Air Quality Annual Status Report 2020

Borough Council of
King's Lynn &
West Norfolk

Background 1/2

- The Air Quality Annual Status Report (ASR) has been completed
- The ASR reviews and assess air quality across the district including the data collected during 2019 and associated work
- The ASR has been completed following the legal requirements of the Part 4 Environment Act 1995 and the Secretary of States Statutory Guidance DEFRA AQ Technical Guidance TG (16) and Policy Guidance PG (16)
- Review and assessment of NO_2 and PM_{10}, no further review required for SO_2, benzene, 1,3 Butadiene & carbon monoxide
- $PM_{2.5}$ not included in LAQM review and assessment

Background 2/2

- The ASR has been reviewed and signed off by Director of Public Health, Norfolk County Council
- The ASR has been sent to DEFRA for auditing and approval
- The ASR has been published on the Borough Council website

National Air Quality Objectives

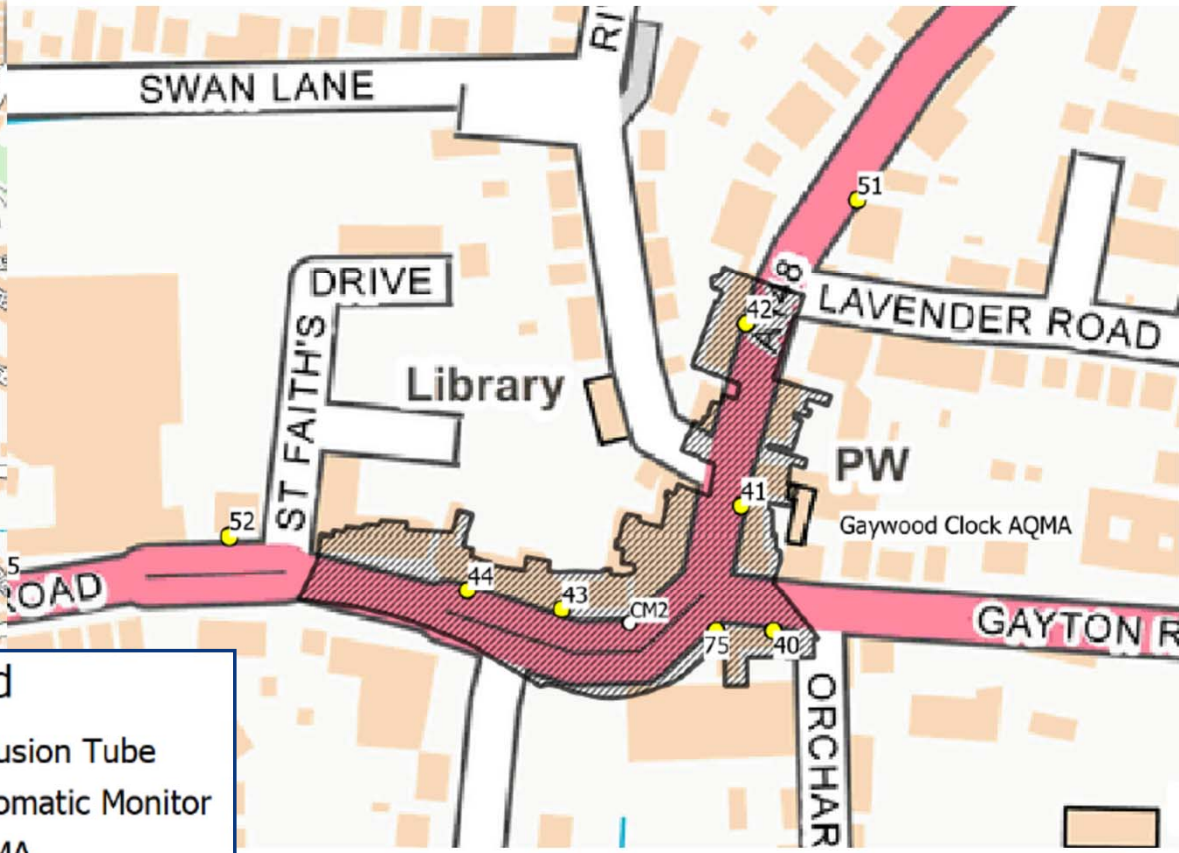
Pollutant	Air Quality Objective	
	Concentration	Measured as
Nitrogen Dioxide (NO_2)	200µg/m^3 not to be exceeded more than 18 times a year	1-hour mean
	40µg/m^3	Annual mean
Particulate Matter (PM_{10})	50µg/m^3, not to be exceeded more than 35 times a year	24-hour mean
	40µg/m^3	Annual mean

Nitrogen Dioxide

- There are two Air Quality Management Areas (AQMA) in King's Lynn: the Town Centre AQMA & Gaywood Clock AQMA, both declared due to exceedances of the Nitrogen Dioxide (NO_2) annual mean objective.
- Monitoring is completed using Diffusion Tubes at 69 sites across the Borough, and two automatic Air Quality Monitoring Stations on London Road, King's Lynn and Lynn Road, Gaywood, King's Lynn.

Air Quality Management Areas

- Due to exceedances of NO_2

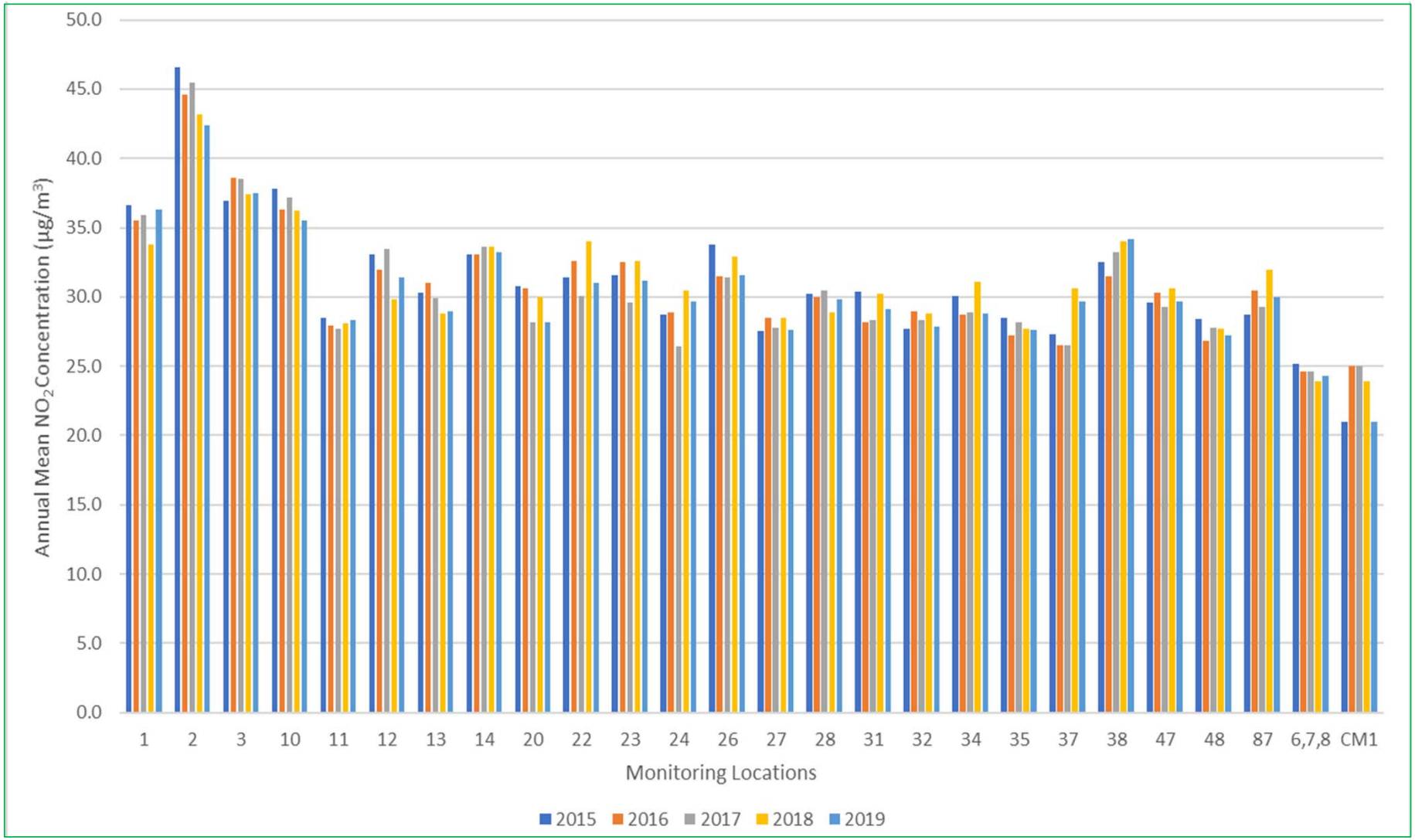


Nitrogen Dioxide Monitoring Equipment

NO_2 Results Summary

- NO_2 levels are generally stable, with small increases at some sites but with further reductions at others.
- Only one site in the Borough (located on Railway Road) now exceeds the annual mean objective with a level of 42.4 µg/m^3, reduced from 43.2 µg/m^3 the previous year. There has been a 5 year downward trend at this site.
- Only four other sites within the borough are within 10% of the annual mean objective. One of this sites is not a relevant receptor and is used to assess traffic flow/ impacts only on London Road, K/L.
- The bus station site is below 40 µg/m^3 annual mean limit, meaning the 1 hourly mean objective will not have been exceeded (the objective of interest at this site).

Town Centre AQMA NO_2 Trend 2015 to 2019



Gaywood Clock AQMA NO_2 Trend 2015 to 2019

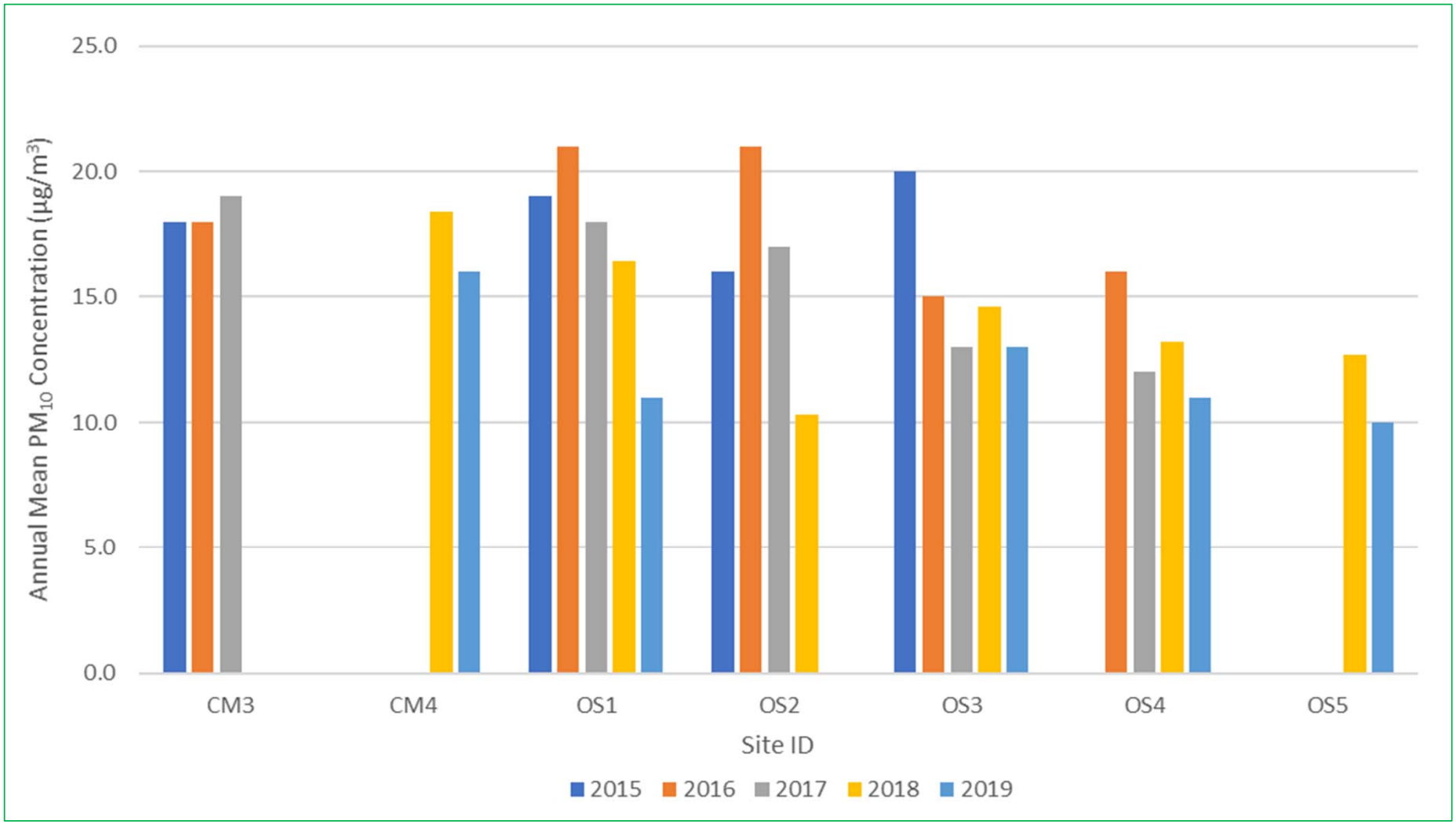
PM_{10} Monitoring Locations

- 1 Air Quality Monitoring Station
  in Stoke Ferry (relocated from North Lynn)
- 4 Osiris Dust Screening Units
  - Page Stair Lane, King's Lynn
  - Estuary Road, King's Lynn
  - Buckenham Drive, Stoke Ferry
  - Wretton Road, Stoke Ferry

Particulate Matter (PM_{10})

- Statutory Duty to review and assess PM_{10} (not $PM_{2.5}$).
- Main concerns are fugitive and point source emissions from industry.
- Detailed Assessment of Stoke Ferry included in the ASR. Results show that no exceedances of PM_{10} annual mean or 24 hour mean objectives.
- No need to declare AQMA for Stoke Ferry.
- No exceedances of the PM_{10} annual mean or 24 hour mean objectives at other monitoring locations.

PM_{10} Annual Mean Trends 2015 to 2019



Air Quality Action Plan

- Work continues to implement the AQAP
  - 61 planning applications were considered for air quality matters.
  - Officers participate in the King's Lynn Transport Strategy group where aspects of potential road layout changes are being considered.
  - A Local Cycling and Walking Implantation Plan is being drawn up as part of the emerging Town Investment Plan for King's Lynn.
  - A King's Lynn Car Parking Strategy is also being prepared to inform the Future High Street Fund proposals, King's Lynn Transport Strategy and the Town Investment Plan.

Defra TG(16) Screening Assessment

- An Air Quality Screening Assessment was undertaken in line with the screening methodology outlined within Chapter 7 of Defra TG(16) Guidance.
- No new sources of pollution were identified during the review, and no additional air quality monitoring is required within the borough.

Conclusions

- Generally NO_2 levels have stabilised with some slight increases at some sites, but also some reductions at others.
- Only one site in the Borough now exceeds, with four other within 10% of annual mean.
- PM_{10} levels are well below annual mean and 24 hour mean objectives.
- $PM_{2.5}$ data shows levels well below annual mean objective, but this is indicative data and not quantitative data.
- No changes to the existing AQMA boundaries are proposed, with no new AQMAs required in the borough.
- However if these trends continue, the London Road section of the Town Centre AQMA may be revoked in the near future.

Priorities for 2020/2021

- Continue to monitor NO2 concentrations throughout the Borough, notably within both AQMAs;
- Continue to monitor PM10 concentrations at current point sources;
- Regularly review the locations within the monitoring network to ensure that any hotspots are identified;
- Continue to participate with implementation of the King's Lynn Transport Study and the supporting dispersion modelling exercise; and
- Update the existing AQAP and the outcomes from the King's Lynn Transport Study.

Air Quality Information

- BCKLWN Air Quality Reports: https://www.west-norfolk.gov.uk/info/20137/air_quality/169/air_quality_information
- BCKLWN Air Quality Data: https://www.west-norfolk.gov.uk/info/20137/air_quality/171/air_pollution_levels
- Download the app (android & IOS)
- Visit Norfolk air quality network http://www.norfolkairquality.net/