# **Annual Progress Report (APR)**



2020 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

15<sup>th</sup> December 2020

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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.

Air quality is a major environmental health risk in the UK. A person's health can be affected by short-term, high pollution episodes and by long-term exposure to lower levels of pollution. There are many things we can do that can make a big difference to emissions and communicating effectively with the public about air pollution and what action can be taken can help improve people's health and ultimately save lives.

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.

#### **Actions to Improve Air Quality**

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**

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

However concerns are being raised with regard to the future and the outcome of leaving the European Union (EU) and possible changes to environmental laws. It has been noted that the Scottish Government is committed to making sure it meets

the EU environmental standards following Brexit and that environmental legislation is being amended to make sure the law keeps working in key areas including air quality. Further information on these outcomes will be reported in the next Progress Report.

#### **How to Get Involved**

The public can access further information on air quality through the Council website at <a href="https://www.cne-siar.gov.uk/business/consumers-and-the-">https://www.cne-siar.gov.uk/business/consumers-and-the-</a> 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 2020. 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) is 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

Dellutent	Air Quality Objec	Date to be	
Pollutant	Concentration	achieved by	
Nitrogen	200 μg/m³ not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
dioxide (NO <sub>2</sub> )	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 <sub>10</sub> )	18 μg/m³	Annual mean	31.12.2010
Particulate Matter (PM <sub>2.5</sub> )	10 lid/m <sup>2</sup> 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 <sub>2</sub> )	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
Banzana   3/5/10/m <sup>2</sup>		Running annual mean	31.12.2010
<b>1,3 Butadiene</b> 2.25 μg/m <sup>3</sup>		Running annual mean	31.12.2003
Carbon Monoxide	10.0 mg/m°		31.12.2003

Dollutont	Air Quality Objec	tive	Date to be
Pollutant	Concentration	Measured as	achieved by
Lead	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 2022.

#### 2.2 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 <a href="https://www.gov.scot/Publications/2015/11/5671/17">https://www.gov.scot/Publications/2015/11/5671/17</a>. Progress by Comhairle nan Eilean Siar against relevant actions within this strategy is demonstrated below.

#### 2.2.1 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.

# 2.2.2 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 <a href="https://www.cne-siar.gov.uk/media/8371/o-item-15a-outer-hebrides-energy-strategy.pdf">https://www.cne-siar.gov.uk/media/8371/o-item-15a-outer-hebrides-energy-strategy.pdf</a>

Table 2.1 – Progress on Measures to Improve Air Quality

Measure No.	Measure	Category	Focus	Lead Authority	Planning Phase	Implementation Phase	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completio n Date	Comments
1	Active Travel Strategy consultation	Alternative to Private Vehicle Use  Transport Planning and Infrastructure	Improving infrastructure for cycling and walking	Technical Services	May – June 2018	Decision to formally adopt strategy must be decided by full council once complete	N/A			Information from Study to be used to create Active Travel Strategy
2	CNES Corporate Travel Policy	Promoting low emission travel  Alternative s to private vehicle use	Promoting low emission travel			Ongoing	No AQMA	Electric cars available for staff		
3	Local Development Plan 2018	Policy Guidance and Developme nt Control	Promotion of sustainable economic development	Development		Ongoing	NO AQMA			

# 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.

Comhairle nan Eilean Siar did not undertake automatic (continuous) monitoring at any sites during 2020. National monitoring results are available at <a href="https://uk-air.defra.gov.uk/">https://uk-air.defra.gov.uk/</a>

#### 3.1.2 Non-Automatic Monitoring Sites

Comhairle nan Eilean Siar did not undertake non- automatic (passive) monitoring of NO<sub>2</sub> at any sites during 2020. Table A.2 in Appendix A shows the details of the sites.

Further details on Quality Assurance/Quality Control (QA/QC) and bias adjustment for the diffusion tubes are included in Appendix C.

#### 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 C.

#### 3.2.1 Nitrogen Dioxide (NO<sub>2</sub>)

Comhairle nan Eilean Siar does not undertake monitoring for NO<sub>2</sub>

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

Comhairle nan Eilean Siar does not undertake monitoring for PM<sub>10</sub>

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

Comhairle nan Eilean Siar does not undertake monitoring for PM<sub>2.5</sub>

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

Comhairle nan Eilean Siar does not undertake monitoring for SO<sub>2</sub>

#### 3.2.5 Carbon Monoxide, Lead and 1,3-Butadiene

Comhairle nan Eilean Siar does not undertake monitoring for Carbon Monoxide, Lead or Butadiene.

## 4. New Local Developments

Funding has been awarded to Stornoway Port Authority for redeveloping the Arnish harbour area. The deep water quay will be developed to allow large cruise ships to dock in the harbour. There will be an environmental impact assessment carried out prior to the development. The Stornoway harbour improvement works are to take place over a 20 year period.

A space port is being proposed to be developed in Scoplaig, North Uist. An environmental impact assessment is to be carried out however there are not expected to be any air quality concerns.

#### **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 developments with fugitive or uncontrolled sources identified.

## 5. Planning Applications

The proposed Stornoway Harbour redevelopment works is to be carried out over 20 years. Each phase is to undergo an environmental impact assessment where issues such as air quality will be assessed.

There is a proposed space port currently going through the planning process at Scolpaig in North Uist. If approved it is not expected to have an impact on the local air quality.

There are a number of planning applications for wind farms that have not been built yet as they are dependent on a new electric interconnector being installed first. If the interconnector gets installed the wind farm developments will then go ahead. These developments may have an impact on future local air quality and will be considered in the next Progress Report.

## 6. Conclusions and Proposed Actions

#### 6.1 Conclusions from New Monitoring Data

There was no new monitoring data for 2020. The monitoring carried out in 2015/2016 did not identify any potential or actual exceedances at the chosen locations. As no exceedances were identified and subsequent progress reports have not shown any new developments or changes to warrant concerns there was no further monitoring carried out in 2020 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 - Annual Mean NO<sub>2</sub> Monitoring Results

			Valid Data	Valid Data	NO <sub>2</sub> Annual Mean Concentration (μg/m <sup>3</sup> ) (3)				
Site ID	Site Type	Monitoring Type	Capture for Monitoring Period (%) <sup>(1)</sup>	Capture 2019 (%) (2)	2015	2016	2017	2018	2019
B1	Urban Background	Diffusion Tube	58	0	5.1	8.8	None	None	None
K1	Kerbside	Diffusion Tube	58	0	14.9	12.4	None	None	None
K2	Kerbside	Diffusion Tube	58	0	26.6	14.9	None	None	None
K3	Kerbside	Diffusion Tube	58	0	20.3	12.9	None	None	None

Notes: Exceedances of the NO<sub>2</sub> annual mean objective of 40µg/m³ 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
NOx	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 <a href="http://www.gov.scot/Resource/0048/00488493.pdf">http://www.gov.scot/Resource/0048/00488493.pdf</a>

Comhairle nan Eilean Siar, <u>The Outer Hebrides Local Development Plan</u> (Adopted Plan) 2012 <a href="https://www.cne-siar.gov.uk/media/1645/outer-hebrides-local-development-plan.pdf">https://www.cne-siar.gov.uk/media/1645/outer-hebrides-local-development-plan.pdf</a>

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

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