# **Annual Progress Report (APR)**



2022 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

May, 2022

Information	Comhairle nan Eilean Siar				
Local Authority Officer	Ruth Smith, Colm Fraser				
Department	Communities				
Address	Sandwick Road, Stornoway, Isle of Lewis, HS1 2BW				
Telephone	01851 822 694				
E-mail	cfraser@cne-siar.gov.uk				
Report Reference Number	LAQM/APR/2022				
Date	19/05/2022				

# **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. SEPA have a monitoring station on Lewis as part of the (VEN) Volcanic Emission Network

https://www2.sepa.org.uk/VolcanicEmissionsNetwork/Dashboard.aspx?id=Lewis

The monitoring station monitors for Particulate Matter (PM) and Sulphur Dioxide (SO<sub>2</sub>) but the data can only be classed as indicative as the PM monitors have not been certified and the SO<sub>2</sub> data has not been verified.

There have been several large moorfires locally that affected large areas of the island however the impact on air quality was minimal and advice given to residents to stay indoors.

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. Comhairle nan Eilean Siar intends to carry out NO<sub>2</sub> monitoring in 2022 and will report these results in the APR 2023.

# 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-environment/environmental-health/air-quality/">https://www.cne-siar.gov.uk/business/consumers-and-the-environment/environmental-health/air-quality/</a>

# **Table of Contents**

E	xecutive	Summary: Air Quality in Our Area	i
	Air Qualit	y in The Western Isles.	i
	Actions to	Improve Air Quality	ii
	Local Pri	prities and Challenges	ii
	How to G	et Involved	ii
1	Local	Air Quality Management	1
2	Action	ns to Improve Air Quality	2
	Air Qualit	y Management Areas	2
	Cleaner A	Air for Scotland 2	3
	2.1.1	Placemaking – Plans and Policies	3
	2.1.2	Transport – Low Emission Zones	3
	Progress	and Impacts of Measures to address Air Quality in the Western Isles	4
3	Air Qu	nality Monitoring Data and Comparison with Air Quality Objectives	7
	Summary	of Monitoring Undertaken	7
	3.1.1	Automatic Monitoring Sites	7
	3.1.2	Non-Automatic Monitoring Sites	7
	3.1.3	Other Monitoring Activities	7
	Individua	Pollutants	7
	3.1.4	Nitrogen Dioxide (NO <sub>2</sub> )	7
	3.1.5	Particulate Matter (PM <sub>10</sub> )	7
	3.1.6	Particulate Matter (PM <sub>2.5</sub> )	8
	3.1.7	Sulphur Dioxide (SO <sub>2</sub> )	8
	3.1.8	Carbon Monoxide, Lead and 1,3-Butadiene	8
4	New L	ocal Developments	9
	Road Tra	ffic Sources	9
	Other Tra	insport Sources	9
	Industrial	Sources	9
	Commerc	cial and Domestic Sources	10

	New Developments with Fugitive or Uncontrolled Sources	10
5	Planning Applications	11
6	Conclusions and Proposed Actions	13
	Conclusions from New Monitoring Data	13
	Conclusions relating to New Local Developments	13
	Proposed Actions	13
	ppendix C: Supporting Technical Information / Air Quality Monitoring Data Q	
	New or Changed Sources Identified Within the Western Isles During 2021	
	Additional Air Quality Works Undertaken by Comhairle nan Eilean Siar During 2021	23
G	ilossary of Terms	27
R	eferences	28

# **List of Tables**

Table 1.1 – Summary of Air Quality Objectives in Scotland	1
Table 2.1 – Progress on Measures to Improve Air Quality.	5

# 1 Local Air Quality Management

This report provides an overview of air quality in the Western Isles during 2021. 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 <sub>2</sub> )	200 μg/m³ not to be exceeded more than 18 times a year	1-hour mean	31.12.2005	
Nitrogen dioxide (NO <sub>2</sub> )	40 μg/m³	Annual mean	31.12.2005	
Particulate Matter (PM <sub>10</sub> )	50 μg/m³, not to be exceeded more than 7 times a year	24-hour mean	31.12.2010	
Particulate Matter (PM <sub>10</sub> )	18 μg/m³	Annual mean	31.12.2010	
Particulate Matter (PM <sub>2.5</sub> )	10 μg/m³	Annual mean	31.12.2021	
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	
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	
Sulphur dioxide (SO <sub>2</sub> )	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/m³	Running annual mean	31.12.2010	
1,3 Butadiene	2.25 μg/m³	Running annual mean	31.12.2003	
Carbon Monoxide	10.0 mg/m <sup>3</sup>	Running 8-Hour mean	31.12.2003	

# 2 Actions to Improve Air Quality

# **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 we are working towards producing an air quality strategy.

## **Cleaner Air for Scotland 2**

Cleaner Air for Scotland 2 – Towards a Better Place for Everyone (CAFS2) is Scotland's second air quality strategy. CAFS2 sets out how the Scottish Government and its partner organisations propose to further reduce air pollution to protect human health and fulfil Scotland's legal responsibilities over the period 2021 – 2026. CAFS2 was published in July 2021 and replaces Cleaner Air for Scotland – The Road to a Healthier Future (CAFS), which was published in 2015. CAFS2 aims to achieve the ambitious vision for Scotland "to have the best air quality in Europe". 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 for which local authorities are the lead delivery bodies within this strategy is demonstrated below.

#### 2.1.1 Placemaking – Plans and Policies

Local authorities with support from the Scottish Government will assess how effectively air quality is embedded in plans, policies, City Deals and other initiatives, and more generally in cross departmental working, identifying and addressing evidence, skills, awareness and operational gaps.

Comhairle nan Eilean Siar considers air quality as part of the planning process. Further examination of local authority departments, plans and policies with regard to air quality will be carried out in 2023.

#### 2.1.2 Transport – Low Emission Zones

Local authorities working with Transport Scotland and SEPA will look at opportunities to promote zero-carbon city centres within the existing LEZs structure.

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. Comhairle nan Eilean Siar

also has a fleet of electric and hybrid pool cars that staff can use as alternatives to using their own vehicles for work related visits.

# Progress and Impacts of Measures to address Air Quality in the Western Isles

Comhairle nan Eilean Siar has not taken forward any new measures during the current reporting year of 2021 in pursuit of improving air quality. Details of all measures completed, in progress or planned are set out in Table 2.1 below.

Table 2.1 – Progress on Measures to Improve Air Quality

Measure No.	Measure	Category	Focus	Lead Authority	Planning Phase		_	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completio n Date	
1	Active Travel Strategy consultation	Alternative to Private Vehicle Use  Transport Planning and Infrastructu re	Improving infrastructure for cycling and walking	Technical Services	-	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		Performan	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completio n Date	Comments
2	CNES Corporate Travel Policy	Promoting low emission transport  Alternative s to private vehicle use	Promoting low emission travel			Ongoing		No AQMA	Electric and hybrid vehicles available for staff to use		
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

# **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 2021. 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 any non- automatic (passive) monitoring during 2021.

### 3.1.3 Other Monitoring Activities

There were no other monitoring activities undertaken by Comhairle nan Eilean Siar.

#### **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.

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

Comhairle nan Eilean Siar did not undertake any non- automatic (passive) monitoring of NO<sub>2</sub> during 2021.

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

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

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

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

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

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

# 3.1.8 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

The Stornoway Port Authority are redeveloping the Arnish harbour area. The deep-water quay will be developed to allow large cruise ships to dock in the harbour. The Stornoway harbour improvement works are to take place over a 20-year period and work is due to commence in 2022.

There have been no other new developments identified within the Western Isles that may affect air quality.

#### **Road Traffic Sources**

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

# **Other Transport Sources**

There are no new transport sources within the Western Isles.

### **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 (CNES) have a responsibility for reviewing and assessing local air quality and given low results from previous periodic assessments for NOx'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 NOx as part of their permit and SEPA regulate this process.

The interconnector was repaired and operational in September 2021. The power station at Battery Point was stopped being using continuously and reverted back to being a backup station.

# **Commercial and Domestic Sources**

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

# **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 larger 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

# **Conclusions from New Monitoring Data**

There was no new monitoring data for 2021. 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 2021 and it was concluded that a detailed assessment was not required.

# **Conclusions relating to New Local Developments**

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

# **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 undertake NO<sub>2</sub> monitoring during 2022 and submitting the findings in the next Air Quality Progress Report.

# Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC

# New or Changed Sources Identified Within the Western Isles During 2021.

Comhairle nan Eilean Siar has not identified any new sources relating to air quality within the reporting year of 2021.

# Additional Air Quality Works Undertaken by Comhairle nan Eilean Siar During 2021

Comhairle nan Eilean Siar has not completed any additional works within the reporting year of 2021.

# **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)
CNES	Comhairle nan Eilean Siar
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
SEPA	Scottish Environmental Protection Agency
SO <sub>2</sub>	Sulphur Dioxide
VEN	Volcanic Emission Network

# 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%2020">http://www.cne-siar.gov.uk/committees/policyandresources/agendas/august2011/Travel%20Policy%2020</a>
11.pdf

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

SEPA, VEN Monitoring Station, as part of the Volcanic Emissions Network

https://www2.sepa.org.uk/VolcanicEmissionsNetwork/Dashboard.aspx?id=Lewis