



Air Quality in Scotland

Welcome to the 16th Scottish Air Quality Database (SAQD) stakeholder's newsletter. This newsletter is produced on behalf of the Scottish Government by Ricardo Energy & Environment (Ricardo) and is designed to provide regular updates and news regarding the SAQD and local air quality matters to all stakeholders. This may include; updates to the network; new information on air quality issues; updates on changes in policy and procedures; new initiatives and events; technical reports; and how to access data using the Air Quality in Scotland website.

If you have any information which you think would be beneficial to include in a future newsletter, please email us at aq-monitoring-scotland@ricardo.com.

NEWS

2023 SCOTTISH AIR QUALITY SEMINAR

The dates for the Scottish Air Quality Seminar 2023 have been finalised as the **15th, 22nd, and 29th March**. As with the previous two years the seminar will be held online using MS Teams between **13:00 and 15:00** each day. We have secured a number of very interesting speakers talking on subjects such as:

- Microplastic air pollution from brake and tyre wear
- The West Midlands – Air project
- Measuring Air pollution using Satellite technology
- Asian Development Banks 7 Cities Clean Air Action Plan Project
- The Shifting Air Quality Policy Landscape within the EU and UK
- Hospital admissions on high pollution days
- The relation between Air Pollution and Dementia
- The UK AERIUS project

In addition, we also have updates regarding; CAFS2; Scottish Governments Place Standard AQ Tool; the Short Life Working Group LAQM review; Scotland's Low Emission Zones; and the PM monitoring intercomparison exercise.

Invites to register for the seminar have been sent out so if you are planning on attending please save the dates in your calendar. If you have not received an invite and would like to attend, please contact directly David Hector or go to the Air Quality in Scotland Website (<https://www.scottishairquality.scot/news/scottish-air-quality-annual-seminar-2023>). In addition please pass on the invites to anyone you believe will be interested in attending the remaining sessions.

CALIBRATION GAS SHORTAGES

As you may or may not be aware, there is a general shortage and/or longer lead times in obtaining calibration gas cylinders for AQ monitoring sites. If you are running low on gas and believe you may run out in the near future we recommend that you reduce the calibration frequency from fortnightly to monthly where appropriate. We would rather have calibrations carried out less frequently than no calibrations at all. If you are already in a position where you can no longer carry out calibrations due to lack of gas please contact one of the Ricardo team as soon as possible and we will look into possible ways to assist.

2022 SITE AUDIT UKAS CERTIFICATES AND Q3 2022 DATA MARKED AS RATIFIED

Please be advised that last summer's QA/QC site audits UKAS accredited certificates can be located [here](#). In addition, the 2022 Quarter 3

data (July to September 2022) is now locked as ratified on the Air Quality in Scotland website. The fully ratified dataset for 2022 is due to be available on the website mid-April.

This data and all historic data can be accessed via the data selector tool located on the Measure and Annual Statistics page [here](#). The data can also be analysed using a variety of R based Openair analytical tools [here](#). If you have any issues with any of these functions please contact one of the Ricardo Energy and Environment Air Quality team by emailing aq-monitoring-scotland@ricardo.com.

REVOKING AND AMENDING AQMA'S

When AQMA revocations or amendments have been carried out please inform the Ricardo team so that we can update the Scottish Air quality website pages accordingly. In addition this information should also be provided to the UK-air website via the Defra LAQM page <https://laqm.defra.gov.uk/1rsw2/index.php>.

Each Local authority should have an account set up to access these pages however if the details have been misplaced you can contact the LAQM support helpdesk for assistance. Details provided below.

LAQM Helpdesk contact details:

Telephone: 0800 0327953

E-mail: laqmhlpdesk@uk.bureauveritas.com

NEW SENSORS BLOG POST

In November Ricardo published the latest in a series of blog posts about Air Quality Sensors, this latest post talks about designing and implementing useful applications for air quality sensors and can be found [here](#).

["I'VE GOT A NET ZERO PLAN – NOW WHAT?": IDEAS ON HOW TO EMBED NET ZERO INTO LOCAL POLICY MAKING](#)

A blog has recently been published providing an overview of three practical steps local authorities can take to operationalise their net Zero plans, moving it from a standalone issue into being embedded in everything a council does, and can be found [here](#).

[ADVANCED SENSORS TRAINING WEBINAR FOR LOCAL AUTHORITIES](#)

As part of the Scottish Air Quality Database and Website project, Ricardo, on behalf of Scottish Government, carried out an "Advanced Air Quality Monitoring with Sensors" training webinar. This was a free event open to all Scottish Local authorities employees held online using MS Teams. The webinar covered the following subjects amongst others;

- A refresher from the previous training event
- Update on sensor specifications and latest technology
- Advanced Sensor data processing and interpretation
- Advanced quality control procedures
- Case studies, working examples and practical exercises
- Q&A session

On completion of the training Ricardo provided CPD certificates to all attendees that requested a certificate to be issued. Please contact David Hector if you have not received your certificate.

[SCOTTISH ENVIRONMENT PROTECTION AGENCY – Written by SEPA](#)

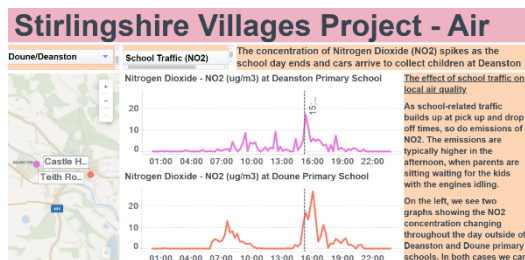
Stirling Villages Community Engagement – Data Collection and Visualisation

Air quality monitors have been installed across villages in the Stirling Council area as part of a project to support rural communities to become more aware of local air quality, help to identify local pollution sources and to consider steps that can be taken to help reduce our contributions to air pollution. The project, launched as part of a partnership between SEPA, the University of Stirling and Stirling Council, has

already visited Aberfoyle, Doune and Deanston and Fintry and is currently being deployed in Thornhill with the project completion scheduled in Kippen during April 2023.

The data collected to date has shown some very interesting information which has been presented to the local communities at the engagement events. Data from the various monitoring locations has identified specific emissions trends associated with bonfire night, domestic combustion for heating (during particularly cold spells), daily traffic patterns, school pick-up/drop-off times and even the local bus timetable.

This data has been made publicly available through an on-line visualisation tool, developed by SEPA, on [Scotland's Environment Web](https://www.scotland.gov.uk/topics/environment-air) which allows local residents to look at the air quality data recorded in their villages and explore some of the potential causes and drivers of air pollution events. An example of how the data is presented is shown below, illustrating data for NO₂ concentrations from the daily school run at primary schools in the villages of Doune and Deanston.



Further data will be added and the on-line visualisation tool is available at: <https://www.environment.gov.scot/our-environment/air/stirlingshire-villages-project/>. For further information on the wider Stirling Villages Project please contact: Graham Applegate/Colin Gillespie at SEPA or Amy McCarron at Stirling University.

Glasgow Science Centre – Our Amazing Air Learning Lab (2023 Session)

Glasgow Science Centre will be running the latest session of the Learning Lab “Our Amazing

Air” starting in April 2023. Learning Lab is an online STEM learning programme for the classroom and home which aims to inspire and empower learners through relevant, varied learning experiences that take place over several weeks.

Each unique programme comprises lesson plans, video content and interactions with experts as well as professional learning for teachers and family support.

The Our Amazing Air programme has been updated for 2023 and is intended to deliver a learning programme for P5 – P7 pupils supporting learners to investigate what air is and why it is so important for us, what air pollution is and how we monitor it, how air quality can be improved and some of the steps we all can take to have a positive impact on air quality and the environment.

The graphic is a promotional poster for "Learning Lab" from the Glasgow Science Centre. It features a central illustration of a young girl in a green field with trees and butterflies. Text on the right says "Celebrate Clean Air Day with fantastic free resources and a science centre visit!". Below the title "Our Amazing Air", there is a list of bullet points: "Starts with an online twilight CLPL on 20 April 2023", "Time saving resources", "No special equipment required", "Curriculum for Excellence second level outcomes", "Around 2 hours/week teaching for 6 weeks", "Live meet the expert session", and "Available for every primary school in Scotland". At the bottom, there is a contact email "learninglab@gsc.org.uk" and logos for SEPA (Scottish Environment Protection Agency) and the Glasgow Science Centre.

The programme includes a variety of materials and support for teachers including an online teacher training session on 20 April 2023, classroom activities, and teaching materials delivered over a dedicated six week learning block of two hourly sessions per week, complementing the Curriculum for Excellence (CfE) outcomes. The pupils also get the opportunity for a live meet the expert Q & A session and a visit to the Science Centre. The programme is available for every primary school in Scotland. The teaching session also culminates with resources and events to coincide with Clean Air Day, scheduled for 15th June.

For more information on the teaching programme, its content and how to register for a place, e-mail: learninglab@gsc.org.uk or visit: [Take Part in Learning Lab | Glasgow Science Centre](https://www.glasgow-science-centre.org.uk/our-amazing-air)

Fife Anti-Idling Campaign

Fife Council is running an Anti-Idling campaign to highlight how idling vehicle engines contribute to air pollution and impact our health and the environment.

Fife's primary school children have been learning about air pollution and vehicle idling and thinking about the impact on their health, their family's health and how it affects their local environment.

Pupils have been taking part in a poster and banner competition with winning entries being selected by a competition panel. Winning designs will be displayed across Fife as part of the campaign.

For further information on the Anti-Idling Campaign please contact Eloise Griffin at Fife Council.

SAQD QAQC ACTIVITIES

Ricardo are currently completing the winter six monthly audits. The auditor will contact you before attending site and an audit summary will be sent to you after each audit visit which will detail their findings. Could you please then pass these on to your ESU's in advance of the service so that any issues can be investigated. If you have not received an audit summary, please contact aq-monitoring-scotland@ricardo.com.

QUESTION AND ANSWERS SECTION

This section will provide answers to frequently asked questions that relate to different aspects of LAQM ranging from Local Site Operator (LSO) duties to advanced data analysis queries. If you

have a question you would like to be answered in this section, please contact aq-monitoring-scotland@ricardo.com.

Q: If reporting Sensor data in my APR should I have a quality assurance and control procedure in place for the data before publishing?

A: It is recommended that all sensor data is subject to QAQC procedures as provided in the guidance which can be found [here](#).





Q: My sites gas cylinder is running low or has oxidised, what should I do?

A: If your gas cylinder pressure has dropped below 500 PSI please contact your provider to arrange the delivery of a new cylinder. If you suspect your gas cylinder is oxidising then please contact Ricardo for advice.

Q: How often should the PTF sample and calibration lines at Automatic AQ station be replaced?

A: If either PTF tubing line is identified as dirty they should be replaced by your ESU and ideally both lines should be replaced annually.

STAY CONNECTED

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