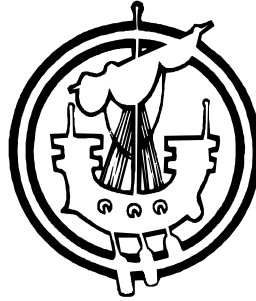


Annual Progress Report



2018 Air Quality Annual Progress Report (APR) for
Comhairle nan Eilean Siar

In fulfilment of Part IV of the
Environment Act 1995

Local Air Quality Management

29th June 2018

| | |
|--------------------------------|---|
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Executive Summary: Air Quality in Our Area

Air Quality in the Western Isles

This report considers local air quality management in the Western Isles, examining relevant policies and technical guidance documents.

As in previous submissions there are no significant changes and no new air pollution sources have been identified. The Outer Hebrides Local Development Plan (Adopted Plan) 2012 demonstrates a shift in transport infrastructure to incorporate new footpaths and more cycle routes in and around settlements and improve bicycle storage at new public buildings, schools, housing developments and commercial and community developments to encourage the use of non-motorised transport.

Passive diffusion tube monitoring for Nitrogen Dioxide (NO₂) was last carried out in 2015/2016. This was undertaken to verify that the pollutant levels were still below the action levels. Comhairle nan Eilean Siar works closely with SEPA and has in place a Development Strategy which considers environmental impacts on the local authority area and transport infrastructure. There are currently no air quality issues within this local authority area.

This report concludes that detailed assessments are not required for any pollutant.

There are no AQMA's declared within the local authority area.

Local Priorities and Challenges

A 12 month monitoring programme for Nitrogen Dioxide (NO₂) was completed in August 2016. No further monitoring has been carried out following the 12 month programme as the results were found to be well below the action levels for this pollutant.

Comhairle nan Eilean Siar has no specific priorities or challenges for the coming year beyond the statutory reporting requirements.

How to Get Involved

The public can access further information on air quality through the Council website at <https://www.cne-siar.gov.uk/business/consumers-and-the-environment/environmental-health/air-quality/>

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1. Local Air Quality Management

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

The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where an exceedance is considered likely the local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives. This Annual Progress Report (APR) summarises the work being undertaken by Comhairle nan Eilean Siar to improve air quality and any progress that has been made.

Table 1.1 – Summary of Air Quality Objectives in Scotland

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

| Pollutant | Air Quality Objective | | Date to be achieved by |
|-----------|------------------------|-------------|------------------------|
| | Concentration | Measured as | |
| Lead | 0.25 µg/m ³ | 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.

Comhairle nan Eilean Siar currently does not have any AQMAs and there is no Air Quality Strategy in place. We propose to have an air quality strategy in place by 2019/2020.

2.2 Progress and Impact of Measures to address Air Quality in the Western Isles

Comhairle nan Eilean Siar 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 2.1.

Comhairle nan Eilean Siar have a corporate Travel Policy in place which promotes the use of electric cars and sustainable travel improving the local environment and encouraging healthier and safer lifestyles at <http://www.cne-siar.gov.uk/committees/policyandresources/agendas/august2011/Travel%20Policy%202011.pdf>

An Active and Sustainable travel Survey was carried out in February 2017 which will assist the Comhairle in designing future Active Travel and Road Safety Policies.

Table 2.1 – 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 | Estimated Completion Date | Comments |
|-------------|------------------------------|---|---|----------------|---------------------------------|---|---------------------------|--|---|---------------------------|---|
| 1 | CNES Corporate Travel Policy | Promoting Travel Alternatives | Promoting use of electric cars and sustainable travel. Improving the local environment and encouraging healthier and safer lifestyles | | | Ongoing | | NO AQMA | e-car club 3 month trial for Development Services | July 2017 | Increase in use of electric cars on journeys less than 80 miles |
| 2 | Local Development Plan | Policy Guidance and Development Control | Promotion of sustainable economic development | Development | New plan to be complete 2017/18 | Adopted plan in place until revised plan complete | | NO AQMA | | | |

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 Comhairle nan Eilean Siar 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. Comhairle nan Eilean Siar has a corporate travel policy in place which promotes travel alternatives to the car and are currently looking at active travel.

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. Comhairle nan Eilean Siar has an Outer Hebrides Energy Strategy in place.

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

3.1 Summary of Monitoring Undertaken

3.1.1 Automatic Monitoring Sites

Comhairle nan Eilean Siar did not undertake any automatic monitoring in 2017.

3.1.2 Non-Automatic Monitoring Sites

Comhairle nan Eilean Siar did not undertake any non-automatic (passive) monitoring of NO₂ during 2017.

3.2 Individual pollutants

The air quality monitoring results presented in this section are, where relevant, adjusted for annualisation and bias.

3.2.1 Nitrogen Dioxide (NO₂)

Table A.2 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.

Monitoring of NO₂ stopped in 2007 as pollutant levels were well below the action levels. It was decided to carry out a year of NO₂ monitoring starting in June 2015 to verify that the NO₂ levels were still well below the action levels. Monitoring stopped in August 2016; the results showed that there were no exceedances.

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.

3.2.2 Particulate Matter (PM₁₀)

There is no monitoring of PM₁₀ in the Western Isles.

3.2.3 Particulate Matter (PM_{2.5})

There is no monitoring of PM_{2.5} in the Western Isles.

3.2.4 Sulphur Dioxide (SO₂)

There is no monitoring for SO₂ in the Western Isles.

3.2.5 Carbon Monoxide, Lead and 1,3-Butadiene

There has been no monitoring for these pollutants in the Western Isles.

4. New Local Developments

There are no new developments in the Western Isles that may affect air quality.

4.1 Road Traffic Sources

There are no new traffic sources, as specified and no significantly changed traffic flows in the Western Isles.

4.2 Other Transport Sources

There are no new transport sources within the Western Isles.

4.3 Industrial Sources

There are no new industrial sources within the Western Isles.

4.4 Commercial and Domestic Sources

There are no new commercial or domestic sources in the Western Isles.

4.5 New Developments with Fugitive or Uncontrolled Sources

There are no new fugitive or uncontrolled sources within the Western Isles.

5. Planning Applications

There has been a planning application for Stornoway Harbour which includes a new marina and proposed deep water pier for cruise liners. This is in the early screening and scoping stage. The proposed development should not have an impact upon air quality.

6. Conclusions and Proposed Actions

6.1 Conclusions from New Monitoring Data

There was no new monitoring data for 2017. The monitoring carried out in 2015/2016 did not identify any potential or actual exceedances at the chosen locations. As no exceedances there was no further monitoring carried out in 2017 and it was concluded that a detailed assessment was not required.

6.2 Conclusions relating to New Local Developments

There have been no new developments identified in the Western Isles that may impact on air quality.

6.3 Proposed Actions

Comhairle nan Eilean Siar does not have any evidence to support creating an AQMA in the Western Isles.

The local authority's next course of action is to submit the next Air Quality Progress Report.

Appendix A: Monitoring Results

Table A.1 – 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) ⁽¹⁾ | Distance to kerb of nearest road (m) ⁽²⁾ | Tube collocated with a Continuous Analyser? |
|---------|---------------------|------------------|---------------|---------------|----------------------|----------|--|---|---|
| B1 | Barony Square | Urban Background | 143142 | 933490 | NO ₂ | N | 0 | 3 | N |
| K1 | South Beach Carpark | Kerbside | 142372 | 932726 | NO ₂ | N | 0 | 1 | N |
| K2 | South Beach | Kerbside | 142232 | 932739 | NO ₂ | N | 0 | 1 | N |
| K3 | Perceval Square | Kerbside | 142309 | 932867 | NO ₂ | N | 5 | 1 | 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.

Table A.2 – Annual Mean NO₂ Monitoring Results

| Site ID | Site Type | Monitoring Type | Valid Data Capture for Monitoring Period (%) ⁽¹⁾ | Valid Data Capture 2017 (%) ⁽²⁾ | NO ₂ Annual Mean Concentration (µg/m ³) ⁽³⁾ | | | | |
|---------|------------------|-----------------|---|--|---|------|------|------|------|
| | | | | | 2013 | 2014 | 2015 | 2016 | 2017 |
| B1 | Urban Background | Diffusion Tube | 58 | 0 | None | None | 5.1 | 8.8 | None |
| K1 | Kerbside | Diffusion Tube | 58 | 0 | None | None | 14.9 | 12.4 | None |
| K2 | Kerbside | Diffusion Tube | 58 | 0 | None | None | 26.6 | 14.9 | None |
| K3 | Kerbside | Diffusion Tube | 58 | 0 | None | None | 20.3 | 12.9 | None |

Notes: Exceedances of the NO₂ annual mean objective of 40µg/m³ 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.

Results were taken from July – December 2015 and January – July 2016, not a full complete calendar year for either 2015 or 2016. There is no background data to carry out annualisation of the NO₂ monitoring data as shown in LAQM (TG16) so the raw data is shown in this table

Glossary of Terms

| 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 |
| NO _x | 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

Cleaner Air For Scotland – The Road to a Healthier Future (CAFS), The Scottish Government 2015 <http://www.gov.scot/Resource/0048/00488493.pdf>

Comhairle nan Eilean Siar, The Outer Hebrides Local Development Plan (Adopted Plan) 2012 <http://www.cne-siar.gov.uk/planningservice/documents/ldp/Outer%20Hebrides%20Local%20Development%20Plan.pdf>

Comhairle nan Eilean Siar, Travel Policy Statement (2011) <http://www.cne-siar.gov.uk/committees/policyandresources/agendas/august2011/Travel%20Policy%202011.pdf>

LAQM (TG16) Local Air Quality Management Technical Guidance, April 2016