

**To: ENVIRONMENT POLICY BOARD**

**On: 24 AUGUST 2016**

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**Report by: DIRECTOR OF COMMUNITY RESOURCES**

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**Heading: Renfrewshire's Local Air Quality Management (Declaration of Air Quality Management Areas & Review of Performance Indicator for Reporting on Air Quality) & Establishment of Environmental Quality Management Areas**

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## **1. Summary**

- 1.1 Following the introduction of the Environment Act 1995, all local authorities have been required to undertake a regular review and assessment of air quality within their area and submit the findings to the Scottish Government. Where these assessments confirm that an exceedance of a statutory air quality objective level exists, an Air Quality Management Area must be formally declared.
- 1.2 Local authorities have flexibility to determine the precise form and extent of an Air Quality Management Area, as long as all areas of concern are included. An Air Quality Action Plan must then be produced to set out measures to bring air quality back into line with limit values.
- 1.3 The Council's most recent air quality reports detailing monitoring and modelling work undertaken in 2014/15 were reported to the Environment Policy Board on 27 January 2016. These reports confirmed exceedances of air quality objective levels at Johnstone High Street and Renfrew town centre.
- 1.4 At that time it was requested that a further report be brought back to this Policy Board setting out options and recommendations for the establishment of a wider or multiple Air Quality Management Areas within Renfrewshire. The attached appendix provides details of the options considered and the assessment undertaken of each option.

- 1.5 The proposal following this options appraisal is to create two new Air Quality Management Areas within Renfrewshire – one in Johnstone and one in Renfrew. This will be in addition to the existing Air Quality Management Area covering Paisley Town Centre. The full options appraisal is provided in Appendix 1.
- 1.6 The information presented above and the recommendation to increase the number of Air Quality Management Areas does not reflect a deterioration in air quality within Renfrewshire. It does reflect improvements in our ability to monitor and assess air quality and identify where issues arise.
- 1.7 The recommendation to create two additional Air Quality Management Areas takes into account the different issues that are impacting on air quality, within each area and the potential that this approach provides to enable the Council to develop individual Air Quality Management Action Plans that specifically address the different issues in a focused way.
- 1.8 The recommendation also takes into consideration the fact that an Air Quality Action Plan may put in place controls that have an impact on the nature and extent of development, planning and infrastructure that can be taken forward within the Air Quality Management Area. This can have an impact on businesses and residents in the affected area. To minimise any potential impact care has been taken to ensure that the boundaries of each area proposed are as small as possible whilst ensuring that the full Air Quality Management Area is included.
- 1.9 The alternative option considered was to expand the existing Paisley Town Centre Air Quality Management Area to include the additional areas of exceedance. While this would have reduced the overall number of Air Quality Management Areas within Renfrewshire (maintaining it at 1 rather than increasing the total to 3) this approach would have brought an increased number of businesses and residents into the Air Quality Management Area unnecessarily, and potentially subject to controls and actions within the action plan.
- 1.10 Should the Policy Board approve the recommendations outlined in this report, the Air Quality Management Areas will be designated by means of the Orders within Appendix 2 and the Scottish Government and any other statutory consultees thereafter notified.

### **Performance Monitoring**

- 1.11 Alongside this options appraisal, the Policy Board also asked that a review be undertaken of the Council's air quality performance indicators (PIs) within the Community Resources Service Improvement Plan and the Community Plan Local Outcome Indicator Plan. At present, the Council has one Air Quality Management Area covering Paisley town centre and a current PI relates to maintaining (or reducing) this number. However this target does require to be reviewed and updated as it is no longer an accurate measure of progress in improving air quality in areas where exceedances of the objectives occurs. Therefore it is recommended that this be updated and replaced with a range of improved measures being developed that will allow the Council to more accurately reflect its progress in tackling air quality. In

the short term it is recommended that the other existing PIs be retained, in addition to the introduction of a new indicator concerning particulate matter (PM<sub>10</sub>).

### **Environmental Quality Management Approach**

- 1.12 The process of declaring Air Quality Management Areas (AQMAs) followed by the production of an action plan is a statutory process defined within the Environment Act 1995. However, this approach could also be used across a number of related areas and to tackle a range of environmental issues for which the Council, through Community Resources or the Community Safety Partnership has responsibility. For example trade waste, fly tipping, dog fouling, graffiti, or anti social behaviour could all be addressed in a similar way with evidence of need leading to a specific area being declared a quality management area and a specific action plan being put in place that focuses resources and tackles specific local needs. With Policy Board approval this approach will be developed and taken forward for a range of environmental quality issues.

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## **2. Recommendations**

- 2.1 It is recommended that the Environment Policy Board:
- (i) notes the options for declaration of Air Quality Management Areas within Renfrewshire, as detailed within Appendix 1;
  - (ii) approves the Air Quality Management Area Orders for each area of exceedance, as detailed within Appendix 2;
  - (iii) notes the review of air quality performance indicators and approves the recommendation to remove the PI relating to maintaining or reducing the number of AQMA's, retaining the other existing PIs and introducing a new performance indicator concerning particulate matter (PM<sub>10</sub>).
  - (iv) approves the proposal to develop quality management areas for a range of environmental issues based on evidence of need

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## **3. Declaration of Air Quality Management Areas**

- 3.1 Part IV of the Environment Act 1995 places a statutory duty on local authorities to regularly review and assess air quality within their area to identify exceedances of statutory air quality objectives and submit the findings to the Scottish Government. This process is termed Local Air Quality Management (LAQM).
- 3.2 The outcomes of these annual Local Air Quality Management reports are reported to the Environment Policy Board with the latest report being presented on 27 January 2016, detailing the outcomes of the Council's 2015 Updating & Screening Assessment and Detailed Assessments for Johnstone, Renfrew & Montgomery Road in Paisley. These reports are referenced as background papers and can be made available on request.

3.3 The 2015 Updating & Screening Assessment confirmed the following:

- continuing exceedances of the annual mean NO<sub>2</sub> objective within the existing Paisley Town Centre Air Quality Management Area,
- a risk of NO<sub>2</sub> levels being exceeded out with the Air Quality Management Area at a residential receptor close to the M8 motorway west of Glasgow Airport. The Council will increase monitoring at this location and review results in the 2017 Annual Progress Report.

3.4 The Detailed Assessment reports for Johnstone, Renfrew & Montgomery Road in Paisley confirmed the following:

- NO<sub>2</sub> concentrations in excess of the annual mean objective were monitored and modelled along Johnstone High St. Whilst potential exceedances of the PM<sub>10</sub> annual mean objective were modelled within the Detailed Assessment, the Scottish Government, their technical advisors and the Scottish Environment Protection Agency (SEPA) have advised that further monitoring is necessary to confirm these exceedances prior to declaring the Air Quality Management Area for PM<sub>10</sub>. An Air Quality Management Area therefore requires to be declared along Johnstone High St for the NO<sub>2</sub> annual mean objective only. Funding for a particulate monitor has been obtained through the Scottish Government's air quality grant scheme for 2016/17.
- NO<sub>2</sub> concentrations in excess of the annual and hourly mean objective levels were monitored and modelled within Renfrew Town Centre. An Air Quality Management Area therefore requires to be declared within Renfrew town centre for both the NO<sub>2</sub> annual and one hour mean objectives.
- The Renfrew M8 study focussed on the section of M8 motorway between Arkleston and Junction 26 where residential properties are sited close to the road. Marginal exceedances of the NO<sub>2</sub> annual mean objective were modelled at a strip of residential properties adjacent to the M8 in Renfrew. The Scottish Government, their technical advisors and the Scottish Environment Protection Agency (SEPA) have advised that further monitoring is required in this area before a conclusion is reached on whether an Air Quality Management Area is required.
- There is no requirement to declare an Air Quality Management Area at Montgomery Road, Paisley.

3.5 In summary, as reported to Board on 27 January 2016 both Johnstone and Renfrew town centres require to be declared Air Quality Management Areas. Currently there is one Air Quality Management Area within Renfrewshire covering the majority of Paisley town centre. The Board asked that consideration be given to choosing whether to expand this Air Quality Management Area to include these additional areas of exceedance (therefore remaining at one large Air Quality Management Area) or to create two additional, discrete air quality management areas within

Renfrewshire. The benefits and disadvantages of both approaches were assessed and are detailed within Appendix 1: *Boundary options for the declaration of Air Quality Management Areas within Renfrewshire*.

- 3.6 It is recommended that Option 1- Individual Air Quality Management Areas for each area of exceedance is approved by the Policy Board, resulting in two new discrete Air Quality Management Areas being declared in Johnstone and Renfrew town centres. This option facilitates focused and detailed consideration of the issues particular to each area and where improvements to air quality are achieved, allows revocation of individual areas. Should the Board approve this option; the Air Quality Management Areas will be designated by means of the Orders in Appendix 2 and the Scottish Government thereafter notified.

#### **4. Performance Monitoring**

- 4.1 As recommended within the January 2016 Environment Policy Board Report, a review of the Council's performance indicators (PIs) for reporting on progress with improvements in air quality has been undertaken. The Community Resources Service Improvement Plan for 2016-2019 has three PIs relating to air quality. These are:

- Number of air quality management areas within Renfrewshire (with a maximum target of one)
- Percentage of air quality monitoring sites which exceed nitrogen dioxide limits
- The average nitrogen dioxide levels at monitoring sites that are exceeding limits.

- 4.2 On review of the above measures, it is considered that the target of having one Air Quality Management Area within Renfrewshire is not appropriate as introducing a wider Air Quality Management Area does not accurately reflect areas where exceedances of objectives for pollutants occur and does not reflect performance in managing or monitoring air quality in Renfrewshire. An Air Quality Management Area is designed to describe a geographic area where the causes of exceedances require to be managed and will generally extend to areas beyond the minimum area required for this. However, seeking to maintain performance in this indicator could lead to large numbers of homes and businesses being included within an Air Quality Management Area unnecessarily and potentially subject to controls and actions within the action plan. A report through the Greener Thematic Board to the Community Plan Partnership Board will also be required to remove this measure from the Local Outcome Indicator Plan.

- 4.3 It is also recommended that a new measure, similar to the NO<sub>2</sub> target, is introduced within the Service Improvement Plan for PM<sub>10</sub>:

- The annual average PM10 value across all continuous monitoring sites, with a target value of less than 18ug/m<sup>3</sup> for the annual mean.

- 4.4 With regard to the other PIs, these were introduced in 2015 and are still felt to be relevant and useful in monitoring performance in this area.

## **5. Environmental Quality Management Areas**

- 5.1 The process of declaring Air Quality Management Areas at areas where evidence demonstrates that air quality objectives are being exceeded, followed by the production of an action plan of measures to address the issue is a statutory process designed to provide a means of managing air quality. This concept can be applied across a variety of environmental issues for which the council has responsibility to ensure efficient targeting of resources to improve the quality of the environment in areas where significant issues are identified. Within Community Resources these may include waste (commercial/ domestic/ recycling/ litter), fly tipping, dog fouling, graffiti street cleanliness and anti social behaviour. Areas will be identified and spatially defined through collation of service knowledge and analysis of customer enquiries as well as other evidence.
- 5.2 Similar to Air Quality Management Areas, if this approach is agreed, these areas will be referred to as Environmental Quality Management Areas (EQMAs). An action plan of measures will be established incorporating relevant strategic service priorities outlined within the Community Resources Service Improvement Plan and where necessary more specific measures tailored to the local situation and environment within any Environmental Quality Management Area. The action planning process will ensure resources are focussed on those areas of most concern, delivering improvements to the environment.

## **6. Next Steps**

- 6.1 If approved by the Policy Board, the new Air Quality Management Area Orders will be appropriately publicised, with the Scottish Government and any other statutory consultees also being notified.
- 6.2 Thereafter there will be a requirement to prepare and publish an Air Quality Action Plan for these areas, normally within a twelve to eighteen month timescale from the Air Quality Management Area Orders commencing. Effective action planning requires input from a range of Council services and other stakeholders. Community Resources will lead on liaising with relevant partners to draw up and then consult on, a future draft Air Quality Action Plan, before bringing it to the Environment Policy Board for approval.
- 6.3 The types of actions commonly included within Air Quality Action Plans relate to transportation, road infrastructure, fleet improvements and green travel plans.
- 6.4 The proposed Environmental Quality Management Areas process will be developed to determine its feasibility and benefits to service delivery with further reports being brought back to future meetings of the Environment Policy Board to agree relevant quality management areas and action plans based on evidence of need.

## Implications of the Report

1. **Financial** – the Council can apply for funding from the Scottish Government to cover costs associated with declaration of an Air Quality Management Area, production of Air Quality Action Plans and any additional monitoring within new AQMAs that may be required. However, there could be significant costs to the Council associated with the development and implementation of effective, future action plan measures.
  2. **HR & Organisational Development** – none
  3. **Community Planning**

**Community Care, Health & Well-being** - by producing our annual air quality reports, declaring Air Quality Management Areas where necessary and producing Air Quality Action Plans we aim to improve air quality and provide a clean and safe environment for all of Renfrewshire's residents, workers and visitors.

**Greener** - improving air quality will have a beneficial impact on Renfrewshire's natural environment.
  4. **Legal** – none
  5. **Property/Assets**-none
  6. **Information Technology** - none
  7. **Equality & Human Rights**- the Recommendations contained within this report have been assessed in relation to their impact on equalities and human rights. No negative impacts on equality groups or potential for infringement of individuals' human rights have been identified arising from the recommendations contained in the report. If required following implementation, the actual impact of the recommendations and the mitigating actions will be reviewed and monitored, and the results of the assessment will be published on the Council's website.
  8. **Health & Safety** – none
  9. **Procurement** – none
  10. **Risk** – none
  11. **Privacy Impact** - none
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## List of Background Papers

- a) Background Paper 1: Environment Policy Board Report, 27 January 2016, Renfrewshire's Local Air Quality Management –2015 Updating & Screening Assessment and Detailed Assessments for Johnstone, Renfrew & Montgomery Road, Paisley,
- b) Background Paper 2: 2015 Updating & Screening Assessment,
- c) Background Paper 3: Detailed Assessment of Air Quality - High St, Johnstone,
- d) Background Paper 4: Detailed Assessment of Air Quality – Renfrew M8 & Town Centre,
- e) Background Paper 5: Detailed Assessment of Air Quality – Montgomery Road, Paisley

The foregoing background papers will be retained within Community Resources for inspection by the public for the prescribed period of four years from the date of the meeting.

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**Renfrewshire  
Council**

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**Boundary options for the declaration of Air  
Quality Management Areas within  
Renfrewshire**

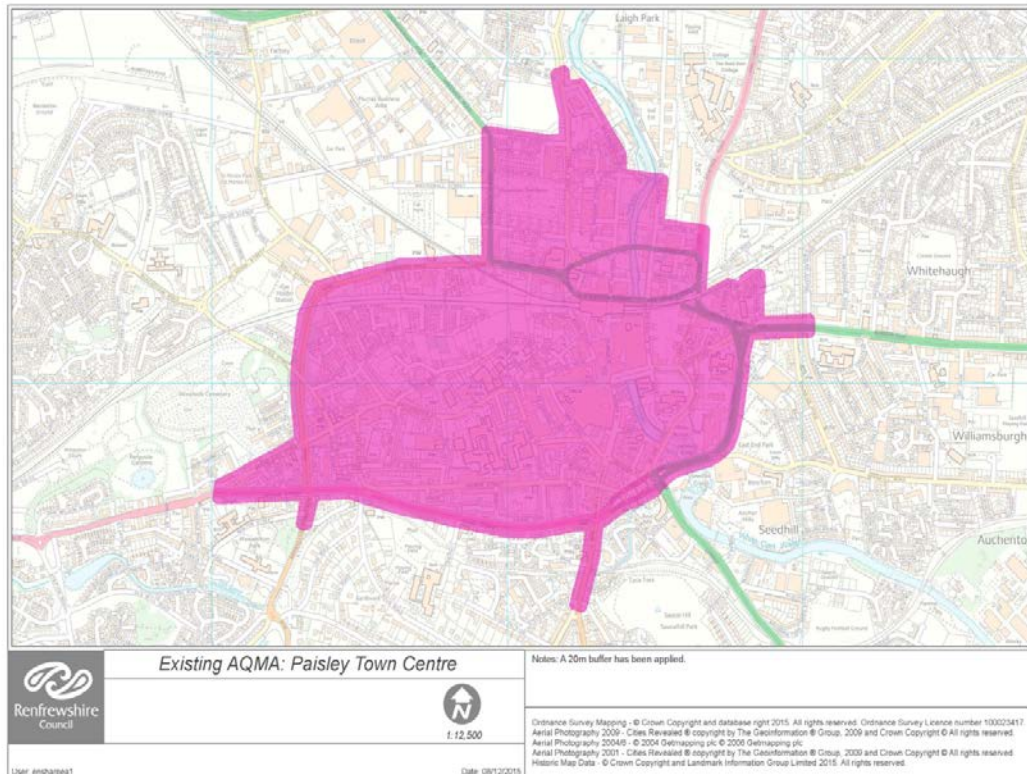
April 2016  
Community Resources

## **1. Summary**

- 1.1 Detailed Assessments of air quality undertaken in Renfrew and Johnstone during 2015 have confirmed exceedances of statutory air quality objectives. There is a requirement that these areas are declared as Air Quality Management Areas and this report details the boundary options for these, outlining their respective advantages and disadvantages.
- 1.2 It is recommended that Option 1 be taken forward as the preferred option, whereby two new Air Quality Management Areas will be declared in Johnstone and Renfrew town centres.

## **2. Background**

- 2.1 Part IV of the Environment Act 1995 introduced a Local Air Quality Management regime, placing a duty on local authorities to regularly review and assess air quality within their area to identify exceedances of statutory air quality objectives. Local authorities are also required to produce annual reports on air quality, including a review of monitoring data. Where a risk of air quality objectives being exceeded is identified, local authorities must:
- Undertake a Detailed Assessment to confirm if an exceedance of any objective exists within an area of relevant public exposure and determine the magnitude and geographic extent of this.
  - Declare an Air Quality Management Area where the Detailed Assessment confirms an exceedance of an objective. The form and extent of any Air Quality Management Area is determined by the local authority and must include the areas of exceedance as a minimum.
  - Produce an Air Quality Action Plan within 12 to 18 months setting out action measures which work towards achieving the objective levels for the pollutant of concern.
- 2.2 Renfrewshire Council first declared an Air Quality Management Area in 2005, extending this in 2009 to incorporate the majority of Paisley town centre for the PM10 and NO2 annual mean objectives and the NO2 1-hour mean objective. A map of the Paisley Town Centre Air Quality Management Area is provided in Figure 1.



**Figure 1: Existing Paisley Town Centre Air Quality Management Area**

2.3 An Air Quality Action Plan for the Paisley Town Centre Air Quality Management Area was published in 2013 and included 16 action measures to improve air quality, the majority of which have now been implemented. However exceedances of air quality objectives within the Paisley Town Centre Air Quality Management Area remain at locations adjacent to busy roads and areas of traffic congestion.

### **3. New Areas of Exceedances**

3.1 Additional areas of exceedances outwith the Paisley Town Centre Air Quality Management Area were identified in 2015 (based on 2014 monitoring data). The Council's 2015 Updating & Screening Assessment identified a risk of NO<sub>2</sub> levels being exceeded at a farm located close to the M8 motorway just west of Glasgow Airport. The Council will increase monitoring at this location and review the results within the 2017 Annual Progress Report. The Detailed Assessments undertaken for Johnstone and Renfrew confirmed exceedances of statutory air quality objectives at these locations. Each of these is described in more detail below.

## **Johnstone**

3.2 The Detailed Assessment study indicated the following:

- NO<sub>2</sub> concentrations in excess of the 40 µg.m<sup>-3</sup> annual mean objective were measured via diffusion tube monitoring and also predicted via dispersion modelling at both ground and 1<sup>st</sup> floor level at various locations along the High Street; at up to 17 residential properties.
- Annual mean PM<sub>10</sub> concentrations in excess of the 18 µg.m<sup>-3</sup> Scottish annual mean objective at both ground and 1<sup>st</sup> floor level were predicted via dispersion modelling at various locations along the High Street. However given these exceedances have been identified from modelling only, the Scottish Government, their technical advisors and the Scottish Environment Protection Agency (SEPA) have advised that monitoring is necessary to confirm these exceedances prior to declaring the Air Quality Management Area for PM<sub>10</sub>.

3.3 The Council is therefore required to declare an Air Quality Management Area for Johnstone High St between Thorn Brae and the junction between High Street, Barrochan Road and Napier Street, at this time for the NO<sub>2</sub> annual mean objective only.

## **Renfrew Town Centre**

3.4 The Renfrew town centre study focused on road traffic emissions at the main traffic junctions (Inchinnan Road, Hairst Street, Glebe Street, Paisley Road, Canal St and High St) where residential properties are located close to the road. The Detailed Assessment study indicated the following:

- NO<sub>2</sub> concentrations in excess of the 40 µg.m<sup>-3</sup> annual mean objective were measured via diffusion tube monitoring and also predicted via dispersion modelling at ground and 1st floor level at residential properties from numbers 1 to 19 Inchinnan Road and at numbers 2 and 4 Paisley Road.
- An annual mean NO<sub>2</sub> concentration in excess of 60 µg.m<sup>-3</sup> was measured at a diffusion tube site located at 15 Inchinnan Road. Guidance indicates there may be a risk that the 1 hour NO<sub>2</sub> objective is being exceeded at this location, where one residential property is present at ground floor.

- No exceedance of the annual mean PM10 objective was identified at any locations of relevant exposure.
- 3.5 The Council is therefore required to declare an Air Quality Management Area in Renfrew Town Centre for the NO<sub>2</sub> annual and one hour mean objectives.
- 3.6 At its meeting on 27 January 2016 the Environment Board noted that there were two main options to consider when declaring these Air Quality Management Areas. The first option would be to create a number of focussed Air Quality Management Areas within Renfrewshire to cover each area where exceedances were observed. The second option would be to extend the existing Air Quality Management Area within Paisley Town Centre to cover both Renfrew and Johnstone Town Centres.
- 3.7 This report provides an assessment of each of these options. In conducting the assessment a range of guidance was taken into consideration.

#### **4. Relevant Guidance**

- 4.1 The Scottish Government's policy guidance on Local Air Quality Management 'Policy Guidance PG(S)(16)' includes a section in relation to determining the boundaries of Air Quality Management Areas.
- 4.2 Whilst there are no specific requirements to determining the boundary, the guidance states that as a minimum the Air Quality Management Area must include all areas of likely exceedances. Air Quality Management Areas may include only the predicted area of exceedance (based on modelled pollutant contour lines) or cover a wider area based on natural boundaries such as roads, rivers or even the entire local authority area. Some local authorities have chosen to designate several Air Quality Management Areas, whilst others have included all areas of exceedance within one Air Quality Management Area (examples of other local authority Air Quality Management Areas are outlined in Section 7 below).
- 4.3 The Scottish Government guidance lists the following points that local authorities may wish to consider when deciding on the most appropriate Air Quality Management Area boundary:
- It may be administratively much simpler to designate a wider area, based on existing boundaries and natural features. This avoids the need to draw artificially precise lines on maps and also allows a more strategic approach to be taken;

- Wherever the boundaries of the Air Quality Management Area are drawn, the action plan is likely to need to cover a wider area;
- Designating a number of smaller Air Quality Management Areas, rather than one single large area, can allow an authority to demonstrate progress by removing individual areas as air quality improves there;
- Declaring smaller Air Quality Management Areas may also provide a clear focus on the problem areas within a local authority. This may prove particularly important for informing local authority planning processes; and
- A more focused approach to declaring Air Quality Management Areas may provide a better indication of where resources need to be allocated in terms of policy interventions.

4.4 The process involves an element of judgement and ultimately it is for each local authority to decide on the best form and extent of an Air Quality Management Area in their area, taking all relevant considerations and guidance into account.

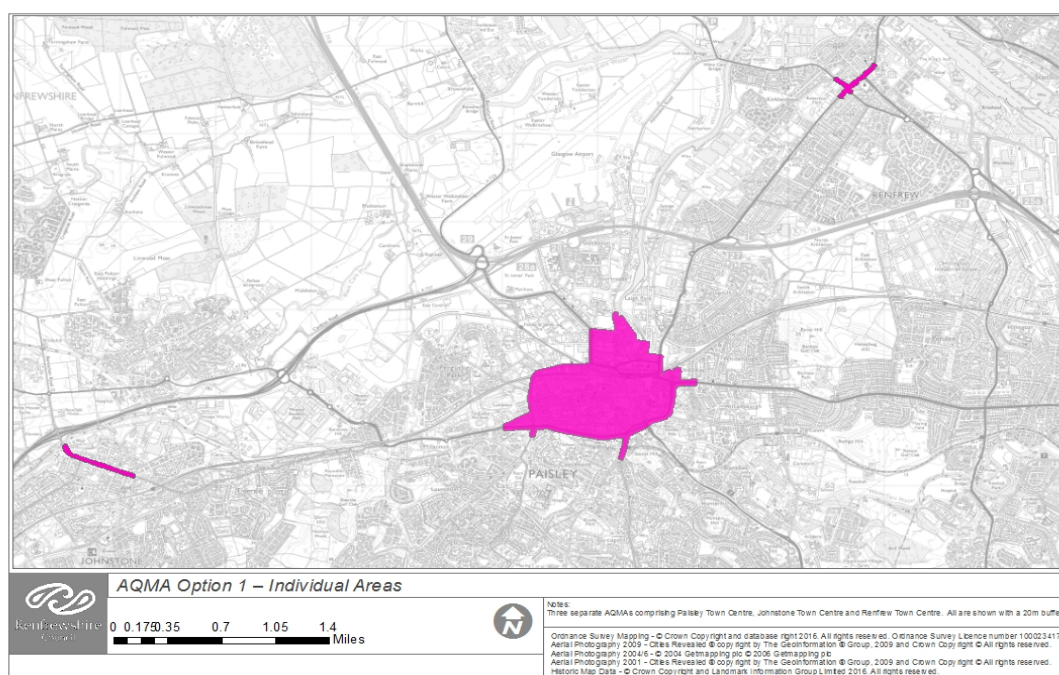
4.5 In view of this, three main options are considered feasible, described in detail in Section 5.

## 5. Discussion of Options

- 5.1 Three boundary options have been considered, with advantages and disadvantages included for information.

### Option 1 – Individual Air Quality Management Areas

- 5.2 Declare the newly identified areas of exceedances as individual Air Quality Management Areas as shown in Figure 2. This would result in a total of three Air Quality Management Areas across Renfrewshire, including the existing Paisley Town Centre Air Quality Management Area



**Figure 2: Individual Air Quality Management Areas**

- 5.3 Individual Air Quality Management Areas present a number of advantages and disadvantages.

#### Advantages:

- Air Quality Management Areas serve to indicate the locations where people are exposed to elevated concentrations of pollutants. Declaring separate Air Quality Management Areas, based on the conclusions of the air quality modelling work, ensures that only areas of concern are included within an Air Quality Management Area.
- Separate small Air Quality Management Areas will be more favourable from a planning/strategic perspective as the Air Quality Management Area would cover only the areas of exceedances and not a wider

geography which would unnecessarily include other areas.

- Designating a number of smaller Air Quality Management Areas, rather than one large area, would provide a clear focus on the areas of concern directing monitoring, resources and preventative measures to these areas.
- Separate Air Quality Management Areas will permit focussed actions directed at unique causes of exceedances within each of the Air Quality Management Areas.
- As improvements in air quality are realised, the Council would be in a position to demonstrate this progress by revoking individual Air Quality Management Areas.

**Disadvantages:**

- The Air Quality Management Area boundaries would be specific to the current exceedance locations and any newly arising exceedances outwith these areas would require the Air Quality Management Areas to be amended or new Air Quality Management Areas to be declared each time.
- Air Quality Management Areas may be influenced by factors beyond their boundaries, in particular the impact of main roads leading to and from the town centres. Care would need to be taken when developing the Air Quality Action Plan to ensure this is recognised and to ensure that addressing air pollution within the individual Air Quality Management Area does not result in the transfer of air quality issues to an area outwith it.

**Option 2 – Single Air Quality Management Area - Radial roads linking all exceedance locations**

- 5.4 This option would extend the existing Paisley Town Centre Air Quality Management Area along the main road network to incorporate the identified areas of exceedance, as shown in Figure 3. The Air Quality Management Area would require to be declared for the NO<sub>2</sub> and PM<sub>10</sub> annual mean objectives and the hourly NO<sub>2</sub> air quality objective.



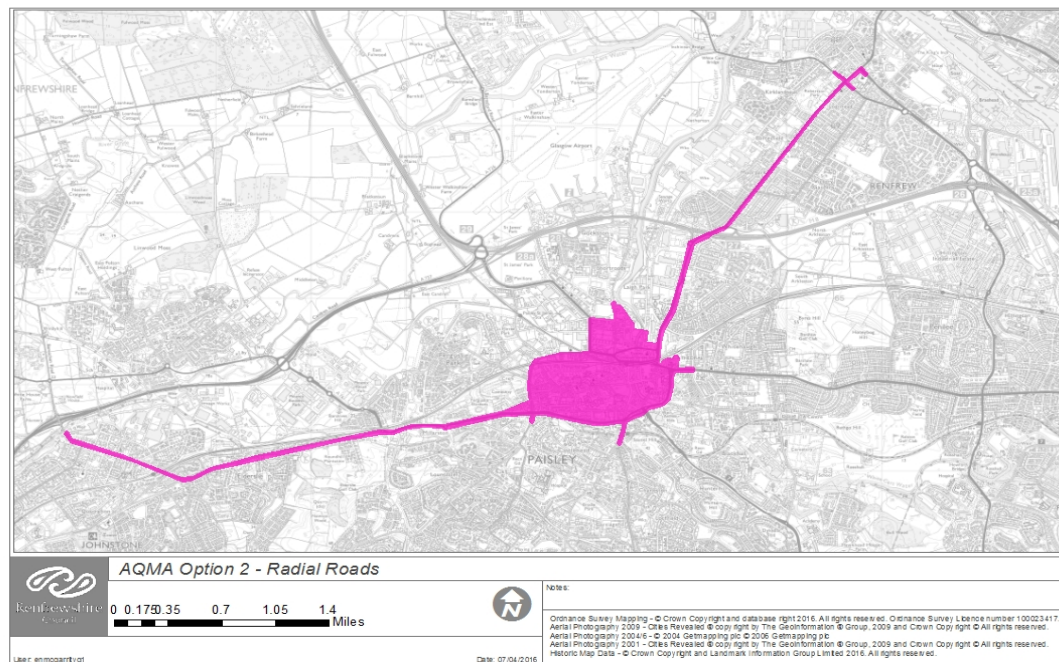


Figure 3: Radial Road Air Quality Management Area

### Advantages:

- The Air Quality Management Area boundary would closely align with the results of the air quality modelling work undertaken but would also include the main roads leading to each town centre location, reflecting the significance of the road transport network as a source of air pollutant emissions.
- As improvements in air quality are realised, the Council would be in a position to demonstrate this progress by partially revoking the Air Quality Management Area, effectively shrinking its area.

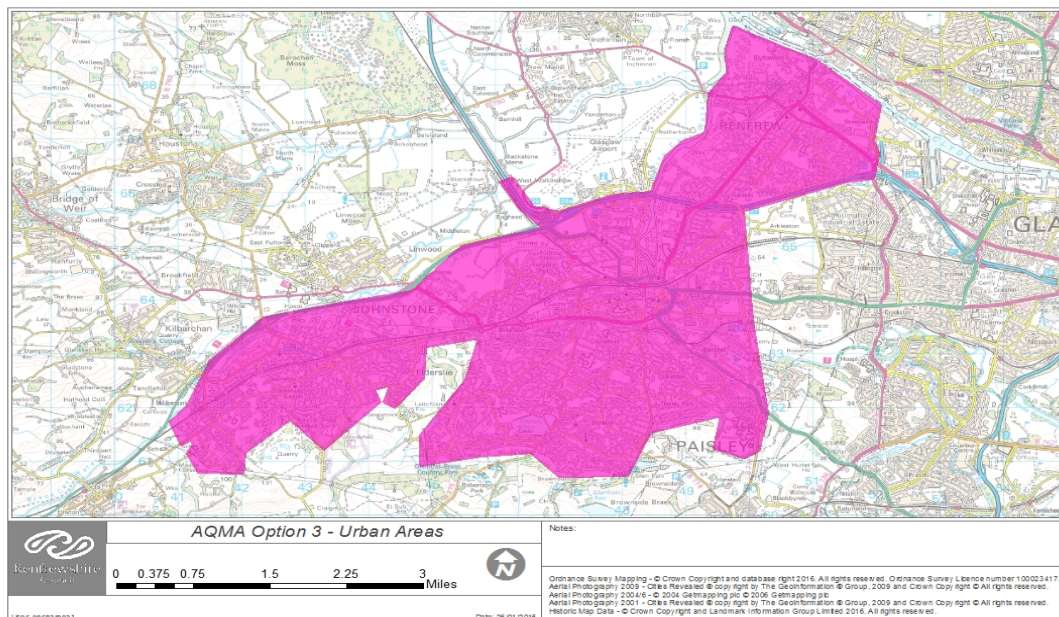
### Disadvantages:

- It would be more difficult to describe the Air Quality Management Area boundary and possibly more difficult to administer in terms of reviewing planning applications.
- There would be a requirement for future amendments or new Air Quality Management Areas should any newly arising exceedances outwith these areas be identified.
- With a single Air Quality Management Area it may be more difficult for the Council to demonstrate improvements in air quality as all exceedances would have to be addressed before the Air Quality Management Area could be revoked.

- Additional resources may be required to establish monitoring locations along the radial roads to demonstrate that there are no exceedances of objectives, prior to being in a position to allow the Air Quality Management Area to be partially revoked.
- The Air Quality Management Area would require to be declared for the NO<sub>2</sub> and PM<sub>10</sub> annual mean objectives and also the hourly NO<sub>2</sub> objective. This is misleading as not all three of these objectives are being exceeded across the whole Air Quality Management Area. For example, the 1 hour NO<sub>2</sub> objective is identified as being at risk of exceeding at only one location in Renfrew, however the Air Quality Management Area would be declared for this objective.

### Option 3 –Single Air Quality Management Area Urban Wide

- 5.5 The final option considered would be to expand the existing Paisley Town Centre Air Quality Management Area encompassing Renfrewshire's main urban areas within one Air Quality Management Area, as shown in Figure 4. Air Quality Management Area would require to be declared for both the NO<sub>2</sub> and PM<sub>10</sub> annual mean objectives and the NO<sub>2</sub> one hour objective.



**Figure 4: Urban Area Air Quality Management Area**

### Advantages:

- Avoids artificially precise boundaries and ensures that the widest possible emphasis is given to the issue.

- Recognises that the potential exists for residents to be exposed to pollutants across a wider area than may be identified through air quality monitoring and reporting.
- Designating a larger area would avoid the need for subsequent amendments or new Air Quality Management Area declarations, where future modelling demonstrates further exceedance locations.
- From a public perspective one Air Quality Management Area in relation to Renfrewshire Council's main urban area is likely to be easier to identify with rather than numerous Air Quality Management Areas.

**Disadvantages:**

- May create the perception that there are high levels of pollution throughout the Council area whereas this is only at certain locations.
- With a single, large Air Quality Management Area it would be more difficult for the Council to demonstrate improvements in air quality as all exceedances would have to be addressed before the Air Quality Management Area could be revoked.
- The Air Quality Management Area would require to be declared for the NO<sub>2</sub> and PM<sub>10</sub> annual mean objectives and also the hourly NO<sub>2</sub> objective. This may be misleading as exceedances of these objectives may only be at specific locations and not across the entire Air Quality Management Area. For example, the 1 hour NO<sub>2</sub> objective is identified as being at risk of exceeding at only one location in Renfrew however the entire Air Quality Management Area would be declared for this objective.
- Additional resources may be required to establish monitoring locations throughout other areas of the Air Quality Management Area to demonstrate that there are no exceedances of objectives, prior to being in a position to allow the Air Quality Management Area to be partially revoked.
- May raise concerns from a planning/strategic perspective, given the potential additional restrictions an Air Quality Action Plan may cause for future planning applications and development.

## **6. Recommended Option**

- 6.1 It is recommended that Option 1- Individual Air Quality Management Areas for each area of exceedance is approved. This would result in two new discrete Air Quality Management Areas being declared, totalling three Air Quality Management Areas across Renfrewshire, including the existing Paisley Town Centre Air Quality Management Area. Following approval of this option, the Air Quality Management Areas will be designated by means of the Orders in Appendix 2 and the Scottish Government and any other statutory consultees will thereafter be notified of this.
- 6.2 Whilst there may be individual Air Quality Management Areas declared, one Air Quality Action Plan will be developed to target measures for improving air quality across all Air Quality Management Areas and within the plan each Air Quality Management Area will be considered separately to ensure that specific targeted measures are identified for each; dependent on the source and cause of the air pollution.

## **7. Examples of Air Quality Management Areas within Scotland**

- 7.1 Examples of Air Quality Management Areas declared by other Scottish local authorities have been included below for comparison purposes and to highlight the variability in boundary selection.
- Aberdeen City Council has 3 separate Air Quality Management Areas, one for the city centre and two elsewhere. The Air Quality Management Area boundary for each takes the form of a linear Air Quality Management Area along roads and junctions similar to our proposed new Air Quality Management Areas in Option 1.
  - Dundee City Council has declared an Air Quality Management Area encompassing the whole of the local authority area. The vast majority of Dundee City Council is urban.
  - Edinburgh City Council has five separate Air Quality Management Areas. The city centre Air Quality Management Area is a combination of roads and land similar to our existing Paisley Town Centre Air Quality Management Area. The others are linear Air Quality Management Areas along roads and junctions similar to our proposed new Air Quality Management Areas in Option 1.

- East Dunbartonshire Council has two Air Quality Management Areas. Both are linear Air Quality Management Areas along the length of main roads similar to our proposed Option 1.
- East Lothian Council has one linear road Air Quality Management Area.
- Falkirk Council has 4 separate Air Quality Management Areas. All of these encompass busy roads/junctions and large areas surrounding these.
- Fife Council has two Air Quality Management Areas, one a town centre Air Quality Management Area and the other a linear road Air Quality Management Area.
- Glasgow City Council has three separate Air Quality Management Areas, one large city centre Air Quality Management Area and two linear Air Quality Management Areas along roads and junctions. This would be similar to our existing Paisley Town Centre Air Quality Management Area and proposed new Air Quality Management Areas in Option 1.
- Highland Council has one small Air Quality Management Area covering a single junction within Inverness City Centre.
- North Lanarkshire Council has five separate Air Quality Management Areas of different types of boundary but mainly linear along main roads with some adjoining land included.
- Perth & Kinross Council has two Air Quality Management Areas. One covers the entire town centre of Perth and the other is a linear road Air Quality Management Area, again similar to what we are proposing in Option 1.
- South Lanarkshire Council has three separate Air Quality Management Areas, two of which cover town centre areas and the other a linear roads Air Quality Management Area incorporating some adjoining land.
- West Lothian Council has one linear road Air Quality Management Area.

**AIR QUALITY MANAGEMENT AREA**  
**DESIGNATION ORDERS**

## **AIR QUALITY MANAGEMENT AREA DESIGNATION ORDER**

### **Environment Act 1995 Part IV, Air Quality**

#### **Renfrewshire Air Quality Management Area Order No. 2, Johnstone**

Renfrewshire Council, in exercise of the powers conferred upon it by Section 83(1) of the Environment Act 1995, hereby makes the following Order.

- 1)** This Order, referred to as the Renfrewshire Air Quality Management Area Order No. 2, Johnstone, shall come into effect on 24 August 2016.
- 2)** The area, as detailed in the attached Schedule 1 and shaded blue on the map in Schedule 2 forming part of this Order, is designated as an air quality management area (the designated area) for the purposes of Part IV of the Environment Act 1995.
- 3)** This area is designated in relation to a likely breach of the nitrogen dioxide (NO<sub>2</sub>) annual mean objective as specified in the Air Quality (Scotland) Regulations 2000, as amended by the Air Quality (Scotland) Amendment Regulations 2002.
- 4)** This Order shall remain in force until it is varied or revoked by a subsequent Order.

## **Renfrewshire Air Quality Management Area Order No. 2, Johnstone**

### **Schedule 1**

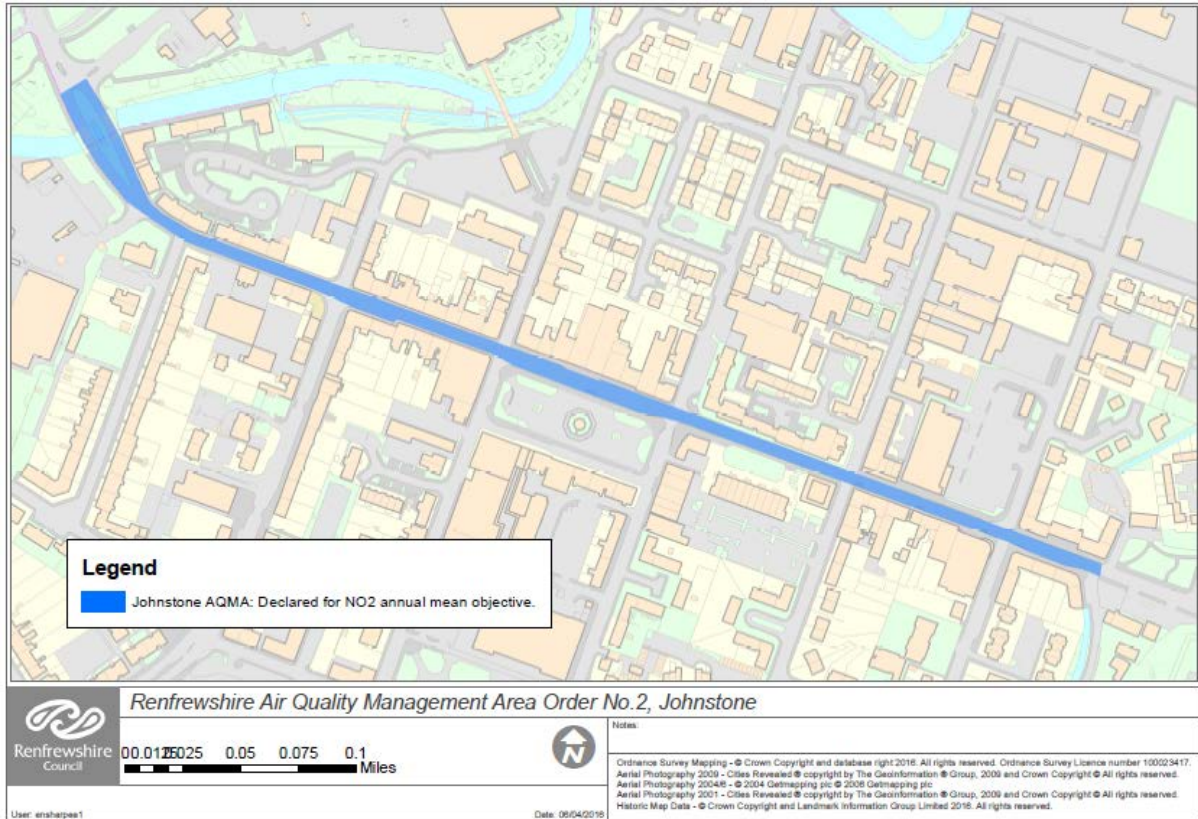
The designated area incorporates the area enclosed within the following boundary line and includes all properties within 20 metres measured from the kerb of the boundary roads. Where the boundary transects part of a property, it shall be taken to include the whole of that property (including the building and open space).

From the junction of High Street and Peockland Place; thence along High Street to the junction of Barrochan Road and Napier Street.



# Renfrewshire Air Quality Management Area Order No. 2, Johnstone

## Schedule 2



## **AIR QUALITY MANAGEMENT AREA DESIGNATION ORDER**

### **Environment Act 1995**

#### **Part IV, Air Quality**

#### **Renfrewshire Air Quality Management Area Order No. 3, Renfrew Town Centre**

Renfrewshire Council, in exercise of the powers conferred upon it by Section 83(1) of the Environment Act 1995, hereby makes the following Order.

- 1)** This Order, referred to as the Renfrewshire Air Quality Management Area Order No. 3, Renfrew Town Centre, shall come into effect on 24 August 2016.
- 2)** The area, as detailed in the attached Schedule 1 and shaded blue on the map in Schedule 2 forming part of this Order, is designated as an air quality management area (the designated area) for the purposes of Part IV of the Environment Act 1995.
- 3)** This area is designated in relation to a likely breach of the nitrogen dioxide (NO<sub>2</sub>) annual mean and one hour mean objectives as specified in the Air Quality (Scotland) Regulations 2000, as amended by the Air Quality (Scotland) Amendment Regulations 2002.
- 4)** This Order shall remain in force until it is varied or revoked by a subsequent Order.

## **Renfrewshire Air Quality Management Area Order No. 3, Renfrew Town Centre**

### **Schedule 1**

The designated area incorporates the area enclosed within the following boundary line and includes all properties within 20 metres measured from the kerb of the boundary roads. Where the boundary transects part of a property, it shall be taken to include the whole of that property (including the building and open space).

From the junction of Paisley Road, Inchinnan Road, Hairst Street and Glebe Street; thence along Glebe Street to property number 4 Glebe St; thence along Paisley Road to the junction of Donaldson Drive; thence along Inchinnan Road to the junction of Longcroft Drive; thence along Hairst Street to the junction with Canal Street and High Street; thence along Canal St to the junction with Ferry Road.

# Renfrewshire Air Quality Management Area Order No. 3, Renfrew Town Centre

## Schedule 2

