700	NO <sub>2</sub>	No	N	1	N	2
KCNO	Kemps Cottage	UB	558148	183532	NO <sub>2</sub>	16	Y (10m)	57	N	2
WT	London Road W Thurrock	R	558483	177678	NO <sub>2</sub>	23	N	4	N	1.5
HR	Howard Road	R	559118	179462	NO <sub>2</sub>	5	Y (0m)	29	N	1.5

NAS2	A1306	R	559720	179630	NO2	5	N	4.5	N	2
LRSS	London Road South Stifford	R	559785	177910	NO2	2	N	3.5	N	2
LRG	London Road Grays	R	560624	177811	NO2	1	N	2.5	N	2
NAS4	Wingfield Grays	UB	560772	178434	NO2	No	Y	N/A	N	1.5
ER	Elizabeth Road	R	560954	179535	NO2	3	N	0.5	N	2
PS	Poison Store AURN Site	UB	561066	177894	NO2	1	N	38	Y (TK1)	3.5

HL	Hogg Lane	R	561108	178922	NO2	3	N	1.2	N	2
NAS1	Queensgate Centre Grays	R	561469	178063	NO2	1	Y (0m)	5	N	2
CR	Cromwell Road Grays	I	561572	178154	NO2	1	N	0.5	N	2
SRG	Stanley Road Grays	R	561685	177833	NO2	1	Y (2.5m)	5	N	2
NAS3	Chestnut Avenue Grays	UB	561830	179878	NO2	No	Y	N/A	N	1.5
WES	William Edwards School	R	561958	180967	NO2	No	N	N/A	N	2

B	Bulphan	RB	563855	184772	NO2	No	N	N/A	N	2
TL	Calcutta Road Tilbury	R	563867	176293	NO2	No	N	0.5	N	2
PKSL	Park Road	R	567781	182400	NO2	No	Y (24m)	9	N	2
SL	Stanford Library	UB	568501	182459	NO2	No	N	N/A	N	2
M	Manorway Monitoring Station	R	569357	182737	NO2	No	N	3	Y (TK3)	2.75
FRC	Francisco Close (Chafford Hundred)	I	559136	179084	NO2	No	Y (10m)	17	N	2



SLHRS	Stanford-le-Hope Railway Station	R	568162	182296	NO2	No	N	4.5	N	2
ETRS	East Tilbury Rail Station	R	567655	179003	NO2	No	Y	2.5	N	1.5
TILA	Dock Road (Tilbury)	R	563498	176483	NO2	{ 24 }	N	2.5	N	2
TILB	Broadway Intersection (Tilbury)	R	563645	176348	NO2	{ 24 }	N	2.5	N	2
TILC	St Andrews Road (Tilbury)	R	563600	176321	NO2	No	N	2.5	N	1.5
TILD	Calcutta Road East (Tilbury)	R	563995	176291	NO2	{ 24 }	N	0.5	N	2

TILE	Calcutta Road North (Tilbury)	R	563870	176305	NO2	{ 24 }	N	2	N	2
TK4 (A&B)	Thurrock 4 (co-located duplicated site)	R	563900	176282	NO2	{ 24 }	Y	5.5	Y (TK4)	1.5
PBP	Purfleet Bypass	R	556257	178438	NO2	No	Y (5.5m)	9.5	N	1.5
PBPA	Purfleet Bypass	R	556221	178461	NO2	No	Y (3.2m)	9.5	N	1.5
LYD	Lydden	UB	560057	179873	NO2	4	Y (26m)	18	N	2
AVSL	Aveley Ship Lane	R	556713	180167	NO2	No	Y (1m)	2	N	2

AVHS	Aveley High Street	R	556661	180180	NO2	No	N	0.75	N	2
SOAA	South Ockendon Arisdale Avenue	R	558785	182323	NO2	No	Y (6 m)	7	N	2
TSR	Tilbury Sydney Road	UB	564122	176152	NO2	No	N	N/A	N	2
DR	Devonshire Road	R	560279	178944	NO2	No	Y (10.5m)	6	N	1.5
LRARN	London Road Art Road (North)	R	555286	179501	NO2	13	Y (0.5m)	19.5	N	2
LRARS	London Road Art Road (South)	R	555357	179362	NO2	13	Y (40m)	15	N	1

LRARMN	London Road Art Road (Mid-North)	R	555299	179453	NO2	13	N	8	N	2
LRARMS	London Road Art Road (Mid-South)	R	555329	179397	NO2	13	N	7	N	2
JRP	Joslin Road Purfleet	UB	556395	178002	NO2	No	N	N/A	N	2
ACHL	Armada Court, Hogg Lane	R	561093	178974	NO2	3	Y (9m)	8	N	1.5
CC	Catherine Close	I	560770	179866	NO2	4	Y (32m)	20	N	1.5
ERFA	Elizabeth Road, (Façade A)	R	560962	179527	NO2	3	Y (32m)	8.2	N	1.5
ERFB	Elizabeth Road (Façade B)	R	560963	179558	NO2	3	Y (0.5m)	8	N	1.5
ERTM	Elizabeth Road, Treaclemine Roundabout	R	560965	179796	NO2	No	Y (0.5m)	8.5	N	1.5
NC	Nutberry Close	I	561077	179912	NO2	No	Y (6.6m)	19.5	N	1.5
HD	Hawkins Drive (A1306)	R	560003	179694	NO2	5	Y (8.4m)	9	N	1.5
GRPL	Grifon Road, Pilgrims Lane Roundabout	I	559551	179547	NO2	5	Y (5.6m)	19.5	N	1.5

PIH	Premier Inn Hotel, WT	I	557299	178802	NO2	8	Y (6.6m)	21	N	1.5
WCFA	Watts Crescent (Façade)	I	556290	178749	NO2	12	Y (7.5m)	17	N	1.5
THA	Thurrock Hotel (A)	UB	557386	179065	NO2	9	Y (0m)	78	N	1.5
THB	Thurrock Hotel (B)	UB	557437	179099	NO2	9	Y (0m)	39	N	1.5

**Notes:**

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on/adjacent to the façade of a residential property).

(2) N/A if not applicable.

(3) New diffusion tube sites in 2017 marked in (Blue)

Table A.3 – Annual Mean NO<sub>2</sub> Monitoring Results

Site ID	Site Type	Monitoring Type	Valid Data Capture for Monitoring Period (%) <sup>(1)</sup>	Valid Data Capture 2017 (%) <sup>(2)</sup>	NO <sub>2</sub> Annual Mean Concentration (µg/m <sup>3</sup> ) <sup>(3)</sup>				
					2013	2014	2015	2016	2017
Thurrock 1	Urban Background	Automatic	97.7%	97.7%	27.46	26.46	25.6	27.9	28.2
Thurrock 3	Roadside	Automatic	98.9%	98.9%	30.04	25.07	23.6	26.9	27.5
Thurrock 4	Roadside	Automatic	96.8%	96.8%	34.55	32.77	31.1	33.46	33.4
Thurrock 8	Roadside	Automatic	97.9%	97.9%	<b>62.84</b>	<b>61.04</b>	<b>56.1</b>	<b>55.02</b>	<b>51.4</b>
LRAR	Roadside	Diffusion Tube	75%	75%	<b>58.28</b>	<b>59.16</b>	<b>49.86</b>	<b>62.52</b>	<b>59.54</b>
PRS	Roadside	Diffusion Tube	92%	92%	35.26	35.08	32.02	35	32.24
WC	Roadside	Diffusion Tube	92%	92%	<b>43.43</b>	<b>41.12</b>	36.89	<b>50.18</b>	<b>41.02</b>
JC	Roadside	Diffusion Tube	100%	100%	<b>58.84</b>	<b>57.39</b>	<b>51.08</b>	<b>48.55</b>	<b>47.81</b>
STON	Roadside	Diffusion Tube	N/A	N/A	<b>41.38</b>	<b>Site Ended 12/2013</b>	<b>Site Ended 12/2013</b>	<b>Site Ended 12/2013</b>	<b>Site Ended 12/2013</b>
IBIS	Urban Background	Diffusion Tube	100%	100%	<b>46.25</b>	<b>49.66</b>	<b>50.34</b>	<b>49.1</b>	<b>47.47</b>
GDSO	Urban Background	Diffusion Tube	100%	100%	28.46	28.9	26.59	28.92	28.12
LT	Roadside	Diffusion Tube	50%	50%	<b>61.99</b>	<b>50.6</b>	<b>50.09</b>	<b>53.73</b>	<b>57.25 <sup>(3)</sup></b>
KCNO	Urban Background	Diffusion Tube	100%	100%	35.21	34.63	32.69	32.81	34.31
WT	Roadside	Diffusion Tube	100%	100%	<b>40.13</b>	39.1	37	<b>41.14</b>	39.99
HR	Roadside	Diffusion Tube	100%	100%	31.41	31.35	28.9	31.51	32.8
NAS2	Roadside	Diffusion	75%	75%	<b>51.69</b>	<b>50.57</b>	<b>48.06</b>	<b>55.99</b>	<b>53.97</b>

		Tube							
LRSS	Roadside	Diffusion Tube	75%	75%	<b>44.76</b>	<b>41.07</b>	38.7	39.64	<b>42.82</b>
LRG	Roadside	Diffusion Tube	75%	75%	39.74	38.15	35.9	38.85	39.17
NAS4	Urban Background	Diffusion Tube	N/A	N/A	20.88	<b>Site Ended 12/2013</b>	<b>Site Ended 12/2013</b>	<b>Site Ended 12/2013</b>	<b>Site Ended 12/2013</b>
ER	Roadside	Diffusion Tube	100%	100%	<b>56.68</b>	<b>53.27</b>	<b>50.61</b>	<b>51.81</b>	<b>50.83</b>
PS	Urban Background	Diffusion Tube	92%	92%	27.72	26.51	23.31	25.73	26.74
HL	Roadside	Diffusion Tube	100%	100%	33.3	35.48	29.95	33.93	35.06
NAS1	Roadside	Diffusion Tube	75%	75%	35.01	33.22	28.74	33.52	33.67
CR	Intermediate	Diffusion Tube	100%	100%	31.95	33.36	31.3	32.61	32.55
SRG	Roadside	Diffusion Tube	100%	100%	33.09	30.85	26.67	30.88	29.4
NAS3	Urban Background	Diffusion Tube	75%	75%	22.67	21.95	20.12	22.02	23.74
WES	Roadside	Diffusion Tube	100%	100%	31.38	30.61	28.54	31.84	30.67
B	Rural Background	Diffusion Tube	92%	92%	18.44	17.7	15.54	17.19	16.66
TL	Roadside	Diffusion Tube	100%	100%	37.13	35.56	30.55	35.68	35.81
PKSL	Roadside	Diffusion Tube	100%	100%	31.01	28.93	26.79	28.98	28.47
SL	Urban Background	Diffusion Tube	100%	100%	27.34	25.83	23.82	27.01	26.52
M	Roadside	Diffusion Tube	75%	75%	32.74	25.72	24.57	26.97	28.3
FRC	Intermediate	Diffusion Tube	100%	100%	34.34	34.03	30.51	33.17	32.48

SLHRS	Roadside	Diffusion Tube	N/A	N/A	29.45	Site Ended 12/2013	Site Ended 12/2013	Site Ended 12/2013	Site Ended 12/2013
ETRS	Roadside	Diffusion Tube	N/A	N/A	28.35	Site Ended 12/2013	Site Ended 12/2013	Site Ended 12/2013	Site Ended 12/2013
TILA	Roadside	Diffusion Tube	92%	92%	<b>40.32</b>	<b>40.23</b>	36.09	<b>40.76</b>	<b>41.86</b>
TILB	Roadside	Diffusion Tube	100%	100%	<b>42.03</b>	39.68	36.29	39.73	38.5
TILC	Roadside	Diffusion Tube	92%	92%	<b>40.39</b>	37.86	32.63	39.02	<b>41.12</b>
TILD	Roadside	Diffusion Tube	100%	100%	38.08	33.9	31.12	36.85	37.15
TILE	Roadside	Diffusion Tube	100%	100%	35.26	35.85	31.68	34.92	36.18
TK4 (A&B)	Roadside	Diffusion Tube	100%	100%	32.79	31.05	29.5	31.51	30.1
PBP	Roadside	Diffusion Tube	75%	75%	<b>40.69</b>	38.51	35.37	37.8	37.64
PBPA	Roadside	Diffusion Tube	75%	75%	No Data	36.06	31.48	34.7	34.1
LYD	Urban Background	Diffusion Tube	75%	75%	34.42	34.48	29.58	30.77	32.16
AVSL	Roadside	Diffusion Tube	100%	100%	<b>45.15</b>	<b>45.92</b>	<b>40.41</b>	<b>41.01</b>	<b>43.02</b>
AVHS	Roadside	Diffusion Tube	100%	100%	39.41	38.92	35.86	37.27	35.98
SOAA	Roadside	Diffusion Tube	100%	100%	33.03	33.04	29.94	30.29	28.72
TSR	Urban Background	Diffusion Tube	100%	100%	31.88	27.17	27.39	28.05	29.02
DR	Roadside	Diffusion Tube	100%	100%	29.79	33.27	28.69	30.05	28.67
LRARN	Roadside	Diffusion Tube	75%	75%	33.93	35.12	31.37	32.02	33.97
LRARS	Roadside	Diffusion Tube	75%	75%	30	32.96	26.51	31.11	31.39



LRARMN	Roadside	Diffusion Tube	75%	75%	44.51	43.87	36.43	45.63	41.82
LRARMS	Roadside	Diffusion Tube	75%	75%	38.79	40.11	32.38	43.62	40.1
JRP	Urban Background	Diffusion Tube	100%	100%	No Data	No Data	26.05	27.6	25.93
ACHL	Roadside	Diffusion Tube	67%	67%	No Data	No Data	No Data	No Data	36.99 <sup>(3)</sup>
CC	Intermediate	Diffusion Tube	67%	67%	No Data	No Data	No Data	No Data	23.52 <sup>(3)</sup>
ERFA	Roadside	Diffusion Tube	67%	67%	No Data	No Data	No Data	No Data	34.92 <sup>(3)</sup>
ERFB	Roadside	Diffusion Tube	67%	67%	No Data	No Data	No Data	No Data	35.63 <sup>(3)</sup>
ERTM	Roadside	Diffusion Tube	67%	67%	No Data	No Data	No Data	No Data	36.7 <sup>(3)</sup>
NC	Intermediate	Diffusion Tube	50%	50%	No Data	No Data	No Data	No Data	37.75 <sup>(3)</sup>
HD	Roadside	Diffusion Tube	67%	67%	No Data	No Data	No Data	No Data	36.06 <sup>(3)</sup>
GRPL	Intermediate	Diffusion Tube	67%	67%	No Data	No Data	No Data	No Data	34.07 <sup>(3)</sup>
PIH	Intermediate	Diffusion Tube	50%	50%	No Data	No Data	No Data	No Data	33.11 <sup>(3)</sup>
WCFA	Intermediate	Diffusion Tube	67%	67%	No Data	No Data	No Data	No Data	32.06 <sup>(3)</sup>
THA	Urban Background	Diffusion Tube	50%	50%	No Data	No Data	No Data	No Data	31.8 <sup>(3)</sup>
THB	Urban Background	Diffusion Tube	67%	67%	No Data	No Data	No Data	No Data	31.19 <sup>(3)</sup>

☒ Diffusion tube data has been bias corrected

☒ Annualisation has been conducted where data capture is <75%

**Notes:**

Exceedances of the NO<sub>2</sub> annual mean objective of 40µg/m<sup>3</sup> are shown in **bold**.

NO<sub>2</sub> annual means exceeding 60µg/m<sup>3</sup>, indicating a potential exceedance of the NO<sub>2</sub> 1-hour mean objective are shown in **bold and underlined**.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

(3) Means for diffusion tubes have been corrected for bias. All means have been “annualised” as per Boxes 7.9 and 7.10 in LAQM.TG16 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Figure A.1 – Trends in Annual Mean NO<sub>2</sub> Concentrations (automatic monitoring sites)

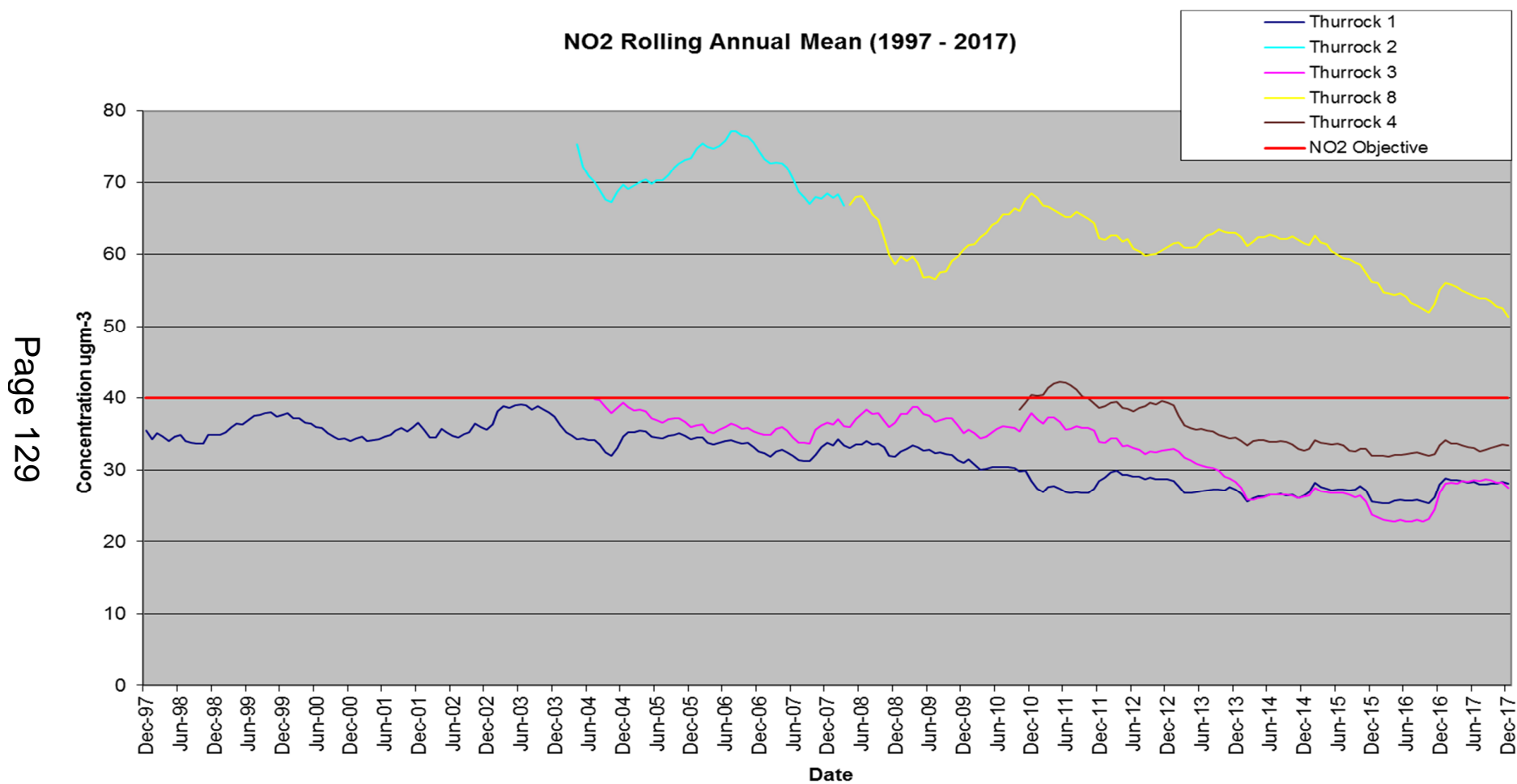


Figure A.2 – Trends in Annual Mean NO<sub>x</sub> Concentrations (automatic monitoring sites)

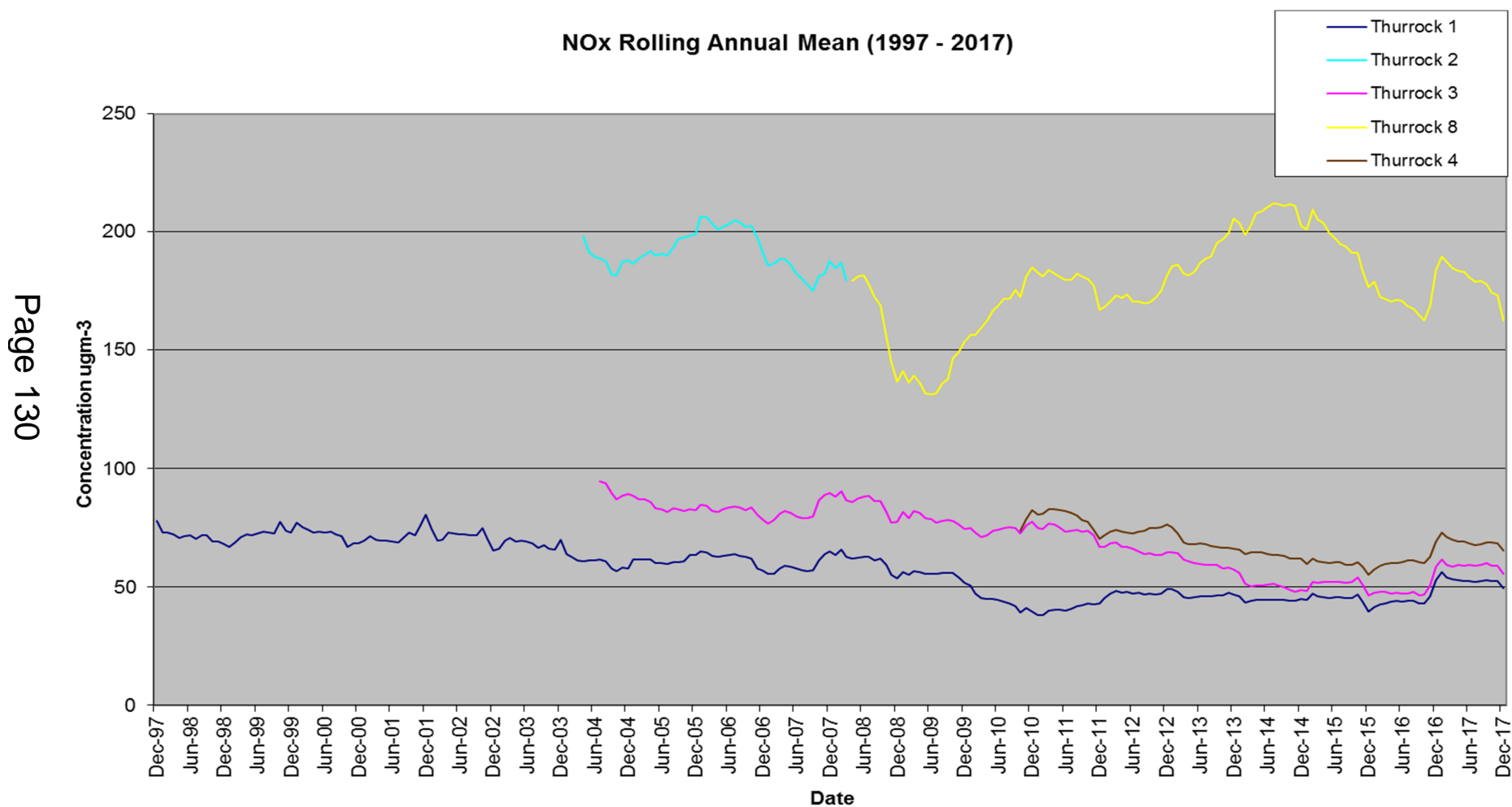


Figure A.3 – Rolling Annual Mean for % NO<sub>2</sub> of NO<sub>x</sub> (automatic monitoring sites)

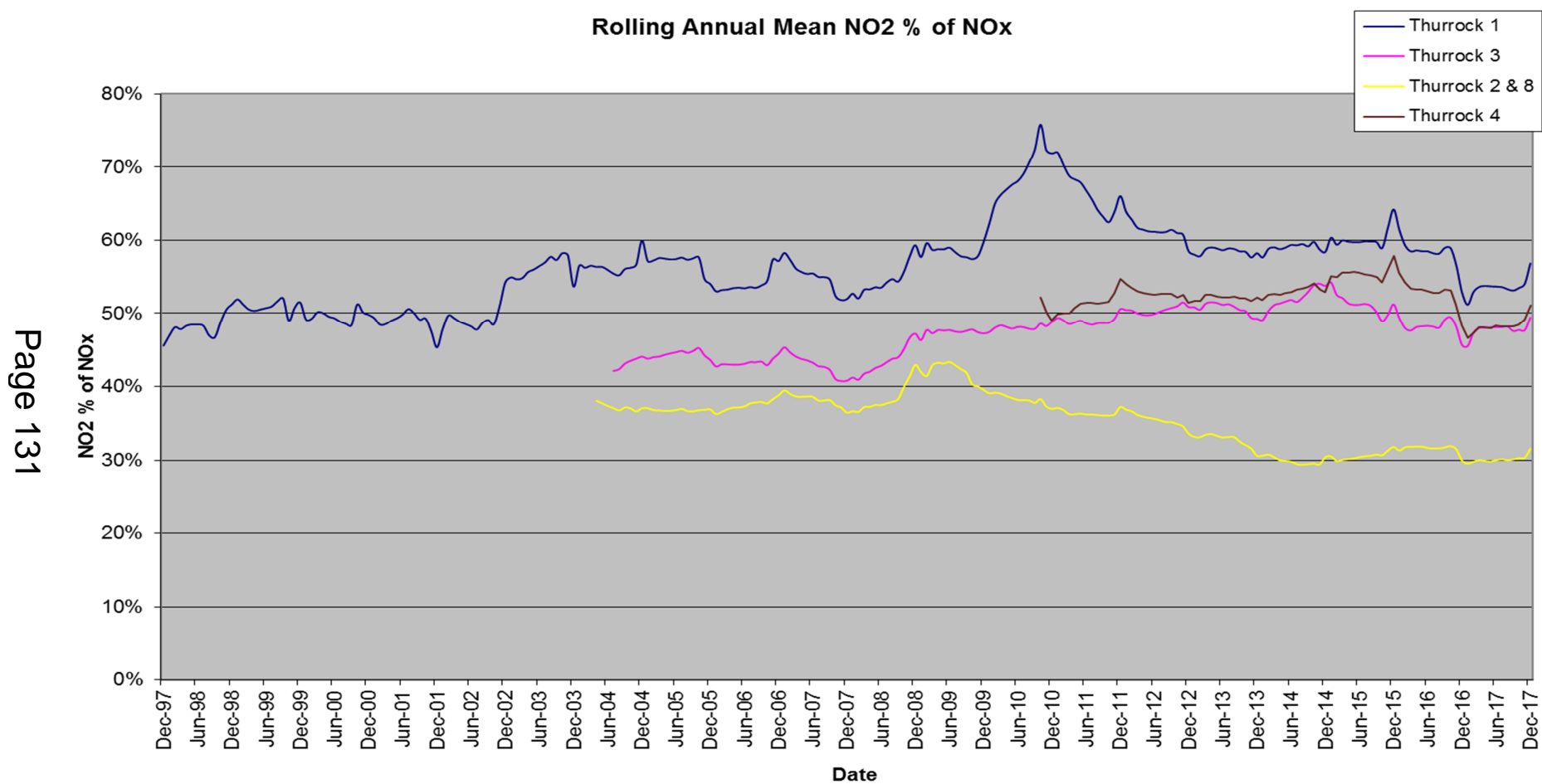


Table A.4 – 1-Hour Mean NO<sub>2</sub> Monitoring Results

Site ID	Site Type	Monitoring Type	Valid Data Capture for Monitoring Period (%) <sup>(1)</sup>	Valid Data Capture 2017 (%) <sup>(2)</sup>	NO <sub>2</sub> 1-Hour Means > 200µg/m <sup>3</sup> <sup>(3)</sup>				
					2013	2014	2015	2016	2017
Thurrock 1	Urban Background	Automatic	97.7	97.7	0	0	0	0	0
Thurrock 3	Roadside	Automatic	98.9	98.9	0	0	0	0	0
Thurrock 4	Roadside	Automatic	96.8	96.8	0	0	0	0	0
Thurrock 8	Roadside	Automatic	97.9	97.9	5	5	0	1	2

**Notes:**

Exceedances of the NO<sub>2</sub> 1-hour mean objective (200µg/m<sup>3</sup> not to be exceeded more than 18 times/year) are shown in **bold**.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

(3) If the period of valid data is less than 85%, the 99.8<sup>th</sup> percentile of 1-hour means is provided in brackets.

Figure A.4 – Trends in Number of NO<sub>2</sub> 1-Hour Means > 200µg/m<sup>3</sup>

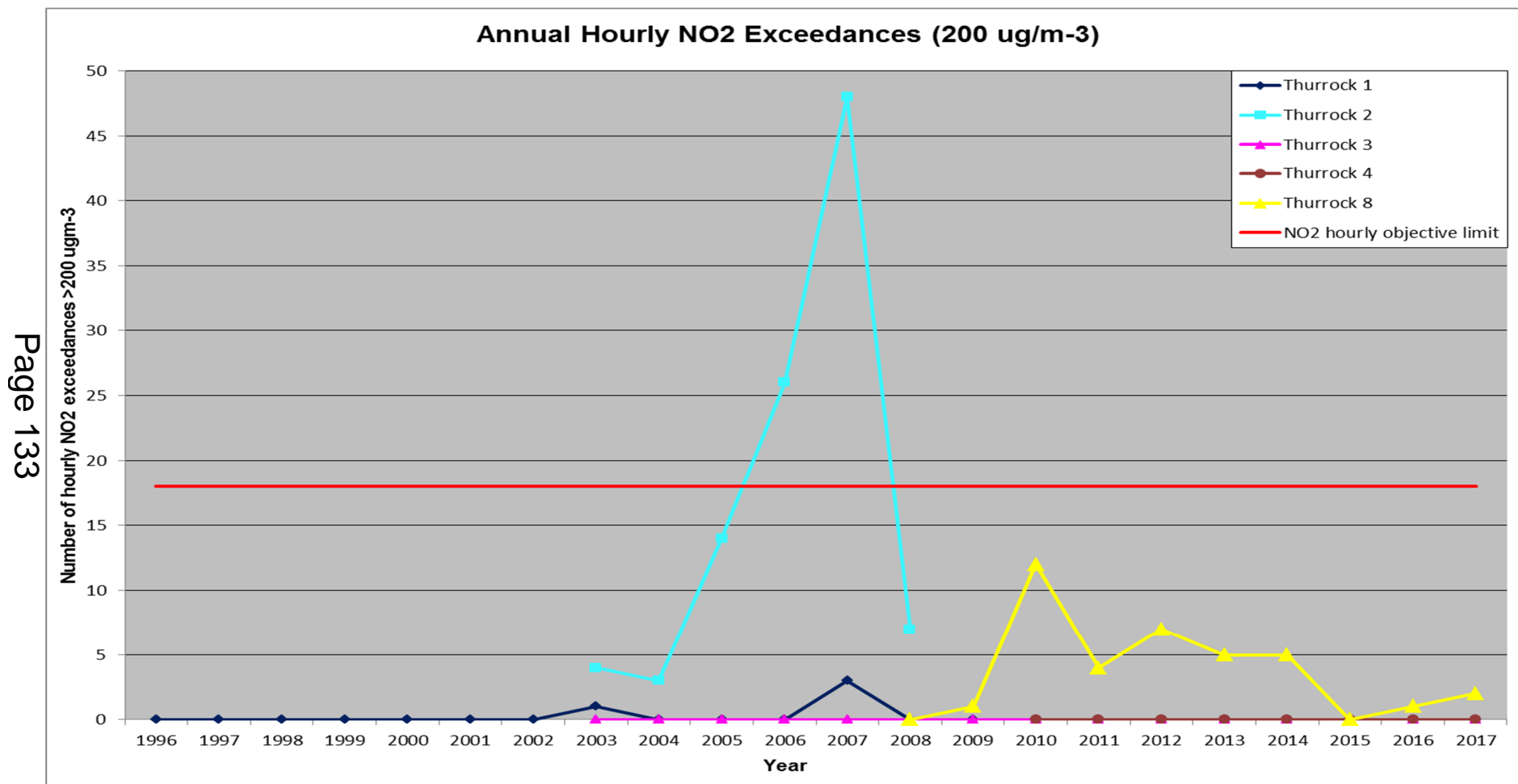


Table A.5 – Annual Mean PM<sub>10</sub> Monitoring Results

Site ID	Site Type	Valid Data Capture for Monitoring Period (%) <sup>(1)</sup>	Valid Data Capture 2017 (%) <sup>(2)</sup>	PM <sub>10</sub> Annual Mean Concentration (µg/m <sup>3</sup> ) <sup>(3)</sup>				
				2013	2014	2015	2016	2017
Thurrock 1	Urban Background	98.3	98.3	19.16	19.28	17.08	17.27	18.21
Thurrock 3	Roadside	66.59	66.59	24.33	19.76	17.14 <sup>(3)</sup>	20.1 <sup>(1)</sup>	20.3 <sup>(3)</sup>
Thurrock 8	Roadside	98.85	98.85	27.43	26.83	24.87	24.75	25.1

☒ Annualisation has been conducted where data capture is <75%

**Notes:**

Exceedances of the PM<sub>10</sub> annual mean objective of 40µg/m<sup>3</sup> are shown in **bold**.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

(3) All means have been “annualised” as per Boxes 7.9 and 7.10 in LAQM.TG16, valid data capture for the full calendar year is less than 75%. See Appendix C for details.



Figure A.5 – Trends in Annual Mean PM<sub>10</sub> Concentrations

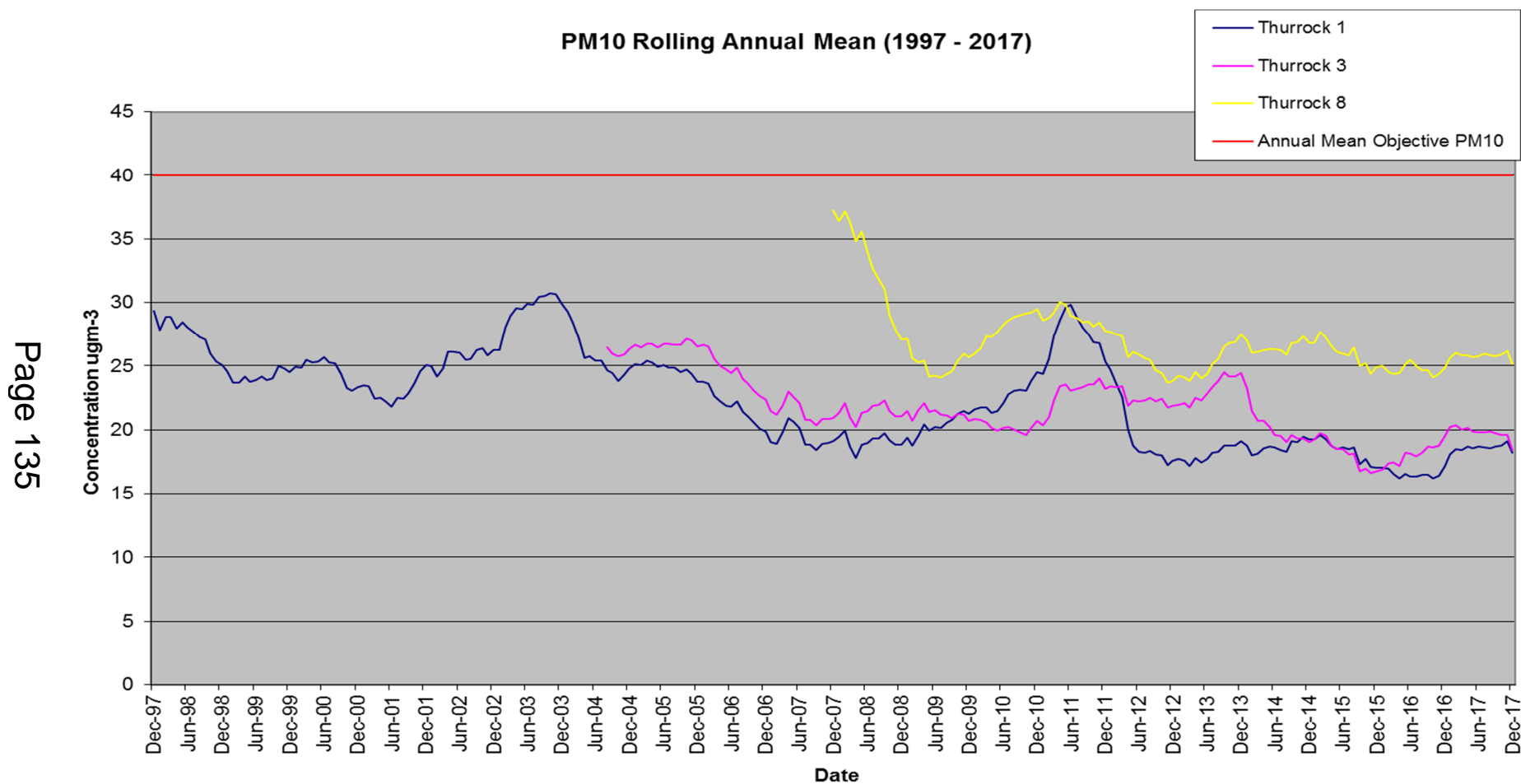


Table A.6 – 24-Hour Mean PM<sub>10</sub> Monitoring Results

Site ID	Site Type	Valid Data Capture for Monitoring Period (%) <sup>(1)</sup>	Valid Data Capture 2017 (%) <sup>(2)</sup>	PM <sub>10</sub> 24-Hour Means > 50µg/m <sup>3</sup> <sup>(3)</sup>				
				2013	2014	2015	2016	2017
Thurrock 1	Urban Background	98.3	98.3	4	11	2	4	5
Thurrock 3	Roadside	66.59	66.59	16	9	<b>[2]*</b> (29.5) <sup>(3)</sup>	<b>[4]*</b> (38.8) <sup>(3)</sup>	<b>[5]*</b> (39.03) <sup>(3)</sup>
Thurrock 8	Roadside	98.85	98.85	21	22	22	11	12

**Notes:**

Exceedances of the PM<sub>10</sub> 24-hour mean objective (50µg/m<sup>3</sup> not to be exceeded more than 35 times/year) are shown in **bold**.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

(3) If the period of valid data is less than 85%, the 90.4<sup>th</sup> percentile of 24-hour means is provided in brackets.

**[ ]\*** indicates number of daily exceedances [but is below level of data capture required]

( ) indicates 90.41th percentile values

Figure A.6 – Trends in the Number of 24-Hour Mean PM<sub>10</sub> Results >50µg/m<sup>3</sup>

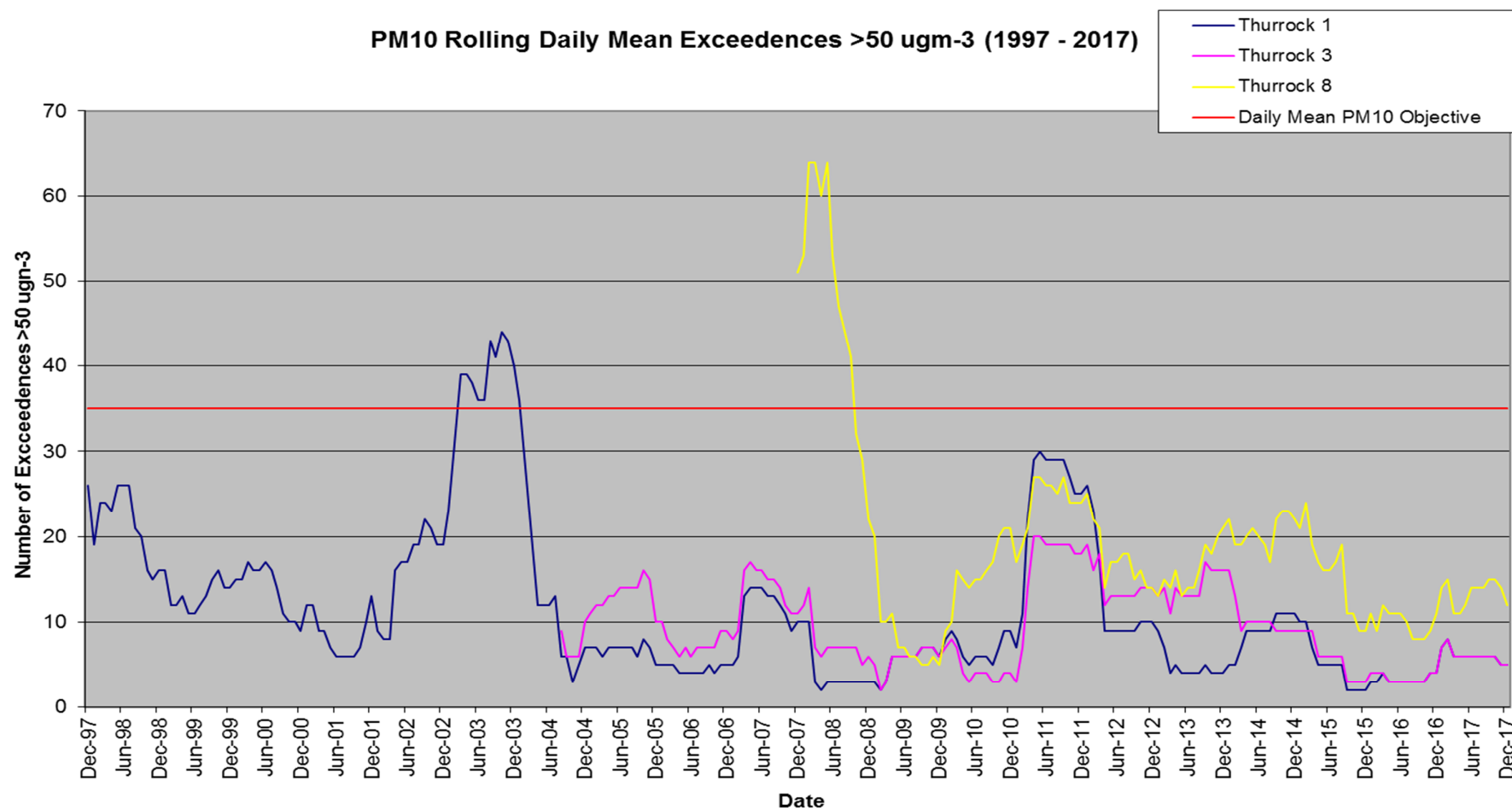


Table A.7 – Annual Mean PM<sub>2.5</sub> Monitoring Results

Site ID	Site Type	Valid Data Capture for Monitoring Period (%) <sup>(1)</sup>	Valid Data Capture 2017 (%) <sup>(2)</sup>	PM <sub>2.5</sub> Annual Mean Concentration (µg/m <sup>3</sup> ) <sup>(3)</sup>				
				2013	2014	2015	2016	2017
Thurrock 3	Roadside	90.48	90.48	14.07	14.23	9.84	13.41	11.05

☐ Annualisation has been conducted where data capture is <75

**Notes:**

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

(3) All means have been “annualised” as per Boxes 7.9 and 7.10 in LAQM.TG16, valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Figure A.7 – Trends in Annual Mean PM<sub>2.5</sub> Concentrations

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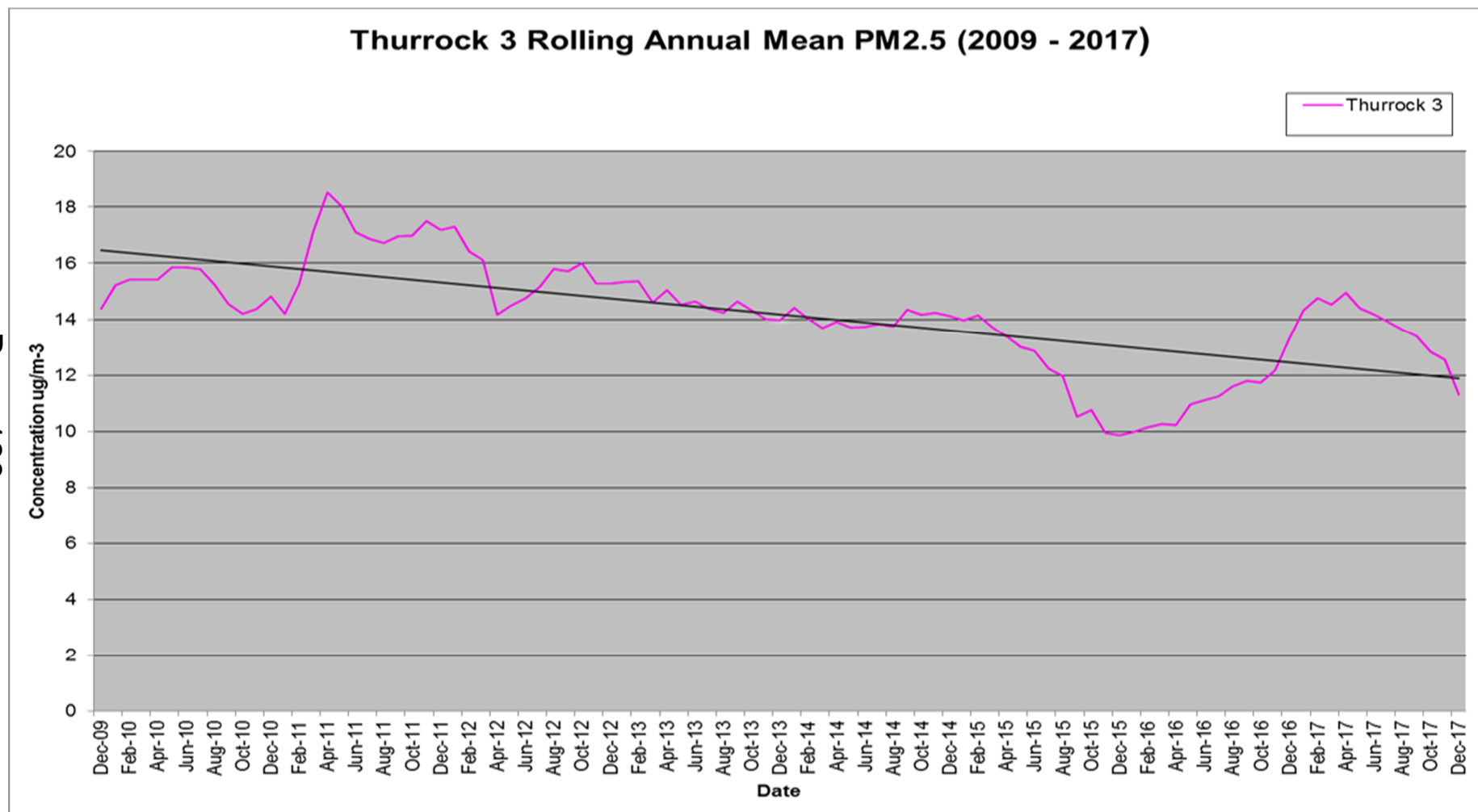


Table A.8 – SO<sub>2</sub> Monitoring Results

Site ID	Site Type	Valid Data Capture for monitoring Period (%) <sup>(1)</sup>	Valid Data Capture 2017 (%) <sup>(2)</sup>	Number of Exceedances 2017 (percentile in bracket) <sup>(3)</sup>		
				15-minute Objective (266 µg/m <sup>3</sup> )	1-hour Objective (350 µg/m <sup>3</sup> )	24-hour Objective (125 µg/m <sup>3</sup> )
Thurrock 1	Urban Background	96.24	96.24	0	0	0

**Notes:**

Exceedances of the SO<sub>2</sub> objectives are shown in **bold** (15-min mean = 35 allowed a year, 1-hour mean = 24 allowed a year, 24-hour mean = 3 allowed a year)

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

(3) If the period of valid data is less than 85%, the relevant percentiles are provided in brackets.

Figure A.8 – Trends in SO<sub>2</sub> Concentrations

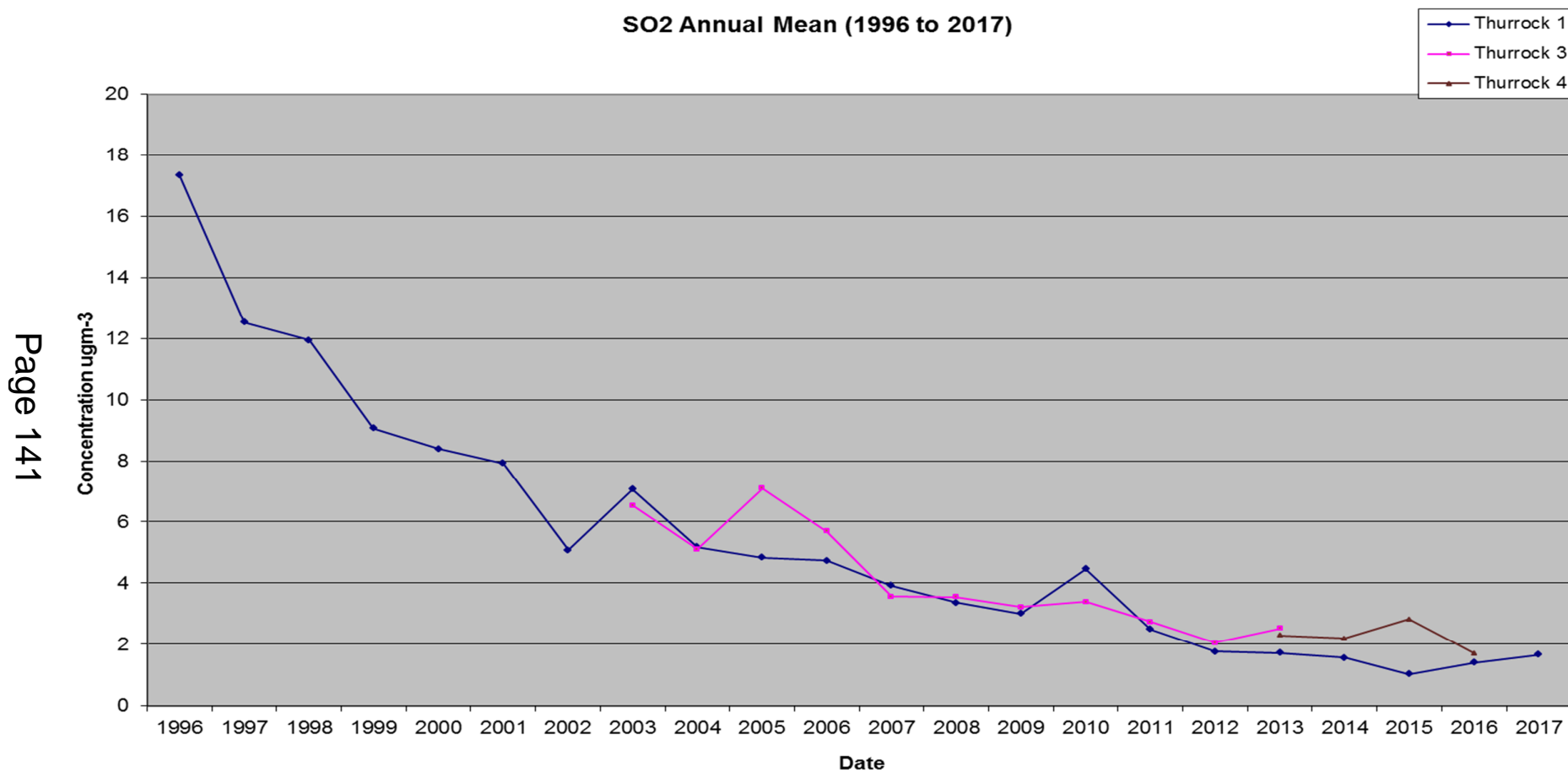
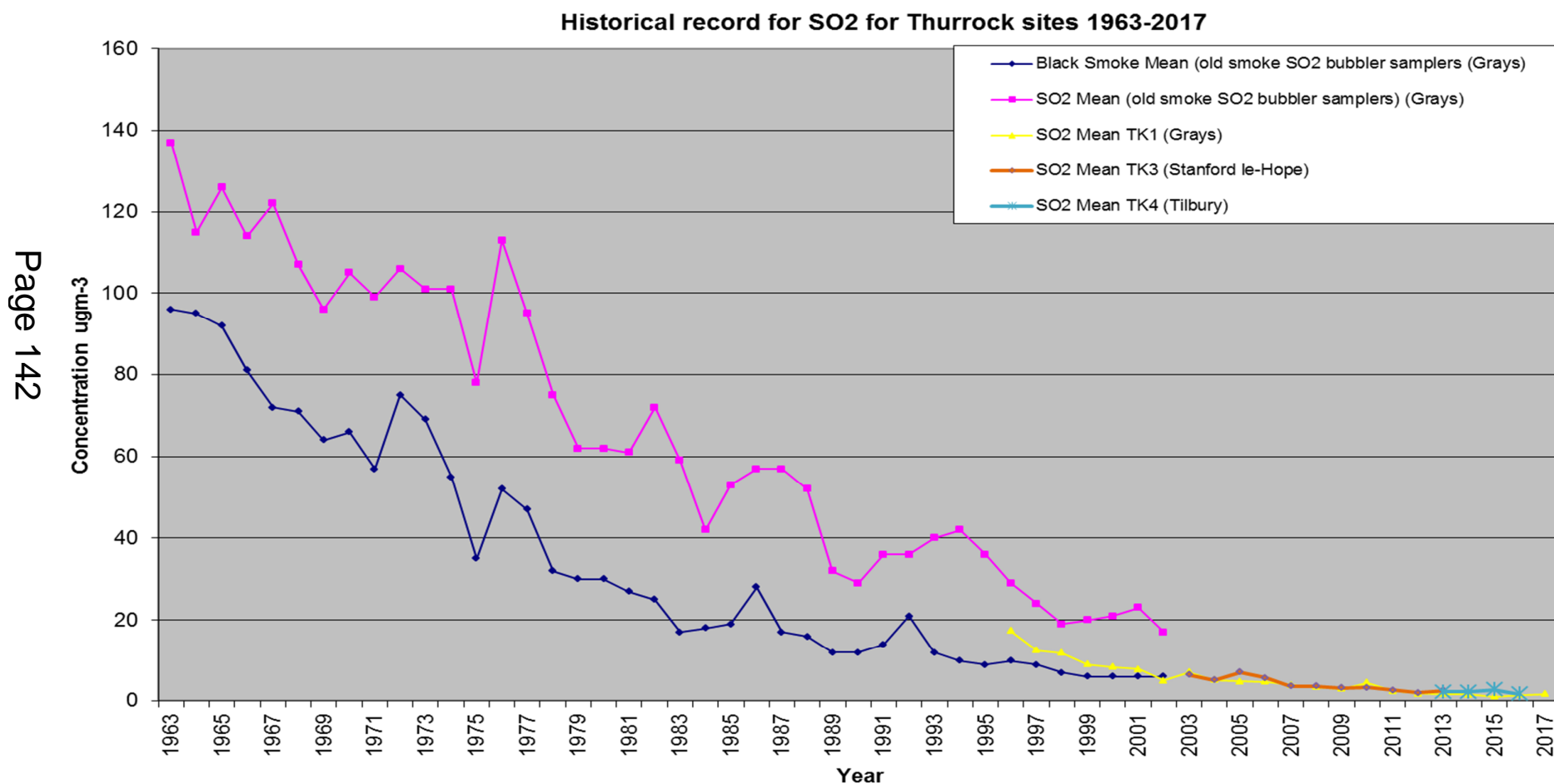


Figure A.9 – Long-Term Historical Trends in SO<sub>2</sub> & Black Smoke Concentrations for Thurrock (1963 – 2017)





## Appendix B: Full Monthly Diffusion Tube Results for 2017

Table B.1 – NO<sub>2</sub> Monthly Diffusion Tube Results - 2017

Site ID	NO <sub>2</sub> Mean Concentrations (µg/m <sup>3</sup> )												Annual Mean		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Raw Data	Bias Adjusted (factor) = 0.89 and Annualised <sup>(1)</sup>	Distance Corrected to Nearest Exposure <sup>(2)</sup>
RAR	92.05	70.69	73.23	71.12	56.19	57.17	57.26	BAD DATA	BAD DATA	BAD DATA	65.96	58.47	<b>66.90</b>	<b>59.54</b>	<b>40.5</b>
PRS	47.55	41.69	39.70	36.39	37.54	34.15	29.16	BAD DATA	33.80	27.87	38.10	32.52	36.22	32.24	27.4
WC	77.64	53.96	48.96	49.63	35.97	32.18	25.92	45.67	46.02	MISSING	48.32	42.73	<b>46.09</b>	<b>41.02</b>	29.7
JC	73.00	52.75	50.22	56.64	54.60	54.44	50.23	48.27	49.71	49.09	59.01	46.69	<b>53.72</b>	<b>47.81</b>	38.5
IBIS	65.68	59.90	47.03	58.88	42.71	55.85	55.31	48.75	49.98	53.49	53.57	48.91	<b>53.34</b>	<b>47.47</b>	location is classed as R.P.E
GDSO	40.49	33.14	33.19	30.86	25.19	27.40	26.20	27.56	27.62	30.49	38.06	38.89	31.59	28.12	location is classed as R.P.E
LT	76.99	71.13	77.57	76.75	42.05	MISSING	MISSING	MISSING	BAD DATA	BAD DATA	84.07	80.92	<b>72.78</b>	<b>57.25<sup>(3)</sup></b>	32.2
KCNO	48.67	43.51	38.47	40.13	27.45	33.40	32.78	36.33	37.05	35.73	43.35	45.67	38.55	34.31	location is classed as R.P.E
WT	58.08	50.18	48.50	45.18	37.20	41.07	36.58	37.05	44.40	38.72	52.83	49.44	<b>44.94</b>	39.99	35.7
HR	49.85	39.15	37.27	33.13	27.80	27.49	29.36	33.59	31.89	35.54	52.96	44.21	36.85	32.8	location is classed as

# Thurrock Council

															R.P.E
NAS2	70.09	60.40	59.33	52.33	44.82	58.65	53.54	BAD DATA	BAD DATA	BAD DATA	69.50	77.10	<b>60.64</b>	<b>53.97</b>	<b>46.1</b>
LRSS	57.16	50.50	46.16	43.07	43.98	43.00	37.59	BAD DATA	BAD DATA	BAD DATA	60.87	50.68	<b>48.11</b>	<b>42.82</b>	37.8
LRG	57.48	43.04	41.67	44.96	38.06	40.47	35.49	BAD DATA	BAD DATA	BAD DATA	47.08	47.83	<b>44.01</b>	39.17	32.50
ER	80.13	56.77	52.53	55.30	52.25	49.74	55.93	50.86	53.06	52.92	69.44	56.47	<b>57.12</b>	<b>50.83</b>	35.8
PS	41.51	35.65	33.94	27.54	22.20	22.42	22.02	25.11	27.67	BAD DATA	35.82	36.56	30.04	26.74	n/a
HL	59.91	40.95	38.93	37.67	31.98	26.71	27.93	32.34	34.81	38.13	51.67	51.67	39.39	35.06	30
NAS1	51.61	36.78	38.23	34.19	30.67	35.35	28.84	BAD DATA	BAD DATA	BAD DATA	41.84	42.98	37.83	33.67	location is classed as R.P.E
CR	54.02	40.29	39.59	34.72	30.79	32.77	27.11	30.96	34.11	31.45	40.06	43.04	36.58	32.55	n/a
SRG	53.09	33.88	32.42	30.83	30.49	27.91	23.17	26.96	30.01	27.19	41.75	38.67	33.03	29.4	28.1
NAS3	40.65	25.92	25.05	20.57	16.66	18.10	15.23	BAD DATA	BAD DATA	BAD DATA	43.54	34.37	26.68	23.74	location is classed as R.P.E
WES	52.26	37.75	37.29	30.36	29.89	29.26	27.63	31.56	32.53	32.48	37.36	35.20	34.46	30.67	23
B	33.69	23.13	19.84	14.01	15.58	14.81	12.37	15.01	MISSING	16.64	19.81	21.04	18.72	16.66	n/a
TL	56.93	41.96	39.66	38.19	31.40	35.74	37.22	35.22	38.53	37.45	48.17	42.37	<b>40.24</b>	35.81	29.7
PKSL	45.46	33.49	33.54	34.54	27.42	28.97	24.55	25.48	29.54	31.13	39.01	30.68	31.98	28.47	n/a
SL	46.30	33.77	30.03	24.88	22.42	22.79	21.36	26.45	28.10	29.17	37.68	34.66	29.80	26.52	n/a
M (triplicate average)	47.11	31.67	30.72	31.17	26.38	27.96	22.91	BAD DATA	BAD DATA	BAD DATA	40.25	36.71	32.76	28.3	24.8
FRC	56.27	42.76	38.08	32.75	30.15	32.81	26.07	31.32	33.03	29.66	42.31	42.78	36.50	32.48	location is classed as R.P.E
TILA	70.12	46.01	43.98	44.75	31.40	35.74	37.22	MISSING	43.72	46.34	62.90	55.15	<b>47.03</b>	<b>41.86</b>	33.6
TILB	61.55	51.81	50.29	41.95	35.01	41.03	36.51	40.84	45.94	46.92	67.28	MISSING	<b>47.19</b>	38.5	37

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TILC	68.97	49.19	47.25	MISSING	34.70	36.46	38.60	32.48	39.04	44.75	64.70	52.09	<b>46.20</b>	<b>41.12</b>	24.1
TILD	55.91	41.94	42.00	37.12	34.05	35.67	32.21	32.65	41.86	35.96	58.85	52.73	<b>41.75</b>	37.15	30.3
TILE	56.76	39.88	43.02	35.75	31.10	35.07	34.46	34.75	34.68	41.42	53.24	47.75	<b>40.66</b>	36.18	30.8
TK4 (A&B) duplicate average	51.00	37.75	38.68	33.94	29.13	31.78	29.76	33.30	32.17	34.54	36.49	36.49	35.42	30.1	location is classed as R.P.E
PBP	52.97	47.93	45.44	41.09	33.87	36.99	30.99	BAD DATA	BAD DATA	BAD DATA	48.15	43.23	<b>42.30</b>	37.64	location is classed as R.P.E
PBPA	53.06	44.11	36.62	40.60	31.03	30.48	31.40	BAD DATA	BAD DATA	BAD DATA	36.71	40.80	38.31	34.1	location is classed as R.P.E
LYD	50.20	40.12	38.54	21.02	33.96	33.68	28.09	BAD DATA	BAD DATA	BAD DATA	43.15	36.48	36.14	32.16	location is classed as R.P.E
AVSL	62.95	49.44	47.60	51.59	50.62	46.49	42.78	36.74	36.61	47.06	56.40	51.73	<b>48.33</b>	<b>43.02</b>	location is classed as R.P.E
AVHS	64.83	41.89	42.29	38.52	42.96	39.00	31.11	32.36	36.58	36.39	44.00	35.18	<b>40.43</b>	35.98	35.4
SOAA	46.19	40.92	34.16	30.97	30.98	26.06	23.88	29.10	19.63	29.73	37.45	38.15	32.27	28.72	location is classed as R.P.E
TSR	48.03	34.65	35.70	29.64	30.49	27.91	23.17	27.35	27.22	32.59	37.73	36.83	32.61	29.02	n/a
DR	45.01	38.68	33.73	31.80	25.74	24.91	23.39	26.23	33.65	28.72	37.59	37.14	32.22	28.67	location is classed as R.P.E
LRARN	47.56	41.18	40.44	41.67	32.89	29.53	33.68	BAD DATA	BAD DATA	BAD DATA	38.06	38.53	38.17	33.97	location is classed as R.P.E
LRARS	48.31	38.33	36.53	34.81	30.92	29.33	26.65	BAD DATA	BAD DATA	BAD DATA	37.17	35.40	35.27	31.39	location is classed as R.P.E
LRARMN	61.78	49.09	48.70	50.56	43.29	38.67	36.45	BAD DATA	BAD DATA	BAD DATA	47.99	46.39	<b>46.99</b>	<b>41.82</b>	37.3

# Thurrock Council

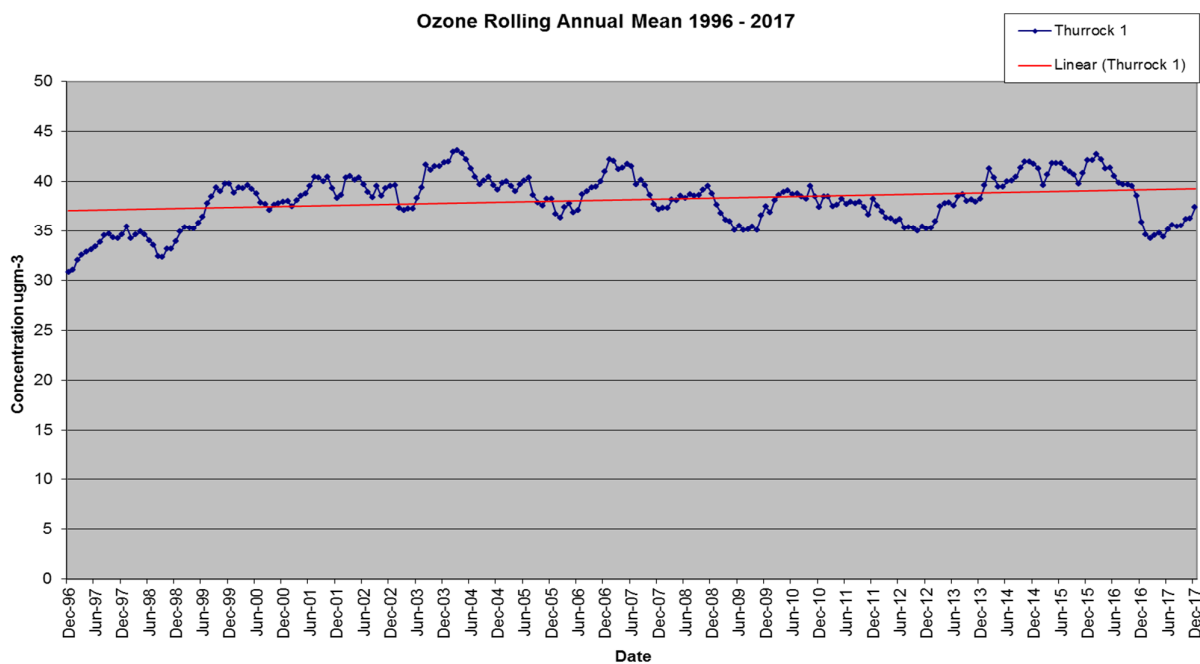
LRARMS	61.98	48.32	43.74	51.73	34.30	39.16	35.18	BAD DATA	BAD DATA	BAD DATA	47.02	44.06	45.05	40.1	35.5
JRP	49.72	33.10	29.96	28.28	24.89	25.83	22.18	21.31	26.14	29.18	30.07	28.92	29.13	25.93	n/a
ACHL	NO DATA	NO DATA	NO DATA	NO DATA	31.34	31.96	26.63	30.33	36.24	37.58	55.78	55.88	38.22	36.99 <sup>(3)</sup>	38.2
CC	NO DATA	NO DATA	NO DATA	NO DATA	25.06	15.01	17.30	18.35	26.48	27.27	32.54	32.33	24.29	23.52 <sup>(3)</sup>	location is classed as R.P.E
ERFA	NO DATA	NO DATA	NO DATA	NO DATA	32.41	35.93	31.25	30.61	28.03	40.61	47.49	42.24	36.07	34.92 <sup>(3)</sup>	location is classed as R.P.E
ERFB	NO DATA	NO DATA	NO DATA	NO DATA	35.29	35.35	34.12	34.25	36.98	36.13	44.20	38.13	36.81	35.63 <sup>(3)</sup>	location is classed as R.P.E
ERTM	NO DATA	NO DATA	NO DATA	NO DATA	39.69	36.91	34.60	31.32	36.50	36.96	44.56	42.75	37.91	36.7 <sup>(3)</sup>	location is classed as R.P.E
NC	NO DATA	NO DATA	NO DATA	NO DATA	32.33	38.98	33.50	BAD DATA	BAD DATA	BAD DATA	46.80	43.69	39.06	37.75 <sup>(3)</sup>	location is classed as R.P.E
HD	NO DATA	NO DATA	NO DATA	NO DATA	32.34	34.06	30.97	34.59	33.22	31.34	52.70	48.83	37.26	36.06 <sup>(3)</sup>	location is classed as R.P.E
GRPL	NO DATA	NO DATA	NO DATA	NO DATA	30.73	31.40	31.56	29.19	31.29	36.52	46.98	43.87	35.19	34.07 <sup>(3)</sup>	location is classed as R.P.E
PIH	NO DATA	NO DATA	NO DATA	NO DATA	41.04	33.38	27.00	BAD DATA	BAD DATA	BAD DATA	35.80	34.11	34.27	33.11 <sup>(3)</sup>	location is classed as R.P.E
WCFA	NO DATA	NO DATA	NO DATA	NO DATA	35.97	32.18	25.92	30.13	33.57	33.36	37.31	36.53	33.12	32.06 <sup>(3)</sup>	location is classed as R.P.E
THA	NO DATA	NO DATA	NO DATA	NO DATA	BAD DATA	39.50	BAD DATA	35.89	32.76	MISSING	34.60	35.12	35.57	31.8 <sup>(3)</sup>	location is classed as R.P.E
THB	NO DATA	NO DATA	NO DATA	NO DATA	35.49	34.28	27.43	30.20	30.28	30.04	34.07	36.00	32.22	31.19 <sup>(3)</sup>	location is classed as

															R.P.E
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	-------

- ☒ Local bias adjustment factor used
- ☒ National bias adjustment factor used
- ☒ Annualisation has been conducted where data capture is <75%
- ☒ Where applicable, data has been distance corrected for relevant exposure

**Notes:**  
 Exceedances of the NO<sub>2</sub> annual mean objective of 40µg/m<sup>3</sup> are shown in **bold**.  
 NO<sub>2</sub> annual means exceeding 60µg/m<sup>3</sup>, indicating a potential exceedance of the NO<sub>2</sub> 1-hour mean objective are shown in **bold and underlined**.  
 (1) See Appendix C for details on bias adjustment and annualisation.  
 (2) Distance corrected to nearest relevant public exposure.  
 (3) (Yellow) low data capture less than 75%  
 R.P.E = Relevant Public Exposure

**Figure A.10 – Long –Term Ozone (O<sub>3</sub>) Rolling Annual Mean for Thurrock 1  
Grays AURN Site**



## Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC

There are a number of different organisations responsible for carrying out QA/QC at various stations and equipment at Thurrock's automatic monitoring sites.

For Thurrock 1, Grays AURN site, the QA/QC is managed by Bureau Veritas (BV) and by Ricardo AEA, the site Audits are conducted by Ricardo AEA. Service contracts do vary, all the gas analysers are maintained by Enviro Technology, and the PM<sub>10</sub> FDMs is maintained by Air Quality Monitors.

For Thurrock 3, Stanford-le-Hope site, this is an affiliated site on the AURN network and is also part of the London Air Quality Network (LAQN). The QA/QC is managed by Environmental Research Group (ERG) at King College London (KCL), the site Audits are conducted by Ricardo AEA. The Service contracts are managed by Enviro Technology.

For Thurrock 4, Tilbury site, this is also part of the London Air Quality Network (LAQN). The QA/QC is managed by Environmental Research Group (ERG) at King College London (KCL). The site Audits are conducted by Ricardo AEA. The Service contracts are managed by Enviro Technology.

For Thurrock 8, Purfleet site, this is also part of the London Air Quality Network (LAQN). The QA/QC is managed by Environmental Research Group (ERG) at King College London (KCL). The site Audits are conducted by the National Physical Laboratory (NPL). The Service contracts are managed by Enviro Technology.

Calibrations for all sites are done every fortnight by Thurrock Council Environmental Health Officers & the Air Quality Officer.

### QA/QC of Diffusion Tube Monitoring

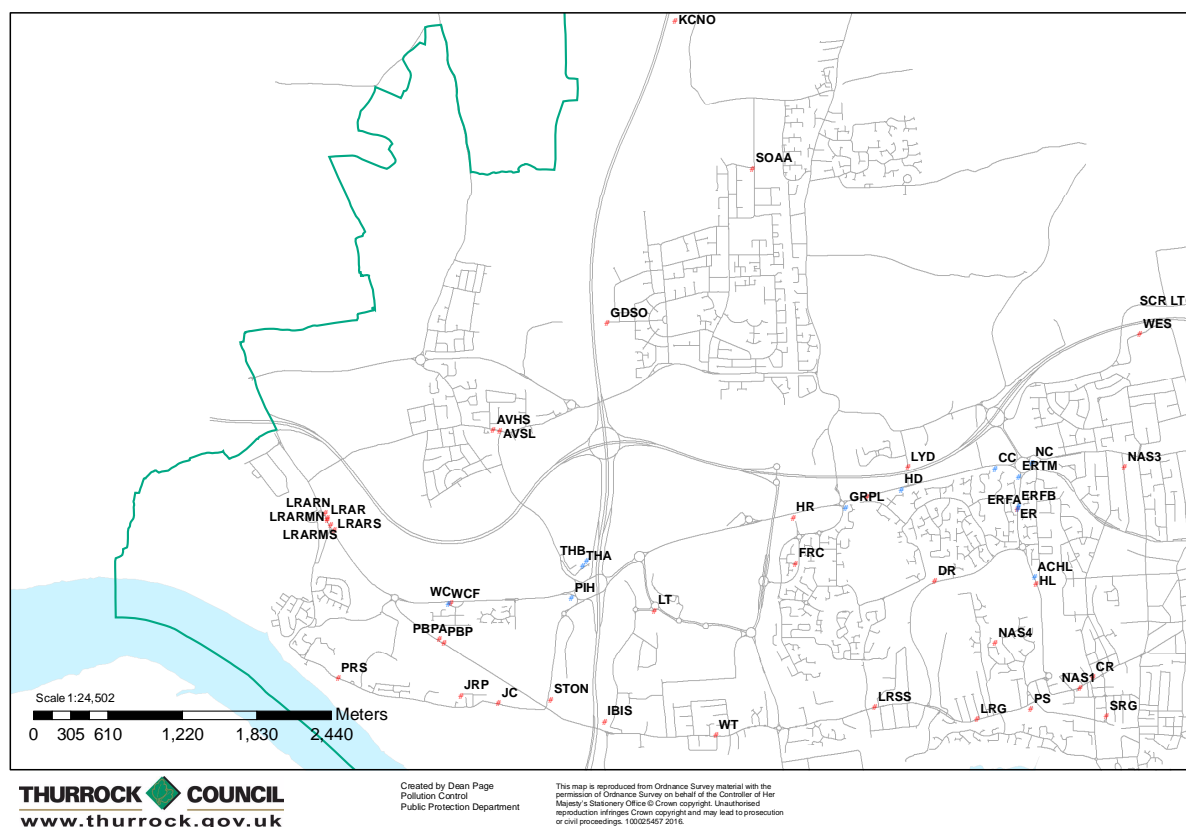
Diffusion Tube studies for Gradko analysis using 20% TEA in water over 2017 demonstrated overall Good Precision

<https://laqm.defra.gov.uk/assets/tubeprecision2017version0618finalreduced.pdf>

<https://laqm.defra.gov.uk/assets/AIR-PT-Rounds-13-to-24-Apr-2016-Feb-2018.pdf>

## Appendix D: Map(s) of Monitoring Locations and AQMAs

Figure D.1: NO<sub>2</sub> Diffusion Tube Locations (West Thurrock)



\*NAS2 site text is not shown as it sits beneath GRPL site on the map only red marker is visible

\*\*New sites marked in (Blue) 2017&18

\*\*\*Older Long-term sites marked in (Red) Pre-2017





Figure D.4: Automatic Monitoring sites location (Thurrock)

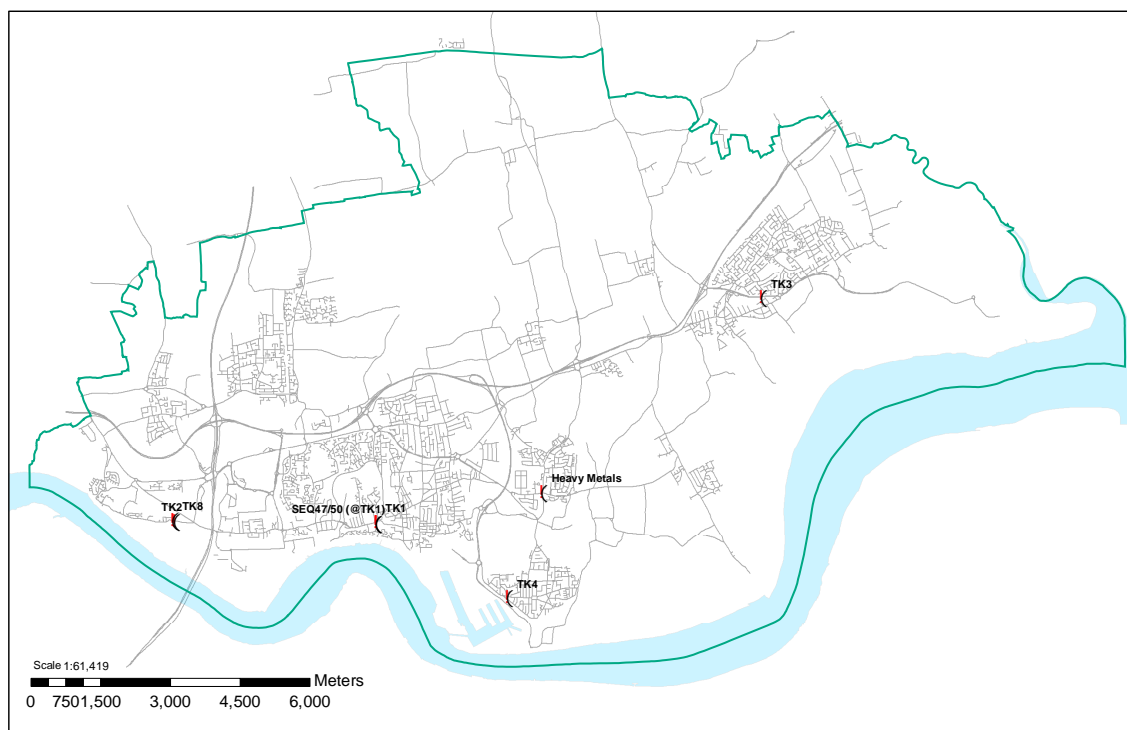
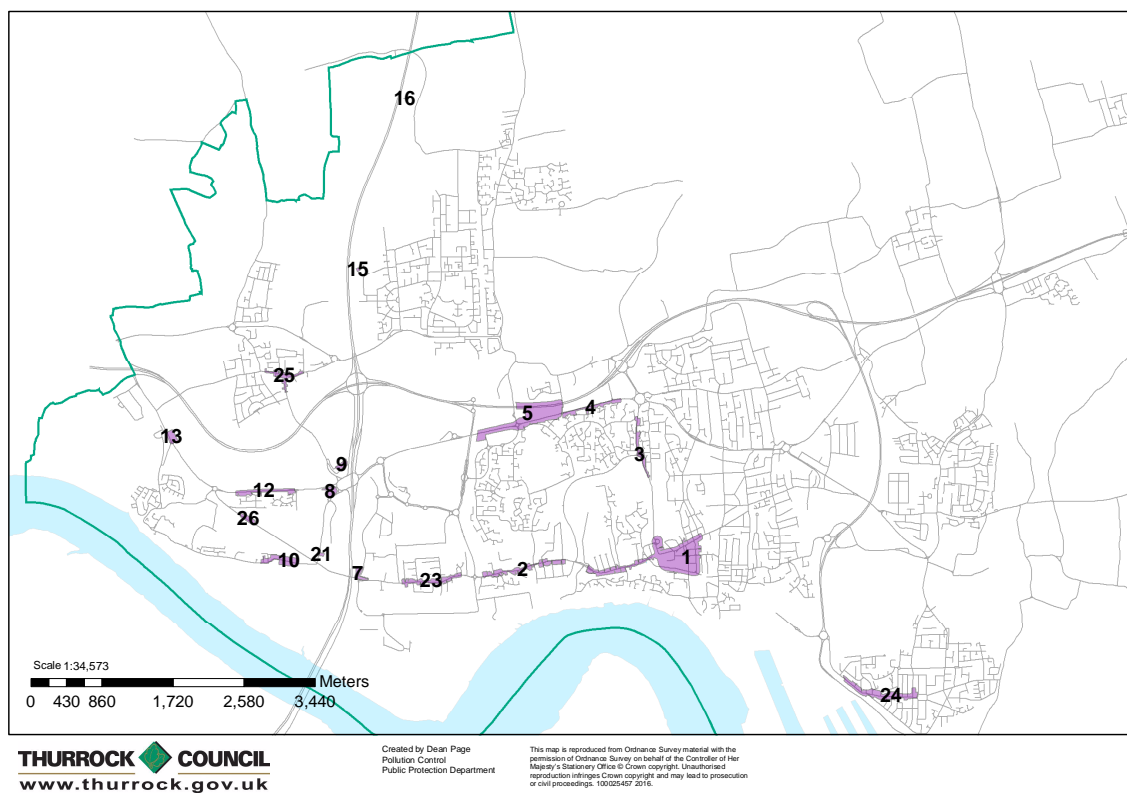


Figure D.5: Map of AQMA locations in Thurrock



## Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England

Pollutant	Air Quality Objective <sup>4</sup>	
	Concentration	Measured as
Nitrogen Dioxide (NO <sub>2</sub> )	200 µg/m <sup>3</sup> not to be exceeded more than 18 times a year	1-hour mean
	40 µg/m <sup>3</sup>	Annual mean
Particulate Matter (PM <sub>10</sub> )	50 µg/m <sup>3</sup> , not to be exceeded more than 35 times a year	24-hour mean
	40 µg/m <sup>3</sup>	Annual mean
Sulphur Dioxide (SO <sub>2</sub> )	350 µg/m <sup>3</sup> , not to be exceeded more than 24 times a year	1-hour mean
	125 µg/m <sup>3</sup> , not to be exceeded more than 3 times a year	24-hour mean
	266 µg/m <sup>3</sup> , not to be exceeded more than 35 times a year	15-minute mean

<sup>4</sup> The units are in microgrammes of pollutant per cubic metre of air (µg/m<sup>3</sup>).

## Glossary of Terms

Abbreviation	Description
ADMS	Atmospheric Dispersion Model System
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQHSD	Air Quality & Health Strategy Document
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
AQO's	Air Quality Objectives
ASR	Air Quality Annual Status Report
AURN	Automatic Urban & Rural network
BV	Bureau Veritas
CERC	Cambridge Environmental Research Consultants
CPZ	Controlled Parking Zone
CTF	Congestion Task Force
Defra / DEFRA	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
DMRB	Design Manual for Roads and Bridges – Air quality screening tool produced by Highways England
EA	Environment Agency
ERG	Environmental Research Group
EU	European Union
FDMS	Filter Dynamics Measurement System
FQP	Freight Quality Partnership
HGV	Heavy Goods Vehicles

IPPC	Integrated Pollution Prevention & Control
KCL	Kings College London
LAQM	Local Air Quality Management
LAQM.PG16	Local Air Quality Management – Policy Guidance 2016
LAQM.TG16	Local Air Quality Management – Technical Guidance 2016
LAQN	London Air Quality Network
LAPC	Local Air Pollution Control
LA-IPPC	Local Authority - Integrated Pollution Prevention & Control
NCAD	National Clean Air Day
NO <sub>2</sub>	Nitrogen Dioxide
NO <sub>x</sub>	Nitrogen Oxides
NPL	National Physical Laboratory
PM <sub>10</sub>	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
PM <sub>2.5</sub>	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
QA/QC	Quality Assurance and Quality Control
SEAT	South Essex Active Travel
SO <sub>2</sub>	Sulphur Dioxide
STP	School Travel Plan
UTMC	Urban Traffic Management Control
VMS	Variable Message Signing

## References

Defra, 2016. - Local Air Quality Management, Technical Guidance LAQM.TG16.

Defra, London.

Defra, 2016. - Local Air Quality Management, Policy Guidance LAQM. PG16. Defra, London.

Thurrock (2017). - Local Air Quality Management – Annual Status Report, 2017

Thurrock (2016). - Local Air Quality Management - Detailed Assessment for NO<sub>2</sub> & PM<sub>10</sub>. 2016

Thurrock (2016). - Air Quality & Health Strategy, 2016

**Cleaner Greener and Safer Overview and Scrutiny Committee  
Work Programme  
2018/19**

Dates of Meetings: 11 June 2018, 5 July 2018, 4 October 2018, 6 December 2018, 7 February 2019

Topic	Lead Officer	Requested by Officer/Member
<b>11 June 2018 - CANCELLED</b>		
<b>5 July 2018</b>		
Recycling - Current position and planned actions	Julie Rogers	Officers
Linford Household Waste & Recycling Centre - 12 month update following in-source	Beau Stanford-Francis	Officers
<b>4 October 2018</b>		
Thurrock Community Safety Partnership Update Report	Michelle Cunningham	Members
Environment Enforcement Update	Phil Carver	Officers
Linford Household Waste & Recycling Centre – Site Redevelopment Update	Daren Spring	Officers
<b>6 December 2018</b>		

Fees & Charges Pricing Strategy 2019/20	Andrew Austin / appropriate officer	Officers
Grounds Maintenance, Street Cleansing and Fly Tipping Update	Daren Spring	Members
Tree Planting Strategy	Daren Spring	Officers
Gang Related Violence Update Report	Michelle Cunningham	Members
<b>7 February 2019</b>		
Violence Against Women and Girls Strategy Report	Michelle Cunningham	Members
Recycling Service Update	Claire Harvey	Members
Bartec Update	Marcelle Puttergill	Members
Refuse Collections Update	Claire Harvey	Members
Update on Air Quality and Health	Mat Kiely	Members