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REPORT TO: Members' Library Service

MEETING DATE:

BY: Depute Chief Executive (Partnerships and Community

Services)

SUBJECT: Local Air Quality Management – Annual Progress Report

2018

1 PURPOSE

To advise East Lothian Council of the Local Air Quality Management - Annual Progress Report (APR), its findings and the comments from Scottish Government and the Scottish Environment Protection Agency (SEPA), as statutory consultee in terms of paragraph 1 of Schedule 11 to the Environment Act 1995.

2 RECOMMENDATIONS

- 2.1 Council is asked to:
- 2.1.1 Note the APR detailing that monitoring results from 2017 complied with all Air Quality Objectives (AQO) and there were no exceedances of any objectives, including the Nitrogen Dioxide (NO₂) Annual Mean AQO.
- 2.1.2 Note that although NO₂ levels within the Musselburgh High Street Air Quality Management Area (AQMA) did not exceed objectives, results at two monitoring locations remain close to the annual mean AQO.
- 2.1.3 Note that as further significant development is proposed for the Musselburgh conurbation, it is not appropriate to revoke the AQMA at this time.
- 2.1.4 Note the Scottish Environment Protection Agency (SEPA) and Scottish Government's commendation of the Council in its consideration of air quality through the planning system, especially given the Local Development Plan (LDP) identifies a significant amount of residential housing. Ensuring that air quality is given the appropriate level of consideration, particularly LDP preferred sites in the Musselburgh 'cluster' area, will be key to achieving and maintaining compliance with the air quality objectives in the AQMA and throughout East Lothian. These

- actions are also in line with the Scottish Governments Cleaner Air for Scotland A Road to a Healthier Future (CAFS) objectives in relation to place making.
- 2.1.5 Note that the Council is meeting its commitments to the CAFS programme via the Active Travel Improvement Plan and Green Travel Plan which is also supported by the development of the Climate Change and Adaptation
- 2.1.6 Note that that all local authorities with an AQMA will be required to go through the National Low Emissions Framework (NLEF), which is currently under development by Transport Scotland. An update on NLEF will be provided to Council on receipt of information and guidance.
- 2.2 Note SEPA and Scottish Government's support of the Council's approach in reviewing the diffusion tube network and commissioning diffusion tubes in areas where traffic flows may increase.

3 BACKGROUND

- 3.1 The Scottish Government requires each Council to submit an APR. This provides an overview of air quality in accordance with the standards set out in technical guidance.
- 3.2 The East Lothian Council APR contains detailed monitoring and technical information on air quality in the county and was submitted in accordance with the Scottish guidance. It has been approved by the Scottish Environment Protection Agency and the Scottish Government. The report is available as a background paper.
- 3.3 East Lothian Council considered the declaration of an Air Quality Management Area (AQMA) for the Nitrogen dioxide (NO₂) annual mean Air Quality Objective (AQO) after submission of the 2013 Progress Report if monitoring results obtained from new monitoring locations, in addition to existing monitoring locations, confirmed that the NO₂ annual mean AQO had been exceeded in Musselburgh High Street. In November 2013, following completion of the 2013 Progress Report, an AQMA was declared in Musselburgh in relation to breaches and likely breaches of the Nitrogen Dioxide annual mean air quality objective. The extent of the AQMA is High Street, Musselburgh (A199) from its junction with Newbigging and extending westwards to the junction with Bridge Street and Mall Avenue.
- 3.4 Following declaration of the AQMA, East Lothian Council commissioned a Further Assessment of Air Quality in Musselburgh. The assessment provided the technical justification for the measures the authority later includes in any Air Quality Action Plan (AQAP). The Further Assessment was completed in September 2014 and confirmed the findings of the previous Detailed Assessment in 2012, namely that there are likely to be continued exceedances of the annual mean NO₂ objective where relevant exposure exists.

- 3.5 The Further Assessment estimated that ambient Nitrogen oxides (NO_x) reductions in the AQMA of up to 27% at some locations were required in order to achieve compliance with the annual mean NO₂ objective and, furthermore, that a source apportionment exercise indicates that emissions from buses form the largest contribution at all locations along the High Street AQMA. An integrated package of interventions would most likely be required to provide the best NO_x reductions. Measures that reduced overall traffic reduced queuing and reduced bus numbers, where appropriate, would reduce road NO_x significantly. These measures are however very challenging (both financially and technically) to implement.
- 3.6 The 2014 Progress Report and 2015 Updating & Screening Assessment confirmed that NO₂ emissions in 2013 and 2014 continued to exceed, or were very close to, the Annual Mean Air Quality Objective for NO₂ at some locations within the AQMA. The 2016 Progress Report and monitoring results from 2015 indicated that all Air Quality Objectives were complied with and there were no exceedances of any objectives, including the NO₂ Annual Mean AQO.
- 3.7 In February 2017, East Lothian Council published an AQAP to outline the measures to be taken to ensure compliance with the Objectives. However, the 2017 Progress Report confirmed that during 2016 exceedances of the NO₂ Annual Mean AQO within the AQMA were again recorded at two locations. There were no other exceedances of any other AQO noted throughout the County.
- 3.8 The 2018 Progress Report and monitoring results from 2017 indicated that all Air Quality Objectives were complied with and there were no exceedances of any objectives, including the NO₂ Annual Mean AQO.
- 3.9 Given that Nitrogen dioxide levels within the Musselburgh High Street AQMA remain close to the annual mean AQO and further significant development is proposed for the Musselburgh conurbation the Council has formed the opinion that it is not appropriate to revoke the AQMA at this point.
- 3.10 The recently published Transport (Scotland) Bill introduces a legislative framework for the implementation of Low Emission Zones, which has been promoted through the Scottish Government's air quality strategy: Cleaner Air for Scotland The Road to a Healthier Future. Scottish Councils who have declared Air Quality Management Areas will be required to undertake a screening exercise to determine whether a Low Emission Zone is necessary to achieve compliance with air quality objectives.
- 3.11 This process will assist Councils to determine the need for vehicle access interventions as a means of improving air quality. The requirement to undertake this screening exercise will be embedded in the 2019 Local Air Quality Management Annual Progress Report with the outcome of the screening exercise for East Lothian reported to Council as part of the 2019 Air Quality Annual Progress Report.

4 POLICY IMPLICATIONS

4.1 There is a direct correlation between the work being undertaken on air quality management and the development of the proposed LDP particularly in regard to traffic modelling and traffic flow interventions in the context of housing and economic land allocations as well as links to other strategies such as the Local Transport Strategy and Climate Change Mitigation and Adaptation Strategy.

5 INTEGRATED IMPACT ASSESSMENT

5.1 Local Air Quality Management has a positive impact on the wellbeing of the community and on equality, the environment or economy.

6 RESOURCE IMPLICATIONS

- 6.1 Financial The capacity to successfully implement an Air Quality Action Plan is heavily dependent upon obtaining adequate funding and resources to deliver the proposed measures. Many of the measures included within the plan are already supported through existing strategies (e.g. local transport strategy) but may require some additional funding to facilitate modification in line with the requirements of this action plan. For other measures, other sources of funding will require to be secured. Other potential sources of funding include:
 - Scottish Government Air Quality Funding;
 - Transport Scotland;
 - Transport Fund;
 - Developer contributions
- 6.2 Scottish Government grant funding has been awarded for financial year 2018/19 to assist the Council with the development and implementation of its Air Quality Action Plan, including the continued delivery of the ECO Stars Fleet Recognition Scheme and the purchase of a CityTree, to be located in Musselburgh High Street (pilot basis). Further funding may be available for future financial years.
- 6.3 Personnel there will be no immediate impacts upon personnel resources as a consequence of this report.
- 6.4 Other none

7 BACKGROUND PAPERS

- 7.1 Local Air Quality Management Annual Progress Report 2018
- 7.2 Response letter from SEPA, received 9th August 2018

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| DATE | 1 November 2018 |

Annual Progress Report (APR)



2018 Air Quality Annual Progress Report (APR) for East Lothian Council

In fulfilment of Part IV of the Environment Act 1995

Local Air Quality Management

June, 2018

| Local Authority Officer | Colin Clark |
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| Date | June 2018 |

Executive Summary: Air Quality in Our Area

Air Quality in East Lothian

East Lothian Council considered the declaration of an Air Quality Management Area (AQMA) for the Nitrogen dioxide (NO₂) annual mean Air Quality Objective (AQO) after submission of the 2013 Progress Report (Ref 1) if monitoring results obtained from new monitoring locations, in addition to existing monitoring locations, confirmed that the NO₂ annual mean AQO had been exceeded in Musselburgh High Street. In November 2013, following completion of the 2013 Progress Report (Ref 1), an AQMA was declared in Musselburgh (Ref 2) in relation to breaches and likely breaches of the Nitrogen Dioxide annual mean air quality objective. The extent of the AQMA is High Street, Musselburgh (A199) from its junction with Newbigging and extending westwards to the junction with Bridge Street and Mall Avenue.

Following declaration of the AQMA East Lothian Council commissioned a Further Assessment (Ref 3) of Air Quality in Musselburgh. The assessment provided the technical justification for the measures the authority later includes in any Air Quality Action Plan (AQAP). The Further Assessment (Ref 3) was completed in September 2014 and confirmed the findings of the previous Detailed Assessment in 2012 (Ref 4), namely that there are likely to be continued exceedances of the annual mean NO₂ objective where relevant exposure exists.

The Further Assessment (Ref 3) estimated that ambient Nitrogen oxides (NO_x) reductions in the AQMA of up to 27% at some locations were required in order to achieve compliance with the annual mean NO₂ objective and, furthermore, that a source apportionment exercise indicates that emissions from buses form the largest contribution at all locations along the High Street AQMA. An integrated package of interventions would most likely be required to provide the best NO_x reductions. Measures that reduced overall traffic, reduced queuing and reduced bus numbers, where appropriate, would reduce road NO_x significantly. These measures are however very challenging (both financially and technically) to implement.

The contour plots and dispersion modelling prepared for the Further Assessment (Ref 3) indicated that the AQMA boundary included all relevant sources and did not require revocation or amendment at that time.

The 2014 Progress Report (Ref 5) and 2015 Updating & Screening Assessment (Ref 6) confirmed that NO₂ emissions in 2013 and 2014 continued to exceed, or were very close to, the Annual Mean Air Quality Objective for NO₂ at some locations within the AQMA. The 2016 Progress Report (Ref 7) and monitoring results from 2015 indicated that all Air Quality Objectives were complied with and there were no exceedances of any objectives, including the NO₂ Annual Mean AQO.

East Lothian Council continued to develop and, in February 2017, published an AQAP to outline the measures to be taken to ensure compliance with the Objectives (Ref 8).

However, the 2017 Progress Report (Ref 9) confirmed that during 2016 exceedances of the NO₂ Annual Mean AQO within the AQMA were again recorded at two locations. There were no other exceedances of any other AQO noted throughout the County

The 2018 Progress Report and monitoring results from 2017 indicated that all Air Quality Objectives were complied with and there were no exceedances of any objectives, including the NO₂ Annual Mean AQO. However, given that Nitrogen dioxide levels within the Musselburgh High Street AQMA remain close to the annual mean AQO and further significant development is proposed for the Musselburgh conurbation the Council has formed the opinion that it is not appropriate to revoke the AQMA at this point.

A summary of all previous Review and Assessment Reports is provided in Appendix E

Actions to Improve Air Quality

Results of monitoring for the 12-month period from 01/01/17 to 31/12/17 indicate no exceedances of the NO₂ Annual Mean AQO. East Lothian Council published the Musselburgh Air Quality Action Plan (Ref 8) in February 2017. The AQAP outlines 13 short, medium and longer term measures to be implemented to improve air quality within the AQMA and throughout the County in general. In addition to the continuation of the Eco Stars Fleet Recognition, launched in February 2017, East Lothian Council will provide a City Tree, which is specifically designed to combat traffic pollution, within the Musselburgh AQMA. The tree will be commissioned in Summer 2018, fully funded by the Scottish Government through the East Central Scotland Vehicle Emissions Partnership. An image of a City Tree is shown below:



Local Priorities and Challenges

Some of the mitigation measures outlined in the AQAP continue to be very challenging (both financially and technically) to implement. In particular the development and implementation of the Local Transport Strategy in conjunction with the Local Development Plan will be key to managing air quality. The proposed transport mitigation measures set out in the LDP are anticipated to help improve Air Quality within the Musselburgh AQMA and beyond.

How to Get Involved

Further information on Air Quality within East Lothian, including access to annual air quality reports, can be obtained from the Council's App or website at:

https://www.eastlothian.gov.uk/info/210568/environmental_health/12172/pollution/4 Information on local and national Air Quality, including access to real-time data and maps can be obtained from the Air Quality in Scotland website at:

http://www.scottishairquality.co.uk/

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1. Local Air Quality Management

This report provides an overview of air quality in East Lothian during 2017. It fulfils the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995) (Ref 10) and the relevant Policy and Technical Guidance documents (Ref's 11 and 12).

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 Progress Report (APR) is summarises the work being undertaken by East Lothian Council to improve air quality and any progress that has been made.

Table 1.1 – Summary of Air Quality Objectives in Scotland

| Pollutant | Air Quality Objecti | Date to be achieved by | |
|--|---|------------------------|--------------|
| Poliutant | Concentration | Measured as | acilieved by |
| Nitrogen | 200 µg/m³ not to be exceeded more than 18 times a year | 1-hour mean | 31.12.2005 |
| dioxide (NO ₂) | 40 μg/m³ | Annual mean | 31.12.2005 |
| Particulate | 50 μg/m³, not to be exceeded more than 7 times a year | 24-hour mean | 31.12.2010 |
| Matter (PM ₁₀) | 18 μg/m³ | Annual mean | 31.12.2010 |
| Particulate Matter (PM _{2.5}) | 10 μg/m³ | Annual mean | 31.12.2020 |
| | 350 µg/m³, not to be exceeded more than 24 times a year | 1-hour mean | 31.12.2004 |
| Sulphur dioxide (SO ₂) | 125 µg/m³, not to be exceeded more than 3 times a year | 24-hour mean | 31.12.2004 |
| | 266 µg/m³, not to be exceeded more than 35 times a year | 15-minute mean | 31.12.2005 |
| Benzene | 3.25 μg/m³ | Running annual mean | 31.12.2010 |
| 1,3 Butadiene | 2.25 μg/m³ | Running annual mean | 31.12.2003 |
| Carbon Monoxide | 10.0 mg/m ³ | Running 8-Hour mean | 31.12.2003 |
| Lead | 0.25 μg/m³ | Annual Mean | 31.12.2008 |

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 months, setting out measures it intends to put in place in pursuit of the objectives.

A summary of AQMAs declared by East Lothian 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=368

Table 2.1 – Declared Air Quality Management Areas

| AQMA Name | Pollutants and Air Quality Objectives | City / Town | Description | Action Plan |
|-----------------------------|--|-------------|--|--|
| High Street, Musselburgh | NO ₂ annual mean | Musselburgh | High Street, Musselburgh (A199) from its junction with Newbigging and extending westwards to the junction with Bridge Street and Mall Avenue | https://www.eastlothian. gov.uk/downloads/file/23 473/air_quality_action_p lan_2017 |

2.2 Progress and Impact of Measures to address Air Quality in East Lothian

East Lothian Council has taken forward a number of measures during the current reporting year of 2017 in pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in Table 2.2. More detail on these measures can be found in the air quality Action Plan (Ref 8) relating to each AQMA. Key completed measures are:

Eco Stars Fleet Recognition Scheme (Measure No 6) – East Lothian
 Council secured funding from the Scottish Government and, in February 2017,
 formally launched an Eco Stars Fleet Recognition Scheme within East
 Lothian. The scheme provides recognition for best operational practices and
 guidance for making improvements to fleet operators with the ultimate aim of
 reducing fuel consumption and reduced emissions. The Council's own fleet,
 together with Commercial Fleet Operators will be encouraged to engage with

the scheme which will have a positive impact on emissions, including within the AQMA in Musselburgh High Street. The scheme had 59 members in August 2017 and now has 100 members and will be continued through 2018/19 when it is anticipated membership numbers will increase further.

- SCOOT Traffic Management System (Measure No 7) East Lothian Council have made a budgetary commitment this year to examine the Urban Traffic Control (UTC) system in Musselburgh which comprises SCOOT. ELC Road Services will be discussing appropriate solutions with City of Edinburgh Council, who manage the SCOOT system on behalf of East Lothian Council, and prepare an action plan based on LDP triggers and vehicle growth going forward. This remains an outstanding item of business, however, a budgetary commitment has been made to re-evaluate the SCOOT system and incorporate Intelligent Traffic Systems (ITS) into the network to advice drivers of journey time delays.
- The East Central Scotland Vehicle Emissions Partnership (Measure No **10)** – East Lothian Council works in partnership with Midlothian, West Lothian and Falkirk Councils aimed at raising awareness of vehicle emissions and impacts on air quality amongst the general public. The partnership also investigates complaints of idling and provides an educational element to increasing awareness of air quality impacts from road traffic. In Spring 2017 the partnership were the first in Scotland to use NASA technology to monitor vehicle emissions. They have undertaken a pilot scheme using state-of the-art remote Emissions Detecting and Reporting (EDAR) technology in sites in Edinburgh and Broxburn in West Lothian and are assisting with set up in Coatbridge in North Lanarkshire. EDAR uses satellite and laser technology to give a true picture of vehicle emissions, as well as recording license plate, speed, acceleration and temperature of the exhaust. Information recorded during the pilot will be shared between the local authorities involved, and Scottish Government agencies such as Transport Scotland and SEPA. Further information on the work of the Partnership can be obtained at the following link: http://switchoffandbreathe.org/about/
- Provision of Information regarding Air Quality and Travel Options
 (Measure No 13) Information on Air Quality within East Lothian, including

access to annual air quality reports, can be obtained from the Council's App or website at:

https://www.eastlothian.gov.uk/info/210568/environmental_health/12172/pollution/4

 AQMA Signage (Measure No 9) – East Lothian Council will be commissioning a City Tree within the AQMA in Musselburgh during the Summer of 2018. As well as providing the locus for the Tree, the structure will also contain signage and information on Air Quality.

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

- Improving Links with Local Transport Strategy (Measure No 1) The development of the Local Transport Strategy was deferred because of the delay in determining the exact nature of the interventions associated with the LDP. To identify these interventions SIAS have been commissioned to build a micro-simulation (S-paramics) model of the strategic and local road network to form a 2012 base and predict cumulative traffic impacts on the strategic and local road network having regard to future development of the preferred sites identified in the LDP. The micro-simulation traffic modelling work is now complete and ELC will be consulting on the LTS in conjunction with its Strategic environmental assessment. The draft Local Transport Strategy was approved for consultation on 27th February 2018 with the period of public consultation ran from 30th March until 10th May 2018. A paper will be taken to Council in September making recommendations to adopt the strategy and associated plans. The strategy provides for specific interventions to mitigate the impact of development growth and support economy growth in Musselburgh, which are detailed in the plan.
- Improving Links with Local Development Plan (Measure No 2) Scottish
 Ministers have completed their examination of the proposed East Lothian
 Local Development Plan (LDP) and issued their Report of Examination and
 recommended post-examination Modifications on 12th March 2018. East
 Lothian Council considered the Report and Modifications and made post-

examination modifications to the LDP. The Council, at its meeting on the 29th May 2018, decided that it intends to adopt the LDP (as modified following Examination in Public). The LDP was submitted to Scottish Ministers on 8th June 2018 for their final review of the LDP before the Council may adopt the plan as the up to date LDP for East Lothian. The LDP will not become constituted until such time as Scottish Ministers issue clearance to the Council confirming that the Council may formally adopt the LDP. The Examination Report confirmed that through Scottish Ministers consideration of the issue of air quality, and the proposed mitigation measures set out in the LDP, that the Council's approach to this issue was acceptable. Only minor changes to the wording of paragraph 6.34 of the proposed LDP were recommended as postexamination modifications. These post-examination modifications were accepted by the Council, and they are intended to clarify how contributions towards air quality improvements will be sought through Policy T8, and excluding those set out in Policy T20. The Council continues to seek environmental improvements to air quality through the application of planning policies and project level decisions. Once the LDP becomes the adopted plan for East Lothian, the Council will have an up to date policy position with regards to air quality across the plan area, and how development related activity and increases in traffic can be managed across the plan area. In the case of Musselburgh, with an Air Quality Management Area being designated, these improvements will be delivered through Transport related interventions. The Council has also recently finalised its proposed Supplementary Guidance on Developer Contributions Framework, the consultation period for this has already begun. This Supplementary Guidance provides more detailed guidance on how much (and in what locations) new developments will be required to contribute towards addressing air quality issues that arise through development related impacts.

- Bus Stop Relocations on High Street, Musselburgh (Measure No 3) The local network Musselburgh town centre mitigations tested within the Musselburgh and Tranent Traffic Model (MTTM) for the High Street are:
 - Adjusting the eastbound lane arrangement for Mall Avenue at the A199
 High Street/ Bridge Street junction.

- Consolidation of pedestrian crossings between Bridge Street and Kilwinning Street.
- Moving westbound bus lay-by into car parking spaces and further back from the Bridge Street junction to remove the traffic obstruction on the High Street.
- Extending the eastbound bus lay-by to remove bus dwell obstruction on the High Street before Shorthope Street
- Adding a bus lay-by westbound on the A199 Linkfield road opposite Loretto School
- A right turn on the High Street for Kilwinning street.

The timing of these measures is currently unknown but will include new signalised junctions and re-signalisation of junctions. East Lothian Council Road Services are currently bidding for match funding to move forward active travel and future proof Musselburgh and these considerations will have to be taken into account. In conjunction with SEStran, Midlothian and the City of Edinburgh Council, East Lothian Council commissioned AECOM to investigate the feasibility of future proofing active travel routes in though and around Musselburgh to generate modal shift in Musselburgh and connecting to Edinburgh and Midlothian. A draft report and business case has been undertaken and will be reported to Council in autumn 2018, which includes for public realm improvements in Musselburgh high Street. The report is based on preliminary design principles and will evolving to detailed design subject to budgetary considerations.

- Enforcement of idling provisions of the Road Traffic (Vehicle Emission)
 (Fixed Penalty) (Scotland) Regulations 2003 (Measure No 4) East
 Lothian Council Road Services are in discussions with NSL Ltd, who provide
 the Parking Attendant Service within the County, and are exploring the
 technicalities of them taking on this role. To alleviate the effect of
 indiscriminate parking at the eastbound bus stop on the High Street during
 peak hour traffic, a parking attendant has been instructed to monitor and take
 appropriate action to keep traffic moving.
- Development of Green Travel Plans (Measure No 11) and Promotion of Cycling and Walking (Measure 12) – The Smarter Choices, Smarter Places (SCSP) Programme is a Paths for All grant scheme to support behaviour

change initiatives to increase active and sustainable travel. The programme is funded through Transport Scotland (Sustainable Transport team) and aims to make walking and cycling a mode of choice for short local journeys in our towns, cities and villages. It also encourages other forms of sustainable choices such as public transport use and car share. This will help to cut Scotland's carbon emissions and improve our air quality. It will help reverse the trend towards sedentary lifestyles and will tackle health inequalities. ELC obtained funding through the scheme to develop a Green Travel Plan for East Lothian Council. ELC commissioned Anson Consultants in 2016 to assess demand, employee travel choices, and barriers and prepare a report with recommendations. This has been completed subject to a final review and should be adopted by Council by 2018. Investment into each of the Area partnerships initiatives 'East Lothian – On the Move' through SCSP has been continued in 2018-19. The purpose of this funding is to encourage behaviour change through local based initiatives and interventions.

No progress has been made on the following measures:

- Electrification of Lothian Buses in Musselburgh (Measure No 5) Due to a lack of commitment from relevant stakeholders regarding funding this project may not be taken forward. Other funding avenues are being explored.
- Longer Trains and platforms at Musselburgh Rail Station (Measure No 8)
 - Developer contributions are being collected through the planning process and individual agreements entered into with Network Rail. Longer platforms are required because longer train sets are needed to accommodate the predicted increased patronage. The platforms are only needed close to full build out of all committed and LDP allocations. It is unlikely this will be delivered until CP7. (2024-2029)

Table 2.2 – Progress on Measures to Improve Air Quality

| Measure No. | Measure | Category | Focus | Lead Authority | Planning Phase | Implementation Phase | Key Performance Indicator | Target Pollution Reduction in the AQMA | Progress to Date | Completion Date | Comments |
|----------------|---|---------------------------------------|-------|----------------------|-------------------|----------------------|------------------------------|--|--|-----------------|----------|
| 1 | Improving Links with Local Transport Strategy | Transport planning and infrastructure | | ELC Road Services | | | | | The draft Local Transport Strategy was approved for consultation on 27th February 2018 with the period of public consultation ran from 30th March until 10th May 2018. A paper will be taken to Council in September making recommendations to adopt the strategy and associated plans. The strategy provides for specific interventions to mitigate the impact of development growth and support economy growth in Musselburgh, which are detailed in the plan. | Sep 2018 | |

| | Language de la Cala | Dell'es Ostalese | The second LDD | ELO Disersia | | 1 | | ı | O (Calla Millaria) | 0 0040 | |
|---|---------------------|------------------|-----------------------------|--------------|-----|---|--|---|----------------------------------|----------|--|
| 2 | Improving Links | Policy Guidance | The proposed LDP | ELC Planning | | | | | Scottish Ministers | Sep 2018 | |
| | with Local | and Development | contains transport | Service | | | | | have completed | | |
| | Development Plan | Control | mitigation measures that | | | | | | their examination of | | |
| | | | are intended to manage | | | | | | the proposed East | | |
| | | | through traffic within | | | | | | Lothian Local | | |
| | | | Musselburgh town centre, | | | | | | Development Plan | | |
| | | | including within the AQMA. | | | | | | (LDP) and issued | | |
| | | | Future traffic growth is | | | | | | their Report of | | |
| | | | anticipated to arise as a | | | | | | Examination and | | |
| | | | result of growth from | | | | | | recommended post- | | |
| | | | existing users of the | | | | | | examination | | |
| | | | transport network and form | | | | | | Modifications on | | |
| | | | committed developments | | | | | | 12 th March 2018. | | |
| | | | (i.e. development that | | | | | | East Lothian | | |
| | | | already has planning | | | | | | Council considered | | |
| | | | | | | | | | | | |
| | | | permission) as well as | | | | | | the Report and | | |
| | | | from new planned and | | | | | | Modifications and | | |
| | | | uncommitted development | | | | | | made post- | | |
| | | | across East Lothian. The | | | | | | examination | | |
| | | | proposed transport | | | | | | modifications to the | | |
| | | | mitigation measures set | | | | | | LDP. The Council, | | |
| | | | out in the LDP are | | | | | | at its meeting on the | | |
| | | | anticipated to help improve | | | | | | 29 th May 2018, | | |
| | | | Air Quality within the | | | | | | decided that it | | |
| | | | Musselburgh AQMA. | | | | | | intends to adopt the | | |
| | | | | | | | | | LDP (as modified | | |
| | | | | | | | | | following | | |
| | | | | | | | | | Examination in | | |
| | | | | | | | | | Public). The LDP | | |
| | | | | | | | | | was submitted to | | |
| | | | | | | | | | Scottish Ministers | | |
| | | | | | | | | | on 8 th June 2018 for | | |
| | | | | | | | | | their final review of | | |
| | | | | | | | | | the LDP before the | | |
| | | | | | | | | | Council may adopt | | |
| | | | | | | | | | the plan as the up to | | |
| | | | | | | | | | | 1 | |
| 1 | | | | | | | | | date LDP for East | | |
| | | | | | | | | | Lothian. The LDP | | |
| | | | | | | | | | will not become | | |
| | | | | | | | | | constituted until | | |
| | | | | | | | | | such time as | | |
| 1 | | | | | | | | | Scottish Ministers | | |
| 1 | | | | | | | | | issue clearance to | | |
| | | | | | | | | | the Council | | |
| | | | | | | | | | confirming that the | | |
| | | | | | | | | | Council may | | |
| 1 | | | | | | | | | formally adopt the | | |
| | | | | | | | | | LDP. | | |
| | 1 | 1 | I | 1 | l . | | | | | 1 | |

| Measure No. | Measure | Category | Focus | Lead Authority | Planning Phase | Implementation Phase | Key Performance Indicator | Target Pollution Reduction in the AQMA | Progress to Date | Estimated Completion Date | Comments |
|----------------|---|--------------------|---|----------------------|-------------------|-------------------------|------------------------------|--|---|---------------------------------|----------|
| 3 | Bus Stop Relocations on High Street, Musselburgh | Traffic Management | To improve the flow of traffic within the AQMA and reduce congestion. | ELC Road Services | | | | the AQMA | In conjunction with SEStran, Midlothian and the City of Edinburgh Council, East Lothian Council commissioned AECOM to investigate the feasibility of future proofing active travel routes in though and around Musselburgh to generate modal shift in Musselburgh and connecting to Edinburgh and Midlothian. A draft report and business case has been undertaken and will be reported to Council in autumn 2018, which includes for public realm improvements in Musselburgh high Street. The report is based on preliminary design principles and will | | |
| | | | | | | | | | evolving to detailed design subject to budgetary considerations. | | |

| Measure No. | Measure | Category | Focus | Lead Authority | Planning Phase | Implementation Phase | Key Performance Indicator | Target Pollution Reduction in the AQMA | Progress to Date | Estimated Completion Date | Comments |
|----------------|---|--|---|---|-------------------|----------------------|------------------------------|--|---|---------------------------|----------|
| 4 | Enforcement of idling provisions of the Road Traffic (Vehicle Emission) (Fixed Penalty) (Scotland) Regulations 2003 | Traffic Management | Prevention of unnecessary pollution from stationary vehicles within the AQMA. | ELC Road Services | | | | | To alleviate the effect of indiscriminate parking at the eastbound bus stop on the High Street during peak hour traffic, a parking attendant has been instructed to monitor and take appropriate action to keep traffic moving. | | |
| 5 | Electrification of Lothian Buses in Musselburgh | Promoting Low Emission Transport | Minimisation of pollution within AQMA by providing electric charging facility to allow buses to switch to electric operation. | ELC Transport Services, Lothian Buses | | | | | Due to a lack of commitment from relevant stakeholders regarding funding this project may not be taken forward. Other funding avenues are being explored. | Unknown | |

| Measure No. | Measure | Category | Focus | Lead Authority | Planning Phase | Implementation Phase | Key Performance Indicator | Target Pollution Reduction in the AQMA | Progress to Date | Estimated Completion Date | Comments |
|----------------|------------------------------------|--------------------------|--|----------------|-------------------|-------------------------|------------------------------|--|--|---------------------------------|----------|
| 6 | Eco Stars Fleet Recognition Scheme | Vehicle Fleet Efficiency | The scheme provides recognition for best operational practices and guidance for making improvements to fleet operators with the ultimate aim of reducing fuel consumption and reduced emissions. | | | | | THE AQMA | East Lothian Council secured funding from the Scottish Government and, in February 2017, formally launched an Eco Stars Fleet Recognition Scheme within East Lothian. The scheme provides recognition for best operational practices and guidance for making improvements to fleet operators with the ultimate aim of reducing fuel consumption and reduced emissions. The Council's own fleet, together with Commercial Fleet Operators will be encouraged to engage with the scheme which will have a positive impact on emissions, including within the AQMA in Musselburgh High Street. The scheme had 59 members in August 2017 and now has 100 members and will be continued through 2018/19 when it is anticipated membership | Ongoing | |
| | | | | | | | | | numbers will increase further | | |

| Measure No. | Measure | Category | Focus | Lead Authority | Planning Phase | Implementation Phase | Indicator | Target Pollution Reduction in the AQMA | Progress to Date | Estimated Completion Date | Comments |
|----------------|---|---------------------------------------|---|----------------------|-------------------|----------------------|-----------|--|--|--|----------|
| 7 | SCOOT Traffic Management System | Traffic Management | SCOOT is a system of Urban Traffic Control and monitors queue lengths at all junctions on the main arterial routes and alters signal timing to suit. This is monitored every 120 seconds and although monitored by East Lothian Council is controlled by the City of Edinburgh Council through their Traffic Control Room | | | | | | This remains an outstanding item of business, however, a budgetary commitment has been made to reevaluate the SCOOT system and incorporate Intelligent Traffic Systems (ITS) into the network to advice drivers of journey time delays. | Ongoing | |
| 8 | Longer Trains and platforms at Musselburgh Rail Station | Transport planning and infrastructure | Provision of infrastructure to provide alternative mode of transport | ELC Road Services | | | | | Developer contributions are being collected through the planning process and individual agreements entered into with Network Rail. Longer platforms are required because longer train sets are needed to accommodate the predicted increased patronage. The platforms are only needed close to full build out of all committed and LDP allocations.) | It is unlikely this will be delivered until CP7. (2024-2029) | |

| Measure | Measure | Category | Focus | Lead Authority | Planning | | Key Performance | | Progress to Date | | Comments |
|---------|--------------|--------------------|-----------------------------------|----------------|----------|-------|-----------------|--------------------------|---|--------------------|----------|
| No. | | | | | Phase | Phase | | Reduction in the AQMA | | Completion Date | |
| 9 | AQMA Signage | Public Information | Increase awareness of Air Quality | ELC Env Health | | | | | East Lothian Council will be commissioning a City Tree within the AQMA in Musselburgh during the Summer of 2018. As well as providing the locus for the Tree, the structure will also contain signage and information on Air Quality. | 2018 | |

| Measure No. | Measure | Category | Focus | Lead Authority | Planning Phase | Phase | Key Performance Indicator | Target Pollution Reduction in the AQMA | Progress to Date | Estimated Completion Date | Comments |
|----------------|---|--------------------|--|--|-------------------|-------|------------------------------|--|--|---------------------------------|----------|
| 10 | The East Central Scotland Vehicle Emissions Partnership | Public Information | East Lothian Council work in partnership with Midlothian, West Lothian and Falkirk Councils aimed at raising awareness of vehicle emissions and impacts on air quality amongst the general public. The partnership also investigates complaints of idling and provides an educational element to increasing awareness of air quality impacts from road traffic | Vehicle Emissions Officer, East Central Scotland Vehicle Emissions Partnership at West Lothian Council | | 2003 | | | In Spring 2017 the partnership were the first in Scotland to use NASA technology to monitor vehicle emissions. They have undertaken a pilot scheme using state-of the-art remote Emissions Detecting and Reporting (EDAR) technology in sites in Edinburgh and Broxburn in West Lothian and are assisting with set up in Coatbridge in North Lanarkshire. EDAR uses satellite and laser technology to give a true picture of vehicle emissions, as well as recording license plate, speed, acceleration and temperature of the exhaust. Informatior recorded during the pilot will be shared between the local authorities involved, and Scottish Government agencies such as Transport Scotland and SEPA. | | |

| Measure No. | Measure | Category | Focus | Lead Authority | Planning Phase | Implementation Phase | Key Performance Indicator | Target Pollution Reduction in the AQMA | Progress to Date | Completion Date | Comments |
|----------------|----------------|------------------|-------------------------------|----------------|-------------------|----------------------|------------------------------|--|-----------------------|-----------------|----------|
| 11 | Development of | Promoting Travel | The Smarter Choices, | ELC Road | | | | | ELC obtained | Autumn 2018 | |
| | Green Travel | Alternatives | Smarter Places (SCSP) | Services | | | | | funding through the | | |
| | Plans | | Programme is a Paths | | | | | | scheme to develop a | | |
| | | | for All grant scheme to | | | | | | Green Travel Plan | | |
| | | | support behaviour | | | | | | for East Lothian | | |
| | | | change initiatives to | | | | | | Council. ELC | | |
| | | | increase active and | | | | | | commissioned | | |
| | | | sustainable travel. The | | | | | | Anson Consultants in | | |
| | | | programme is funded | | | | | | 2016 to assess | | |
| | | | through Transport | | | | | | demand, employee | | |
| | | | Scotland (Sustainable | | | | | | travel choices, and | | |
| | | | Transport team) and | | | | | | barriers and prepare | | |
| | | | aims to make walking | | | | | | a report with | | |
| | | | and cycling a mode of | | | | | | recommendations. | | |
| | | | choice for short local | | | | | | This has been | | |
| | | | journeys in our towns, | | | | | | completed subject to | | |
| | | | cities and villages. It | | | | | | a final review and | | |
| | | | also encourages other | | | | | | should be adopted | | |
| | | | forms of sustainable | | | | | | by Council by 2018. | | |
| | | | choices such as public | | | | | | Investment into each | | |
| | | | transport use and car | | | | | | of the Area | | |
| | | | share. This will help to | | | | | | partnerships | | |
| | | | cut Scotland's carbon | | | | | | initiatives 'East | | |
| | | | emissions and improve | | | | | | Lothian - On the | | |
| | | | our air quality. It will help | | | | | | Move' through SCSP | | |
| | | | reverse the trend | | | | | | has been continued | | |
| | | | towards sedentary | | | | | | in 2018-19. The | | |
| | | | lifestyles and will tackle | | | | | | purpose of this | | |
| | | | health inequalities. | | | | | | funding is to | | |
| | | | · · | | | | | | encourage behaviour | | |
| | | | | | | | | | change through local | | |
| | | | | | | | | | based initiatives and | | |
| | | | | | | | | | interventions | | |

| Measure No. | Measure | Category | Focus | Lead Authority | Planning Phase | Implementation Phase | Key Performance Indicator | Target Pollution Reduction in the AQMA | Progress to Date | Estimated Completion Date | Comments |
|----------------|---|----------------------------------|---|--|-------------------|----------------------|------------------------------|--|--|---------------------------------|----------|
| 12 | Promotion of cycling and walking | Promoting Travel Alternatives | The Smarter Choices, Smarter Places (SCSP) Programme is a Paths for All grant scheme to support behaviour change initiatives to increase active and sustainable travel. The programme is funded through Transport Scotland (Sustainable Transport team) and aims to make walking and cycling a mode of choice for short local journeys in our towns, cities and villages. It also encourages other forms of sustainable choices such as public transport use and car share. This will help to cut Scotland's carbon emissions and improve our air quality. It will help reverse the trend towards sedentary lifestyles and will tackle health inequalities. | ELC Road Services | | | | | ELC obtained funding through the scheme to develop a Green Travel Plan for East Lothian Council. ELC commissioned Anson Consultants in 2016 to assess demand, employee travel choices, and barriers and prepare a report with recommendations. This has been completed subject to a final review and should be adopted by Council by 2018. Investment into each of the Area partnerships initiatives 'East Lothian – On the Move' through SCSP has been continued in 2018-19. The purpose of this funding is to encourage behaviour change through local based initiatives and interventions | | |
| 13 | Provision of Information regarding Air Quality and Travel Options | Public Information | Increase awareness of Air Quality and alternative modes of transport and travel options | ELC Env Health ELC Road Services | | | | | Information on Air Quality within East Lothian, including access to annual air quality reports, can be obtained from the Councils website at: https://www.eastlothian.gov.uk/info/210568/environmental health/12172/pollution/4 | | |

2.3 Cleaner Air for Scotland

Cleaner Air for Scotland – The Road to a Healthier Future (CAFS) is a national cross-government strategy that sets out how the Scottish Government and its partner organisations propose to reduce air pollution further to protect human health and fulfil Scotland's legal responsibilities as soon as possible. A series of actions across a range of policy areas are outlined, a summary of which is available at http://www.gov.scot/Publications/2015/11/5671/17. Progress by East Lothian Council against relevant actions within this strategy is demonstrated below.

2.3.1 Transport – Avoiding travel – T1

All local authorities should ensure that they have a corporate travel plan (perhaps within a carbon management plan) which is consistent with any local air quality action plan. The Active Travel Improvement Plan (ATIP), an associated plan of the LTS has been prepared to provide a series of interventions to encourage modal shift. The (Green) travel plan has been prepared and will follow on from the adoption of the LTS. Further, work is also ongoing to explore electric bikes (e-bikes) with partner organisations, parking management and enforcement to deter car use and improvements to bus service have realised significant gains in local patronage.

2.3.2 Climate Change – Effective co-ordination of climate change and air quality policies to deliver co-benefits – CC2

Scottish Government expects any Scottish local authority which has or is currently developing a Sustainable Energy Action Plan to ensure that air quality considerations are covered. East Lothian Council has recently employed a Sustainable Energy and Climate Change Officer who has been tasked with taking forward the Climate Change Mitigation and Adaptation Strategy. The Strategy is currently being prepared and is anticipated to be completed by July 2019. The Strategy will identify priorities and actions which contribute to the delivery of East Lothian's climate change obligations and will be wide-ranging and cover air quality considerations.

2.3.3 Additional actions

One of six main objectives to be achieved across Scotland is Place making: air quality not to be compromised by new or existing developments. Section 2.3.1 of the AQAP (Ref 8) refers. Furthermore, the National Transport Strategy for Scotland was updated in January 2016 and introduced 3 key strategic outcomes, one of which was

to reduce emissions to tackle climate change. Another key outcome aims to improve journey times and connections by reducing congestion. Section 2.3.2 of the AQAP (Ref 8) refers. Other relevant regional and National strategies that impact on air quality are discussed in the AQAP (Ref 8). These include South East of Scotland Transport Partnership – SEStrans (in Section 2.3.3), East Lothian Council Local Transport Strategy (in Section 2.3.4), Strategic Development Plan for South East Scotland – SESplan (in Section 2.3.5), East Lothian Council Local Development Plan (in Section 2.3.6) and Climate Change Declaration (in Section 2.3.7).

3. Air Quality Monitoring Data and Comparison with Air Quality Objectives

3.1 Summary of Monitoring Undertaken

3.1.1 Automatic Monitoring Sites

This section sets out what monitoring has taken place and how local concentrations of the main air pollutants compare with the objectives.

East Lothian Council undertook automatic (continuous) monitoring at 2 sites during 2017. Table A.1 in Appendix A shows the details of the sites. National monitoring results are available at http://www.scottishairquality.co.uk/

Maps showing the location of the monitoring sites are provided in Appendix D.

3.1.2 Non-Automatic Monitoring Sites

East Lothian Council undertook non- automatic (passive) monitoring of NO₂ at 23 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) and bias adjustment for the diffusion tubes are included in Appendix C.

Two additional diffusion tube sites will be provided in Haddington from July 2018 to assess impacts due to significant new housing development in the town. Details of the new sites are provided in Table A.2 in Appendix A. Maps showing the location of the new sites are provided in Appendix D.

3.2 Individual pollutants

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

3.2.1 Nitrogen Dioxide (NO₂)

Table A.3 in Appendix A compares the ratified and adjusted monitored NO₂ annual mean concentrations for the past 5 years with the air quality objective of 40μg/m³. Figures 1 and 2 below show the trends for diffusion tubes located within the AQMA on Musselburgh High Street and also for tubes located Tranent High Street between

2013-2017. It can be seen that there has been a slight downward trend in annual mean NO₂ concentrations between 2013-2017:

Figure 1: Diffusion Tubes on Musselburgh High Street 2013-2017

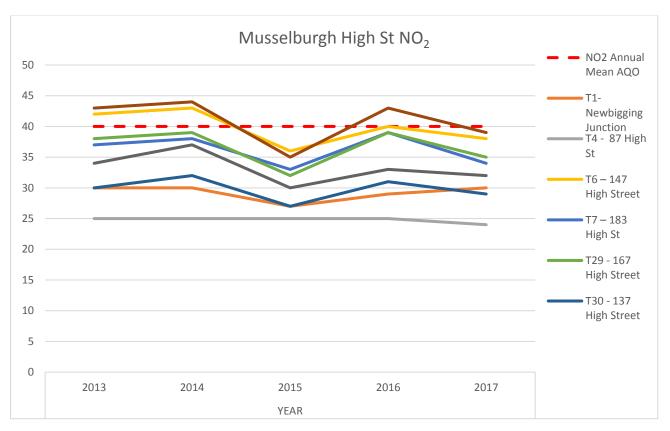
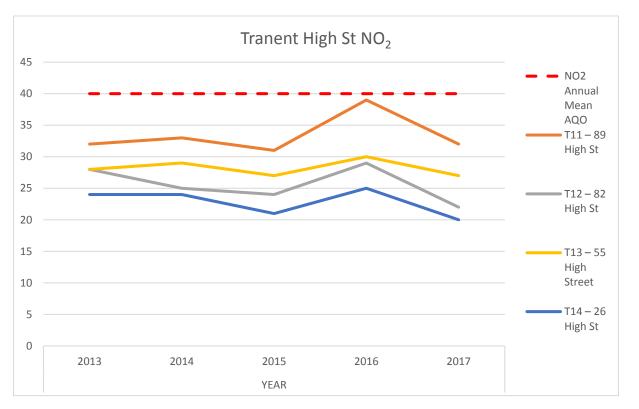


Figure 2: Diffusion Tubes on Tranent High Street 2013-2017



There were no exceedances of the Annual Mean NO₂ Objective recorded at any locations, including those locations within the AQMA. However, concentrations of Nitrogen dioxide at two locations within the AQMA, T6 (147 High Street, Musselburgh) and T31 (69 High Street, Musselburgh) confirm that levels remain close to the Annual Mean AQO. The Objective was close to being exceeded at T11 (89 High Street, Tranent) in 2016 but this was reported as likely due to road works within the vicinity of the tubes in the town during October 2016. This conclusion would appear to be correct as results for Tranent have fallen back to well within the objective levels in 2017.

For diffusion tubes, the full 2017 dataset of monthly mean values is provided in Appendix B. Details of ratified data for the automatic monitor for 2017 are provided in Appendix C.

Table A.4 in Appendix A compares the ratified continuous monitored NO₂ hourly mean concentrations for the past 5 years with the air quality objective of 200µg/m³, not to be exceeded more than 18 times per year. There were no exceedances of the hourly mean air quality objective in 2017.

3.2.2 Particulate Matter (PM₁₀)

Table A.5 in Appendix A compares the ratified and adjusted monitored PM₁₀ annual mean concentrations for the past 5 years with the air quality objective of 18μg/m³. Figure 3 below shows the trend for PM₁₀ concentrations on Musselburgh North High Street between 2013-2017. It can be seen that there has been a slight downward trend in annual mean PM₁₀ concentrations between 2013-2016 although levels increased slightly in 2017 but remained below 2013 levels.

Figure 3: PM₁₀ concentrations on Musselburgh North High Street 2013-2017

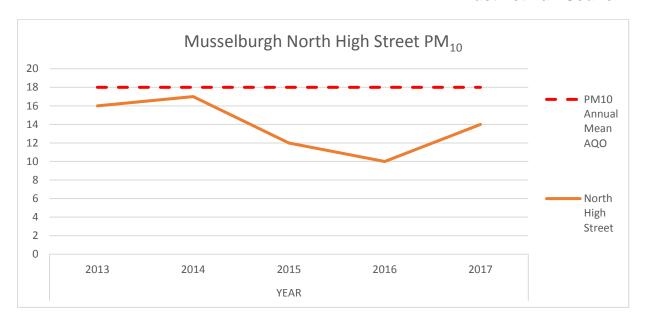


Table A.6 in Appendix A compares the ratified continuous monitored PM_{10} daily mean concentrations for the past 5 years with the air quality objective of $50\mu g/m^3$, not to be exceeded more than 7 times per year.

There were no exceedances of the annual mean or daily mean air quality objectives in 2017.

3.2.3 Particulate Matter (PM_{2.5})

East Lothian Council do not currently monitor PM_{2.5} and have no plans to do so in the future

3.2.4 Sulphur Dioxide (SO₂)

East Lothian Council do not currently monitor Sulphur dioxide (SO₂).

3.2.5 Carbon Monoxide, Lead and 1,3-Butadiene

East Lothian Council do not currently monitor Carbon Monoxide, Lead or 1,3-Butadiene.

4. New Local Developments

4.1 Road Traffic Sources

East Lothian Council can confirm that there are no new:

- Narrow congested streets with residential properties close to the kerb.
- Busy streets where people may spend one hour or more close to traffic.
- Roads with a high flow of buses and/or HGVs.
- Junctions.
- New roads constructed or proposed.
- · Roads with significantly changed traffic flows.
- Bus or coach stations.

since the 2017 Annual Progress Report (Ref 9)

4.2 Other Transport Sources

East Lothian Council can confirm that there are no new:

- Airports.
- Locations where diesel or steam trains are regularly stationary for periods of 15 minutes or more, with potential for relevant exposure within 15m.
- Locations with a large number of movements of diesel locomotives, and potential long-term relevant exposure within 30m.
- · Ports for shipping.

since the 2017 Annual Progress Report (Ref 9)

4.3 Industrial Sources

East Lothian Council can confirm that there are no new:

- **Industrial installations:** new or proposed installations for which an air quality assessment has been carried out.
- **Industrial installations:** existing installations where emissions have increased substantially or new relevant exposure has been introduced.
- **Industrial installations:** new or significantly changed installations with no previous air quality assessment.
- · Major fuel storage depots storing petrol.
- Petrol stations.
- Poultry farms.

since the 2017 Annual Progress Report (Ref 9)

4.4 Commercial and Domestic Sources

East Lothian Council can confirm that there are no new:

• Biomass combustion plant – individual installations.

- Areas where the combined impact of several biomass combustion sources may be relevant.
- Areas where domestic solid fuel burning may be relevant.
- Combined Heat & Power (CHP) plant.

since the 2017 Annual Progress Report (Ref 9)

4.5 New Developments with Fugitive or Uncontrolled Sources

East Lothian Council can confirm that there are no new:

- Landfill sites.
- Quarries.
- Unmade haulage roads on industrial sites.
- Waste transfer stations etc.
- Other potential sources of fugitive particulate emissions.

since the 2017 Annual Progress Report (Ref 9).

5. Planning Applications and the Local Development Plan

The proposed East Lothian Local Development Plan was submitted to Scottish Ministers on 4th May 2017 and the subsequent Report of Examination was received by the Council on the 12th March 2018.

The council considered the Report of Examination's conclusions and recommended post-examination modifications at a meeting of the council on the 29th May 2018. At that meeting the council decided to make post-examination modifications to the proposed Local Development Plan 2016.

On the 29th May 2018 East Lothian Council also decided that it intends to adopt the proposed East Lothian Local Development Plan 2016 (as modified following Examination in Public), namely the East Lothian Local Development Plan 2018 (ELLDP 2018) (Ref 13).

The council has now submitted the ELLDP 2018 to the Scottish Ministers for their review. Following this review, should the Scottish Ministers give clearance to the council such that it may adopt the ELLDP 2018, the decision of the council on the 29th May also makes provision for the council to formally adopt the ELLDP 2018 and to constitute this plan as the up to date local development plan for East Lothian. The ELLDP 2018 identifies a number of preferred sites throughout the County that may be used to accommodate up to 10, 000 new homes. A number of these sites are within the Musselburgh 'cluster' area and the cumulative impacts of these developments on the AQMA will have to be taken into account when determining associated planning applications. There are also a number of preferred sites within the Tranent "cluster" area and the impacts of these developments on local air quality will also be taken into account in order to minimise the possibility of a new AQMA being declared in Tranent. Air Quality Assessments will be required on a case-bycase basis but where assessment indicates that air quality is likely to be an issue, mitigation measures will need to be identified. These could include, but not be limited to, providing new housing with infrastructure to support modes of transport with low impact on air quality; or financial contributions from developers towards other infrastructure that may be required to off-set impacts upon air quality (e.g. alterations to road network). Developments that result in a breach of AQOs or significant

increases in pollutant concentrations within an existing AQMA will not be supported. The LDP will seek to integrate land use and transport and minimise the need to travel as well as the distance travelled. It will do this by promoting town centres as accessible locations for a mix of land uses and services and by providing community services locally. It will help promote active travel choices and public transport as alternatives to other motorised transport.

6. Conclusions and Proposed Actions

6.1 Conclusions from New Monitoring Data

Monitoring for the 12-month period from 01/01/17 to 31/12/17 indicates that there were no exceedances of any AQO's in East Lothian in 2017. However, concentrations of nitrogen dioxide at two locations within the AQMA, T6 (147 High Street, Musselburgh) and T31 (69 High Street, Musselburgh) confirm that levels remain close to the Annual Mean AQO.

6.2 Conclusions relating to New Local Developments

A number of preferred sites have been identified with the East Lothian Local Development Plan 2018 to provide up to 10,000 new homes in the County. Many of these will be built within the Musselburgh and Tranent "clusters" where air quality is a material consideration. Air Quality Assessments will be required on a case-by-case basis and any mitigation measures that may be required will be incorporated into the development layout as required by the ELLDP 2018.

6.3 Proposed Actions

The new monitoring data has not identified any new or existing exceedances of the objectives for any pollutant. However, two additional diffusion tube sites will be provided in Haddington from July 2018 to assess impacts due to significant new housing development within the town. Details of the new sites are provided in Table A.2 in Appendix A. Maps showing the location of the new sites are provided in Appendix D.

In addition to the proposed new monitoring sites described above, existing monitoring of NO₂ will continue throughout East Lothian, including Musselburgh, while PM₁₀ monitoring will continue in Musselburgh. The AQMA does not require amending or revoking at this time as levels within the AQMA remain close to the Nitrogen dioxide Annual Mean AQO.

East Lothian Council shall continue to implement measures outlined within the AQAP and also develop and publish policies that supplement CAFS throughout 2018 and beyond and will report progress in the Annual Progress Report due in June 2019.

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) | Distance to kerb of nearest road (m) (2) | Inlet Height (m) |
|------------------|--|-----------|------------------|------------------|-------------------------|-------------|--|---|---|------------------------|
| NO _X | Musselburgh North High Street - NO _x | Roadside | 333 941 | 672837 | NO ₂ | N | Gas-phase chemilluminescence detection | 5 | 3 | 1.5 |
| PM ₁₀ | Musselburgh North High Street - BAM | Roadside | 333 941 | 672837 | PM ₁₀ | N | BAM | 5 | 3 | 1.5 |

^{(1) 0} 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) | Distance to kerb of nearest road (m) ⁽²⁾ | Tube collocated with a Continuous Analyser? |
|--------------------|--|--------------|------------------|------------------|-------------------------|----------|---|--|---|
| T1 | Musselburgh – Newbigging Junction | Roadside | 334659 | 672720 | NO ₂ | Y | Y (15m) | 2m | N |
| T4 | Musselburgh - 87 High St | Roadside | 334526 | 672700 | NO ₂ | Y | Y (15m) | 4m | N |
| T6 | Musselburgh – 147 High Street | Roadside | 334392 | 672652 | NO ₂ | Y | Y 20m) | 3m | N |
| T7 | Musselburgh – 183 High St | Roadside | 334301 | 672632 | NO ₂ | Y | Y 20m) | 3m | N |
| T8 | Musselburgh - Mall Av | Roadside | 334172 | 672524 | NO ₂ | N | Y (25m) | 4m | N |
| T9 | Musselburgh – 45 Bridge Street | Roadside | 334105 | 672750 | NO ₂ | N | Y (3m) | 4m | N |
| T10 | Musselburgh – 150 North High St | Roadside | 333800 | 672822 | NO ₂ | N | Y (3m) | 4m | N |
| T11 | Tranent – 89 High St | Roadside | 340686 | 672692 | NO ₂ | N | Y (3m) | 3m | N |
| T12 | Tranent – 82 High St | Roadside | 340738 | 672687 | NO_2 | N | Y (4m) | 3m | N |
| T13 | Tranent – 55 High Street | Roadside | 340608 | 672738 | NO ₂ | N | Y (4m) | 3m | N |
| T14 | Tranent – 26 High St | Roadside | 340570 | 672780 | NO_2 | N | Y (2m) | 2m | N |
| T15 | Tranent – 58 Bridge St | Roadside | 340112 | 672905 | NO_2 | N | Y (5m) | 2m | N |
| T16 | Haddington - Lyn Lea | Urban | 352249 | 673631 | NO_2 | N | Y 8m) | 3m | N |
| T23 | Musselburgh - Co-located 133 N High St | Roadside | 333941 | 672837 | NO_2 | N | Y (5m) | 3m | Υ |
| T24 | Musselburgh - Co-located 133 N High St | Roadside | 333941 | 672837 | NO_2 | N | Y (5m) | 3m | Υ |
| T25 | Musselburgh - Co-located 133 N High St | Roadside | 333941 | 672837 | NO_2 | N | Y (5m) | 3m | Υ |
| T26 | Wallyford - 116 Salters Rd | Roadside | 336691 | 672055 | NO_2 | N | Y (5m) | 2m | N |
| T27 | Wallyford - 71 Salters Rd | Roadside | 336769 | 672127 | NO_2 | N | Y (5m) | 2m | N |
| T28 | Musselburgh - 15 Bridge Street | Roadside | 334164 | 672708 | NO_2 | N | Y (5m) | 3m | N |
| T29 | Musselburgh - 167 High Street | Roadside | 334354 | 672643 | NO_2 | Y | Y (5m) | 3m | N |
| T30 | Musselburgh - 137 High Street | Roadside | 334427 | 672664 | NO ₂ | Y | Y (5m) | 3m | N |
| T31 | Musselburgh - 69 High Street | Roadside | 334580 | 672713 | NO ₂ | Y | Y (5m) | 3m | N |
| T32 | Musselburgh - 86 High Street | Roadside | 334578 | 672695 | NO_2 | Υ | Y (5m) | 3m | N |
| T33 ⁽³⁾ | Haddington – 23 Hardgate | Roadside | 351693 | 673998 | NO_2 | N | Y (5m) | 2m | N |
| T34 ⁽³⁾ | Haddington – 2 Bothwell Bank, Hardgate | Roadside | 351702 | 674034 | NO_2 | N | Y (5m) | 2m | N |

^{(1) 0} 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 monitoring tubes proposed in Haddington from July 2018

Table A.3 - Annual Mean NO₂ Monitoring Results 2013 - 2017

| | | | Valid Data | | | NO ₂ Annual I | Mean Concent | ration (µg/m³) | |
|-----------------|-----------|------------------------|---------------------------------------|---|------|--------------------------|--------------|----------------|------|
| Site ID | Site Type | Monitoring Type | Capture for Monitoring Period (%) (1) | Valid Data Capture 2017 (%) ⁽²⁾ | 2013 | 2014 | 2015 | 2016 | 2017 |
| NO _x | Roadside | Automatic | 96 | 95 | 24 | 23 | 22 | 25 | 23 |
| T1 | Roadside | Passive Diffusion Tube | 100 | 100 | 30 | 30 | 27 | 29 | 30 |
| T4 | Roadside | Passive Diffusion Tube | 91.7 | 91.7 | 25 | 25 | 25 | 25 | 24 |
| T6 | Roadside | Passive Diffusion Tube | 100 | 100 | 42 | 43 | 36 | 40 | 38 |
| T7 | Roadside | Passive Diffusion Tube | 100 | 100 | 37 | 38 | 33 | 39 | 34 |
| T8 | Roadside | Passive Diffusion Tube | 100 | 100 | 24 | 23 | 21 | 24 | 23 |
| T9 | Roadside | Passive Diffusion Tube | 100 | 100 | 26 | 28 | 24 | 28 | 24 |
| T10 | Roadside | Passive Diffusion Tube | 100 | 100 | 34 | 34 | 31 | 34 | 33 |
| T11 | Roadside | Passive Diffusion Tube | 100 | 100 | 32 | 33 | 31 | 39 | 32 |
| T12 | Roadside | Passive Diffusion Tube | 100 | 100 | 28 | 25 | 24 | 29 | 22 |
| T13 | Roadside | Passive Diffusion Tube | 100 | 100 | 28 | 29 | 27 | 30 | 27 |
| T14 | Roadside | Passive Diffusion Tube | 91.7 | 91.7 | 24 | 24 | 21 | 25 | 20 |
| T15 | Roadside | Passive Diffusion Tube | 100 | 100 | 19 | 17 | 16 | 20 | 18 |
| T16 | Urban | Passive Diffusion Tube | 100 | 100 | 8 | 8 | 8 | 9 | 7 |
| T23 | Roadside | Passive Diffusion Tube | 100 | 100 | 23 | 23 | 22 | 24 | 22 |
| T24 | Roadside | Passive Diffusion Tube | 100 | 100 | 24 | 22 | 22 | 25 | 21 |
| T25 | Roadside | Passive Diffusion Tube | 100 | 100 | 24 | 23 | 22 | 26 | 24 |
| T26 | Roadside | Passive Diffusion Tube | 91.7 | 91.7 | 23 | 24 | 21 | 25 | 28 |
| T27 | Roadside | Passive Diffusion Tube | 100 | 100 | 24 | 22 | 21 | 26 | 22 |
| T28 | Roadside | Passive Diffusion Tube | 100 | 100 | 26 | 26 | 23 | 28 | 22 |
| T29 | Roadside | Passive Diffusion Tube | 91.7 | 91.7 | 38 | 39 | 32 | 39 | 35 |
| T30 | Roadside | Passive Diffusion Tube | 100 | 100 | 30 | 32 | 27 | 31 | 29 |
| T31 | Roadside | Passive Diffusion Tube | 100 | 100 | 43 | 44 | 35 | 43 | 39 |
| T32 | Roadside | Passive Diffusion Tube | 100 | 100 | 34 | 37 | 30 | 33 | 32 |

Notes: Exceedances of the NO_2 annual mean objective of $40\mu g/m^3$ are shown in **bold**.

NO₂ annual means exceeding 60µg/m³, indicating a potential exceedance of the NO₂ 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 LAQM.TG(16) if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Table A.4 – 1-Hour Mean NO₂ Monitoring Results 2013 - 2017

| | | | Valid Data Capture | Valid Data | | re Valid Data NO ₂ 1-Hour Means > 200µg | | | | | | |
|---------|-----------|-----------------|---|------------------------------------|---------|--|--------|------|------|--|--|--|
| Site ID | Site Type | Monitoring Type | for Monitoring Period (%) ⁽¹⁾ | Capture 2015 (%) ⁽²⁾ | 2013 | 2014 | 2015 | 2016 | 2017 | | | |
| NOx | Roadside | Automatic | 95 | 95 | 0 (101) | 0 (78) | 0 (75) | 0 | 0 | | | |

Notes: Exceedances of the NO₂ 1-hour mean objective (200µg/m³ 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^{th} percentile of 1-hour means is provided in brackets.

Table A.5 – Annual Mean PM₁₀ Monitoring Results 2013 - 2017

| | | Valid Data Capture | Valid Data | P | M ₁₀ Annual N | lean Concen | tration (µg/m | ³) |
|------------------|-----------|-------------------------------|------------------|------|--------------------------|-------------|---------------|----------------|
| Site ID | Site Type | for Monitoring Period (%) (1) | Capture 2015 (%) | 2013 | 2014 | 2015 | 2016 | 2017 |
| PM ₁₀ | Roadside | 90 | 90 | 16 | 17 | 12 | 10 | 14 |

Notes: Exceedances of the PM₁₀ annual mean objective of 18µg/m³ 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 LAQM.TG(16), valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Table A.6 – 24-Hour Mean PM₁₀ Monitoring Results 2013 - 2017

| | | Valid Data Capture for | Valid Data | PM ₁₀ 24-Hour Means > 50μg/m ^{3 (3)} | | | | | | | |
|------------------|-----------|---------------------------|------------------|--|------|------|------|------|--|--|--|
| Site ID | Site Type | Monitoring Period (%) (1) | Capture 2015 (%) | 2013 | 2014 | 2015 | 2016 | 2017 | | | |
| PM ₁₀ | Roadside | | | 2 (32) | 3 | 1 | 0 | 0 | | | |

Notes: Exceedances of the PM₁₀ 24-hour mean objective (50µg/m³ not to be exceeded more than 7 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 98.1st percentile of 24-hour means is provided in brackets.

Appendix B: Full Monthly Diffusion Tube Results for 2017

Table B.1 – NO₂ Monthly Diffusion Tube Results for 2017

| Site | | | | | | 05 | 5/01/17 | - 03/0 | 1/18 | | | | | AVERAGE | Data | BIAS |
|------|-----------------------------------|---------|-----|-----|-----|-----|---------|--------|---------|-----|-----|-----|-----|---------|--------------|----------------------|
| ID | Location | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | AVERAGE | Capture % | ADJUSTED (1.0 local) |
| 1 | Musselburgh – Newbigging Junction | 43 | 29 | 41 | 30 | 27 | 24 | 19 | 22 | 23 | 26 | 37 | 35 | 30 | 100 | 30 |
| 4 | Musselburgh - 87 High St | 25 | 30 | 32 | 23 | 16 | 16 | 14 | 20 | 21 | 24 | 27 | 37 | 24 | 91.7 | 24 |
| 6 | Musselburgh – 147 High Street | MISSING | 85 | 44 | 42 | 41 | 32 | 25 | 28 | 32 | 21 | 36 | 35 | 38 | 100 | 38 |
| 7 | Musselburgh – 183 High St | 33 | 34 | 46 | 38 | 37 | 29 | 34 | 26 | 30 | 28 | 42 | 34 | 34 | 100 | 34 |
| 8 | Musselburgh - Mall Av | 27 | 30 | 30 | 16 | 22 | 14 | 16 | 16 | 21 | 21 | 33 | 30 | 23 | 100 | 23 |
| 9 | Musselburgh – 45 Bridge Street | 29 | 30 | 23 | 24 | 23 | 18 | 25 | 16 | 24 | 21 | 23 | 31 | 24 | 100 | 24 |
| 10 | Musselburgh – 150 North High St | 38 | 33 | 41 | 40 | 27 | 25 | 24 | 26 | 30 | 29 | 40 | 47 | 33 | 100 | 33 |
| 11 | Tranent – 89 High St | 42 | 35 | 42 | 32 | 30 | 22 | 21 | MISSING | 29 | 27 | 38 | 38 | 32 | 100 | 32 |
| 12 | Tranent – 82 High St | 25 | 26 | 32 | 23 | 29 | 16 | 19 | 15 | 18 | 18 | 23 | 20 | 22 | 100 | 22 |
| 13 | Tranent – 55 High Street | 39 | 33 | 33 | 25 | 24 | 21 | 18 | 18 | 25 | 23 | 30 | 32 | 27 | 100 | 27 |
| 14 | Tranent – 26 High St | MISSING | 22 | 1 | 47 | 24 | 20 | 16 | MISSING | 18 | 16 | 20 | 18 | 20 | 91.7 | 20 |
| 15 | Tranent – 58 Bridge St | 23 | 18 | 24 | 17 | 16 | 11 | 12 | 12 | 17 | 17 | 24 | 27 | 18 | 100 | 18 |
| 16 | Haddington - Lyn Lea | 13 | 8 | 4 | 7 | 5 | 3 | 4 | 4 | 6 | 8 | 11 | 15 | 7 | 100 | 7 |
| 23 | Musselburgh - 133 N High St | 26 | 25 | 29 | 19 | 24 | 17 | 16 | 14 | 19 | 18 | 27 | 28 | 22 | 100 | 22 |
| 24 | Musselburgh - 133 N High St | 23 | 21 | 23 | 24 | 21 | 17 | 16 | 14 | 18 | 21 | 26 | 26 | 21 | 100 | 21 |
| 25 | Musselburgh - 133 N High St | 30 | 24 | 29 | 23 | 22 | 18 | 23 | 16 | 22 | 21 | 27 | 33 | 24 | 100 | 24 |
| 26 | Wallyford - 116 Salters Rd | 83 | 24 | 31 | 22 | 18 | 16 | 14 | 19 | 22 | 20 | 35 | 31 | 28 | 91.7 | 28 |
| 27 | Wallyford - 71 Salters Rd | 33 | 28 | 36 | 20 | 21 | 15 | 13 | 17 | 20 | 21 | 1 | 33 | 22 | 100 | 22 |
| 28 | Musselburgh - 15 Bridge Street | 28 | 27 | 25 | 23 | 24 | 18 | 17 | 14 | 21 | 18 | 27 | 27 | 22 | 100 | 22 |
| 29 | Musselburgh - 167 High Street | 35 | 39 | 45 | 35 | 41 | 28 | 27 | 26 | 34 | 30 | 45 | 39 | 35 | 91.7 | 35 |
| *30 | Musselburgh - 137 High Street | 33 | 32 | 43 | 30 | 33 | 20 | 25 | 19 | 21 | 27 | 32 | 30 | 29 | 100 | 29 |
| *31 | Musselburgh - 69 High Street | 48 | 32 | 58 | 42 | 37 | 34 | 28 | 31 | 34 | 34 | 48 | 45 | 39 | 100 | 39 |
| *32 | Musselburgh - 86 High Street | 44 | 40 | 42 | 30 | 26 | 25 | 20 | 20 | 28 | 32 | 38 | 36 | 32 | 100 | 32 |

Three of the diffusion tubes are co-located with the continuous analyser on Musselburgh North High Street (Tube Numbers T23, T24 and T25). The bias adjustment factor has been calculated from the comparison of the diffusion tubes and continuous analyser measurements during the monitoring period. The average for the co-located tubes was 22.3 µg/m³. The average for the continuous analyser was 23 µg/m³. This provided a diffusion tube bias adjustment factor of 1.

| Method | Average for period (µg/m³) |
|-----------------|----------------------------|
| Analyser | 23 |
| Tubes | 22.3 |
| BIAS ADJUSTMENT | 1 |

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

Air Pollution Report



1st January to 31st December 2017

East Lothian Musselburgh N High St (Site ID: MUSS)

These data have been fully ratified

Only relevant statistics for LAQM are presented in the table. Cells with - indicate no data available or calculated.

| Pollutant | NO µg/m³ | NO ₂ μg/m³ | NO _χ asNO ₂ μg/m³ | PM ₁₀ μg/m³ |
|----------------------------------|-------------|--------------------------|--|---------------------------|
| Number Days Low | - | 355 | - | 324 |
| Number Days Moderate | - | 0 | - | 0 |
| Number Days High | - | 0 | - | 0 |
| Number Days Very High | - | 0 | - | 0 |
| Max Daily Mean | 81 | 85 | 207 | 48 |
| Annual Max | 467 | 177 | 893 | 342 |
| Annual Mean | 13 | 23 | 44 | 14 |
| 98th Percentile of daily mean | - | - | - | 35 |
| 90th Percentile of daily mean | - | - | - | 23 |
| 99.8th Percentile of hourly mean | - | 123 | - | - |
| 98th Percentile of hourly mean | 68 | 80 | 181 | 42 |
| 95th Percentile of hourly mean | 45 | 62 | 130 | 32 |
| 50th Percentile of hourly mean | 7 | 18 | 30 | 12 |
| % Annual data capture | 95.11% | 95.06% | 95.06% | 90.45% |

Instruments: PM 10: BAM Gravimetric Equivalent (correction applied)

All gaseous pollutant mass units are at 20° C and 1013mb. Particulate matter concentrations are reported at ambient temperature and pressure. NO_X mass units are NO_X as NO₂ μ g m-3

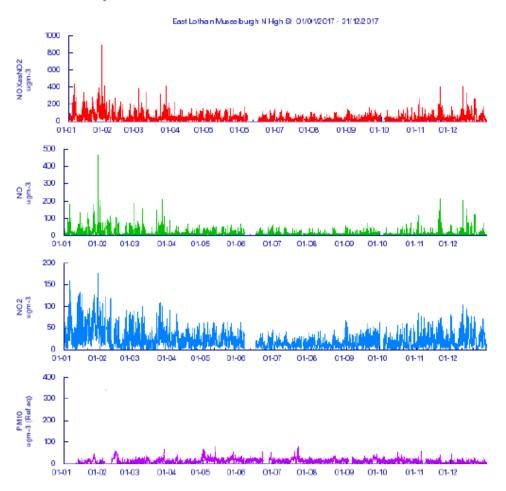
Note: For a strict comparison against the objectives there must be a data capture of 85% or greater throughout the calendar year.

1/3

Report produced by Ricardo Energy & Environment

| Pollutant | Air Quality Standards (Scotland) Regulations 2010 | Exceedances | Days |
|---|---|-------------|------|
| PM10 particulate matter (Hourly measured) | daily mean > 50 microgrammes per metre cubed | 0 | 0 |
| PM10 particulate matter (Hourly measured) | Annual mean > 18 microgrammes per metre cubed | 0 | - |
| Nitrogen diaxide | Hourly Mean > 200 microgrammes per metre cubed | 0 | 0 |
| Nitrogen diaxide | Annual Mean > 40 microgrammes per metre cubed | 0 | - |

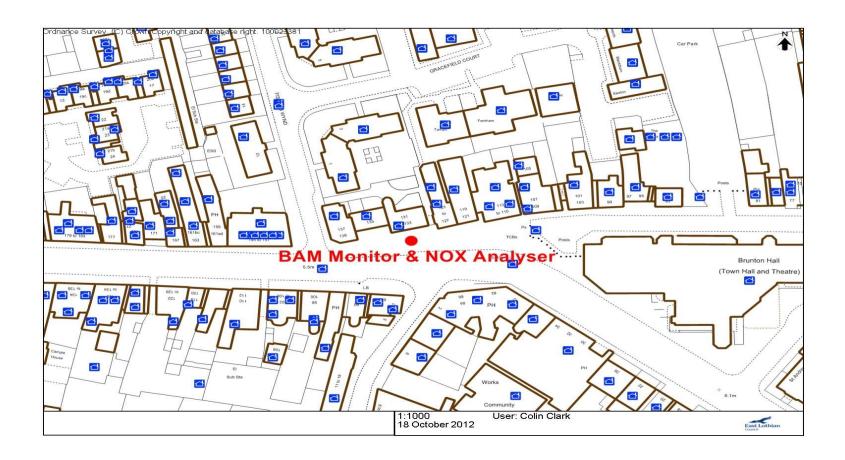
Annual Graph



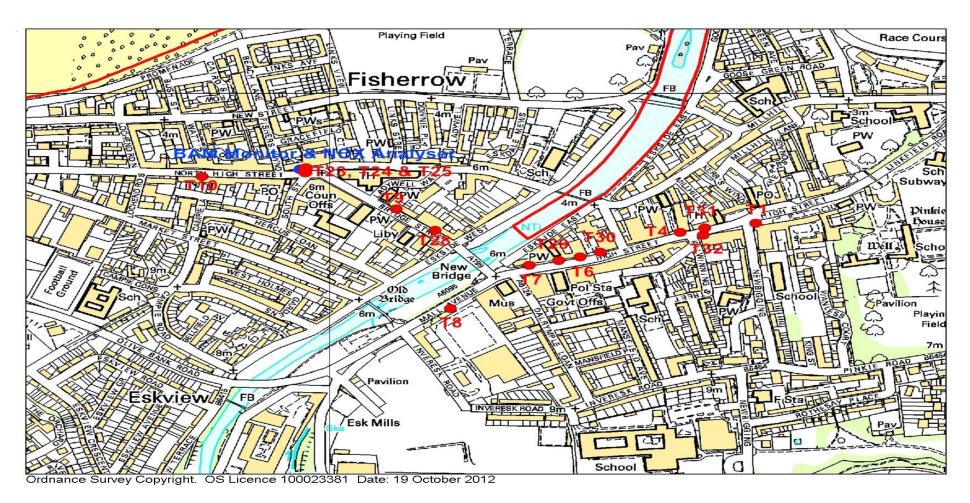
3 / 3 Report produced by Ricardo Energy & Environment

Appendix D: Maps of monitoring locations

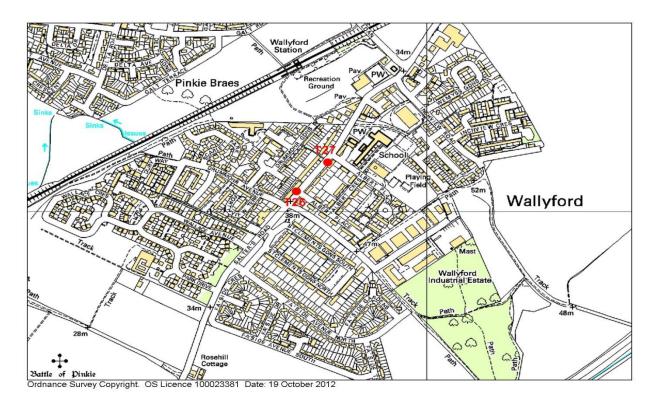
Map of Automatic Monitoring Site in Musselburgh



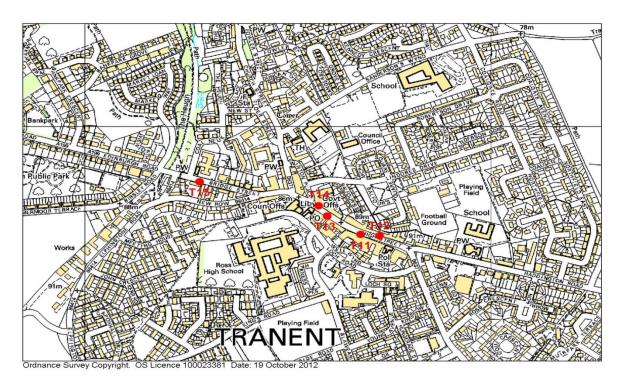
Map of Non-Automatic Monitoring Sites in Musselburgh



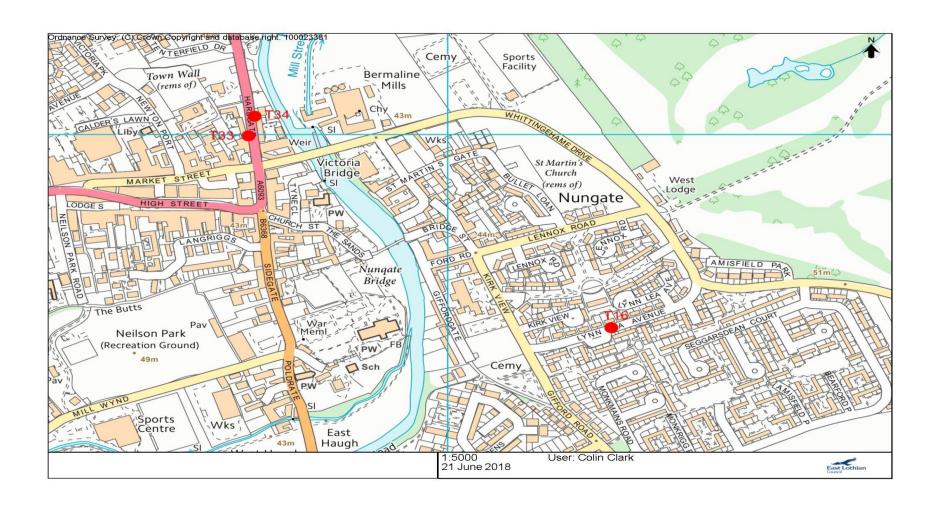
Map of Non-Automatic Monitoring Sites in Wallyford



Map of Non-Automatic Monitoring Sites in Tranent



Map of Non-Automatic Monitoring Sites in Haddington



Appendix E: Summary of Previous Rounds of Review and Assessment

| | | | | Fast Lothian Council |
|---------|---------------------------------|--------------------|--------------------------|--|
| DOLLNID | | | w and Assessment Reports | CONCLUCIONS |
| ROUND | REPORT TYPE | REPORT DUE DATE | REPORT COMPLETION DATE | CONCLUSIONS |
| 2 | Updating & Screening Assessment | April 2003 | March 2004 | No further assessments required for Carbon Monoxide, Benzene, Lead and 1,3-Butadiene. Detailed Assessments required for: Nitrogen Dioxide due to road traffic sources in Musselburgh High St Sulphur Dioxide due to industrial sources (Cockenzie Power Station and Lafarge Cement Works) PM10 due to road traffic sources in Musselburgh High St and North High St and also due to industrial source (Cockenzie Power Station) |
| 2-1 | Detailed Assessment | April 2004 | April 2005 | Nitrogen Dioxide due to road traffic in Musselburgh High St expected to meet Objectives by target year of 2005. No Further Assessment required at this time. Sulphur Dioxide in vicinity of Cockenzie Power Station was not forecast to exceed Objectives. 15-minute mean Objective forecast to be slightly exceeded in vicinity of Lafarge Cement Works, although abatement equipment to be installed should ensure that Objective will be met. No further assessments required at this time. PM10 Annual Mean Objective forecast to be exceeded in Musselburgh High St due to roadwork's and Cockenzie due to emissions from Coal Plant at Cockenzie Power Station. However, results were based on Osiris monitoring system and use of correction factors. Further Assessments to be carried out by East Lothian Council using TEOM Analyser for road traffic sources in Musselburgh and by SEPA using Gravimetric Sampler for industrial source in Cockenzie. |
| 2-2 | Progress Report | April 2005 | August 2005 | Nitrogen Dioxide levels due to road traffic sources continue to comply with Objectives within Musselburgh and throughout East Lothian. PM10 Further Assessments due to road traffic sources in Musselburgh and industrial source in Cockenzie still to be completed and results to be incorporated in Updating and Screening Assessment Report due in April 2006. |
| 3 | Updating & Screening Assessment | April 2006 | August 2006 | No exceedances of any Objectives forecast. No Further Assessments required |
| 3-1 | Progress Report | April 2007 | July 2007 | Nitrogen Dioxide levels due to road traffic sources in Musselburgh and proposed expansions of Musselburgh Racecourse and Wallyford Village continue, and are forecast, to comply with Objectives. PM10 levels due to road traffic in Musselburgh complied with using local correction factor but exceeded using national correction factor. TEOM unit to be replaced with a BAM unit following results of Equivalence Study carried out by DEFRA. |
| 3-2 | Progress Report | April 2008 | February 2009 | Nitrogen Dioxide levels due to road traffic sources in Musselburgh and proposed expansions of Musselburgh Racecourse and Wallyford Village continue, and are forecast, to comply with Objectives. Passive monitoring to be introduced in Wallyford. |

| | Summ | ary of Previous Pevie | v and Assessment Reports | |
|-------|--|-----------------------|--------------------------|---|
| Round | Report Type | Report Due Date | Report Completion Date | Conclusions |
| 4 | Updating & Screening Assessment | April 2009 | November 2009 | PM10 and Nitrogen Dioxide levels in Musselburgh will require to be subject of a Detailed Assessment due to the Biomass Unit located at Queen Margaret University. The results of the Updating and Screening Assessment carried out for all other pollutants indicates that current Air Quality Objectives are being complied with. |
| 4-1.1 | Detailed Assessment of Nitrogen Dioxide and PM10 due to QMU Biomass Unit | 2010 | October 2010 | PM10 and Nitrogen Dioxide levels continue to be met |
| 4-1 | Progress Report | April 2010 | October 2010 | All AQO's being complied with |
| 4-2 | Progress Report | April 2011 | June 2011 | Detailed Assessment of Nitrogen Dioxide required for Musselburgh High Street. All other AQO's being complied with. |
| 4-2.1 | Detailed Assessment of Nitrogen Dioxide in Musselburgh due to Road Traffic | 2012 | May 2012 | AQMA required for Bridge Street and High Street due to forecast exceedance of Annual Mean AQO if additional monitoring confirms predicted exceedances. |
| 5 | Updating &Screening Assessment | April 2012 | | AQMA required for Bridge Street and High Street due to forecast exceedance of Annual Mean AQO <u>if additional monitoring confirms</u> predicted exceedances in 2012. |
| 5-1 | Progress Report | April 2013 | August 2013 | AQMA to be declared in Musselburgh in relation to exceedances of NO2 Annual Mean Objective. Further Assessment to be commissioned. |
| 5-1.1 | Further assessment | November 2014 | June 2014 | It is estimated that ambient NOx reductions in the AQMA of between 0% and 27% are required in order to achieve compliance with the annual mean NO2 objective. The source apportionment exercise indicates that emissions from buses form the largest contribution at all locations along the High St AQMA. Modelling of the mitigation scenarios agreed with the Council indicates |
| | | | | that an integrated package of interventions would provide the best NOx reductions. Measures that reduce overall traffic, reduce queuing and reduce bus numbers, where appropriate, will reduce road NOx significantly. |
| 5-2 | Progress Report | April 2014 | August 2014 | Monitoring results for 2013, indicate that the current AQMA boundary includes all relevant sources and does not require revocation or amendment at this time. NO ₂ levels in AQMA continue to exceed or remain very close to objective. |
| 6-1 | Updating & Screening Assessment | April 2015 | September 2015 | Monitoring results for 2014, indicate that the current AQMA boundary includes all relevant sources and does not require revocation or amendment at this time. NO₂ levels in AQMA continue to exceed or remain very close to objective. Progress is being made wrt development of Action Plan with draft expected early 2016. |
| 6-2 | Annual Progress Report | June 2016 | July 2016 | No exceedances of Air Quality Objectives with downward trend noted in NO ₂ . Action Plan being progressed. Awaiting results of Micro-simulation traffic model to allow traffic-related mitigation measures to be identified for inclusion in Action Plan. |
| 6-3 | Annual Progress Report | June 2017 | July 2017 | Exceedances of NO2 Annual Mean recorded at T6 and T31. |

| 6.4 | Annual Draggeon Donage | June 2018 | June 2018 | No exceedances of any Air Quality Objectives |
|-----|------------------------|-----------|-----------|--|
| 0-4 | Annual Progress Report | June 2016 | June 2016 | No exceedances of any Air Quality Objectives |

Glossary of Terms

Please add a description of any abbreviation included in the APR – An example is provided below.

| Abbreviation | Description |
|-------------------|---|
| AQAP | Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the LA intends to achieve air quality limit values' |
| 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 |
| APR | Air quality Annual Progress Report |
| AURN | Automatic Urban and Rural Network (UK air quality monitoring network) |
| Defra | Department for Environment, Food and Rural Affairs |
| DMRB | Design Manual for Roads and Bridges – Air quality screening tool produced by Highways England |
| FDMS | Filter Dynamics Measurement System |
| LAQM | Local Air Quality Management |
| NO ₂ | Nitrogen Dioxide |
| NOx | Nitrogen Oxides |
| PM ₁₀ | Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less |
| PM _{2.5} | Airborne particulate matter with an aerodynamic diameter of 2.5µm or less |
| QA/QC | Quality Assurance and Quality Control |
| SO ₂ | Sulphur Dioxide |

References

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- 4. East Lothian Council, Local Air Quality Management: Detailed Assessment, June 2012
- 5. East Lothian Council, Local Air Quality Management: Progress Report, July 2014
- 6. East Lothian Council, Local Air Quality Management: Updating and Screening Assessment, October 2015
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- 12. Part IV of The Environment Act 1995: Local Air Quality Management, Technical Guidance (TG16), Department of Environment, Food and Rural Affairs, April 2016.
- 13. East Lothian Council, East Lothian Local Development Plan, 2018

Colin Clark John Muir House Haddington East Lothian EH41 3HA 09th August 2018
If telephoning ask for:
Tanith Allinson
0131 449 7227

Dear Colin

THE ENVIRONMENT ACT 1995, PART IV LOCAL AIR QUALITY MANAGEMENT – ANNUAL PROGRESS REPORT 2018

Thank you for your report. The following comments are provided by SEPA as statutory consultee in terms of paragraph 1 of Schedule 11 to the Environment Act 1995. SEPA has discussed the report with the Scottish Government in order to share expertise and provide consistent comments.

The report concludes that all air quality objectives were met during 2017. Two monitoring locations within the Musselburgh Air Quality Management Area (AQMA) recorded concentrations close to the annual mean nitrogen dioxide (NO₂) objective, but remained in compliance. This is an improvement from last year's report when exceedances of the NO₂ annual mean objective were reported in the Musselburgh AQMA.

We commend the Council in its consideration of air quality through the planning system, especially given the LDP identifies a significant amount of residential housing. Ensuring that air quality is given the appropriate level of consideration, particularly LDP preferred sites in the Musselburgh 'cluster' area, will be key to achieving and maintaining compliance with the air quality objectives in the AQMA and throughout East Lothian. These actions are also in line with CAFS objectives in terms of place making. In addition we are supportive of the council's approach in reviewing the diffusion tube network and commissioning diffusion tubes in areas of new public exposure.

We agree that the Musselburgh AQMA should be retained. We advise that all local authorities with an AQMA will be required to go through the National Low Emissions Framework which is currently under development by Transport Scotland. Updates on this will be provided through the Pollution Liaison Groups throughout 2018/19.

I trust the above comments are of assistance. If you have any questions or wish to discuss any of the points raised in this response, please do not hesitate to contact Tanith Allinson 0131 449 7227

Yours sincerely, Tanith Allinson

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