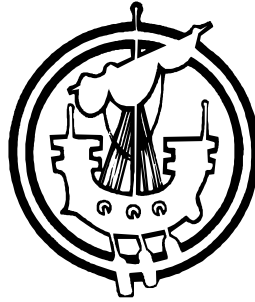


Annual Progress Report (APR)



2021 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

June 2021

Comhairle nan Eilean Siar

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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 (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.

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

Due to the Covid pandemic there has been little work done on Air Quality as Environmental Health's main focus has been Covid-19 and the huge workload that has entailed and is still

ongoing and therefore 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 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) 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 Concentration	Air Quality Objective Measured as	Date to be Achieved by
Nitrogen dioxide (NO ₂)	200 µg/m ³ not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
Nitrogen dioxide (NO ₂)	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
Particulate Matter (PM ₁₀)	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
Sulphur dioxide (SO ₂)	125 µg/m ³ , not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
Sulphur dioxide (SO ₂)	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

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. We are working towards producing an air quality strategy.

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 on [the Scottish Government’s website](#). 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 <https://www.cne-siar.gov.uk/media/8371/o-item-15a-outer-hebrides-energy-strategy.pdf>

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	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

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
2	CNES Corporate Travel Policy	Promoting low emission transport Alternatives to private vehicle use	Promoting low emission travel			Ongoing		No AQMA	Electric vehicles available for staff to use		
3	Local Development Plan 2018	Policy Guidance and Development 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 any automatic (continuous) monitoring during 2020. National monitoring results are available at <https://uk-air.defra.gov.uk/>

3.1.2 Non-Automatic Monitoring Sites

Comhairle nan Eilean Siar did not undertake any non- automatic (passive) monitoring of NO₂ during 2020.

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 (NO₂)

Comhairle nan Eilean Siar does not undertake monitoring for NO₂.

3.2.2 Particulate Matter (PM₁₀)

Comhairle nan Eilean Siar does not undertake monitoring for PM₁₀.

3.2.3 Particulate Matter (PM_{2.5})

Comhairle nan Eilean Siar does not undertake monitoring for PM_{2.5}.

3.2.4 Sulphur Dioxide (SO₂)

Comhairle nan Eilean Siar does not undertake monitoring for SO₂.

3.2.5 Carbon Monoxide, Lead and 1,3-Butadiene

Comhairle nan Eilean Siar does not undertake monitoring for Carbon Monoxide, lead or 1,3-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.

There have been no other new developments identified within 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

The interconnector cable providing the electricity supply to Lewis and Harris broke in October 2020 and the backup diesel powered station at Battery Point Stornoway began operating to provide an electricity supply to residents until the interconnector was fixed.

The Comhairle have a responsibility for reviewing and assessing local air quality and given low results from previous periodic assessments for NO_x's we do not routinely monitor pollutants in the Outer Hebrides, therefore we do not have any specific information about air quality in the area around the power station. However the plant and emissions from the backup power station at Battery Point is controlled through a SEPA permit. SSE undertakes active monitoring of NO_x as part of their permit and SEPA regulate this process.

It is expected that the interconnector will be fixed by September 2021 and the power station at Battery Point will stop being used continuously and revert back to being a backup station.

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 are 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 are several 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 Impact of COVID-19 upon LAQM

Comhairle nan Eilean Siar has not been undertaking any air quality monitoring since 2015/2016. The Covid-19 pandemic hasn't affected any monitoring for our local authority although it has increased Environmental Health's workload vastly which in turn has had an adverse impact on all other aspects of the job.

7 Conclusions and Proposed Actions

7.1 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.

7.2 Conclusions relating to New Local Developments

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

7.3 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 NO₂ Monitoring Results (µg/m³)

Site ID	Site Type	Monitoring Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2020 (%) ⁽²⁾	2016	2017	2018	2019	2020
B1	Urban Background	Diffusion Tube	58	0	8.8	None	None	None	None
K1	Kerbside	Diffusion Tube	58	0	12.4	None	None	None	None
K2	Kerbside	Diffusion Tube	58	0	14.9	None	None	None	None
K3	Kerbside	Diffusion Tube	58	0	12.9	None	None	None	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**.

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.

(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)

Results were taken from January – July 2016, not a full complete calendar year for 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.

New or Changed Sources Identified Within Comhairle Nan Eilean Siar During 2020

Comhairle nan Eilean Siar has not identified any new sources relating to air quality within the reporting year of 2020.

Additional Air Quality Works Undertaken by Comhairle nan Eilean Siar During 2020.

Comhairle nan Eilean Siar has not completed any additional works within the reporting year of 2020.

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 <https://www.cne-siar.gov.uk/media/1645/outer-hebrides-local-development-plan.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