

## 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

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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 (NO<sub>2</sub>) 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 (NO<sub>2</sub>) 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 <sub>2</sub> )	200 µg/m <sup>3</sup> not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
	40 µg/m <sup>3</sup>	Annual mean	31.12.2005
Particulate Matter (PM <sub>10</sub> )	50 µg/m <sup>3</sup> , not to be exceeded more than 7 times a year	24-hour mean	31.12.2010
	18 µg/m <sup>3</sup>	Annual mean	31.12.2010
Particulate Matter (PM <sub>2.5</sub> )	10 µg/m <sup>3</sup>	Annual mean	31.12.2020
Sulphur dioxide (SO <sub>2</sub> )	350 µg/m <sup>3</sup> , not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
	125 µg/m <sup>3</sup> , not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
	266 µg/m <sup>3</sup> , not to be exceeded more than 35 times a year	15-minute mean	31.12.2005
Benzene	3.25 µg/m <sup>3</sup>	Running annual mean	31.12.2010
1,3 Butadiene	2.25 µg/m <sup>3</sup>	Running annual mean	31.12.2003
Carbon Monoxide	10.0 mg/m <sup>3</sup>	Running 8-Hour mean	31.12.2003

<b>Pollutant</b>	<b>Air Quality Objective</b>		<b>Date to be achieved by</b>
	<b>Concentration</b>	<b>Measured as</b>	
<b>Lead</b>	0.25 µg/m <sup>3</sup>	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 NO<sub>2</sub> 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 (NO<sub>2</sub>)**

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

Monitoring of NO<sub>2</sub> stopped in 2007 as pollutant levels were well below the action levels. It was decided to carry out a year of NO<sub>2</sub> monitoring starting in June 2015 to verify that the NO<sub>2</sub> 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 NO<sub>2</sub> hourly mean concentrations for the past 5 years with the air quality objective of 200µg/m<sup>3</sup>, not to be exceeded more than 18 times per year.

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

There is no monitoring of PM<sub>10</sub> in the Western Isles.

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

There is no monitoring of PM<sub>2.5</sub> in the Western Isles.

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

There is no monitoring for SO<sub>2</sub> 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) <sup>(1)</sup>	Distance to kerb of nearest road (m) <sup>(2)</sup>	Tube collocated with a Continuous Analyser?
B1	Barony Square	Urban Background	143142	933490	NO <sub>2</sub>	N	0	3	N
K1	South Beach Carpark	Kerbside	142372	932726	NO <sub>2</sub>	N	0	1	N
K2	South Beach	Kerbside	142232	932739	NO <sub>2</sub>	N	0	1	N
K3	Perceval Square	Kerbside	142309	932867	NO <sub>2</sub>	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 NO<sub>2</sub> Monitoring Results**

Site ID	Site Type	Monitoring Type	Valid Data Capture for Monitoring Period (%) <sup>(1)</sup>	Valid Data Capture 2017 (%) <sup>(2)</sup>	NO <sub>2</sub> Annual Mean Concentration (µg/m <sup>3</sup> ) <sup>(3)</sup>				
					2013	2014	2015	2016	2017
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 NO<sub>2</sub> annual mean objective of 40µg/m<sup>3</sup> are shown in **bold**.

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

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

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

(3) Means for diffusion tubes have been corrected for bias. All means have been “annualised” as per 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 NO<sub>2</sub> 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 <sub>2</sub>	Nitrogen Dioxide
NO <sub>x</sub>	Nitrogen Oxides
PM <sub>10</sub>	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
PM <sub>2.5</sub>	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
QA/QC	Quality Assurance and Quality Control
SO <sub>2</sub>	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/lbp/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