

Air Quality in Scotland

Welcome to the tenth 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

2019 SAQD DATASET MARKED AS RATIFIED

Please be advised that the 2019 dataset is now fully ratified and available via the Air Quality Scotland website. You can access the data itself via the "Data & Maps" tab

(<http://www.scottishairquality.co.uk/laqm/statistics-pdf>). The statistics can be accessed either from the "Data and Maps" tab or the individual sites "Statistics" tab (http://www.scottishairquality.co.uk/latest/siteinfo?site_id=ABD8&view=statistics). You can also produce an annual statistics report with all the relevant LAQM statistics via the website. This can be accessed within the individual site Annual Report tab or the Annual Statistic Report page within the LAQM tab (<http://www.scottishairquality.co.uk/laqm/statistics-pdf>).

If local authorities find that their data is still showing as "provisional" on the website, please highlight this to Ricardo as soon as possible.

COVID-19: SCOTTISH AIR QUALITY DATABASE SITE CALIBRATIONS AND VISITS

Scottish Government understands that due to the current situation normal working conditions are not operating and this may have an impact on the ability of local site operators to carry out SAQD site visits and calibrations.

It is important to Scottish Government to keep the SAQD and website running as close to normal as possible as it can help in the ongoing evaluation of risk during the Covid-19 outbreak due to the impact air pollution has on respiratory illnesses. However, the health and safety of workers is paramount. With this in mind, and if appropriate to individual situations we advise the following:

- **SITE CALIBRATIONS AND AD HOC SITES VISITS:**

Where possible try to operate the analysers with the least number of site visits that can be achieved to ensure the instruments continue to collect data whilst maintaining an acceptable level of data quality. This balances the need for social distancing where possible with the need to ensure the instruments can continue to operate. If appropriate to individual situations it is acceptable to reduce 2 weekly site visits to monthly visits. LSO's should, however, take note of what the current on-site situation is with regards to filters changes and re-schedule visits around this. If it is the case that calibrations will not be carried out during the foreseeable future please advise Ricardo.

Ricardo will continue to carry out daily checks on site data and will provide emails highlighting any issues and giving advice on what to do. Scottish Government and Ricardo appreciate that these

ad hoc sites visits may not always be achievable. If not, please let Ricardo know and we will see if alternative arrangements can be made.

- **LOCAL TRANSPORT:**

Where public transport is usually used by LSOs, we would ask individuals to consider government guidance on the use of alternatives and varying travel times to avoid busy periods.

- **ILLNESS:**

In the event that an individual has been to site within the last 72 hours and then believes they may have coronavirus, we ask that Ricardo and the relevant Engineer Support Units are made aware immediately so that any future site visits are stopped until sufficient time has passed for the threat of virus remaining on surfaces to pass. If you have any questions regarding visiting sites and the current situation please do not hesitate in contacting any of the Ricardo team. In addition, the [Air Quality App](#) is an easy way to stay up to date with current and forecasted air quality in your area.

- **LETTER OF AUTHORISATION INFORMATION:**

There have a be a number of enquires by local authorities asking whether there will be an AQ site visit authorisation letter issued by Scottish Government for visiting SAQD sites similar to what has been issued by the Environment Agency for visiting AURN sites. Legal advice is that any such authorisation should come from the individual authorities to their employees.

If you believe a letter is required, suggested text for authorities to use if they want to issue their own authorisation letters can be found in the “Questions and Answers” section of this newsletter.

SUMMARY ANALYSIS OF NO₂ CONCENTRATIONS DURING COVID-19 RESTRICTIONS

Please visit http://www.scottishairquality.scot/assets/documents/news/Summary_analysis_of_NO2_concentrations_during_Covid-19_Restrictions.pdf for a summary analysis of

NO₂ concentrations at four Scottish monitoring sites during the week 30 March to 05 April 2020 compared to 01 to 07 April 2019.

Additional analysis at a UK level has also been carried out and can be found at:

<https://ee.ricardo.com/news/analysis-of-covid-19-lockdown-on-uk-local-air-pollution>

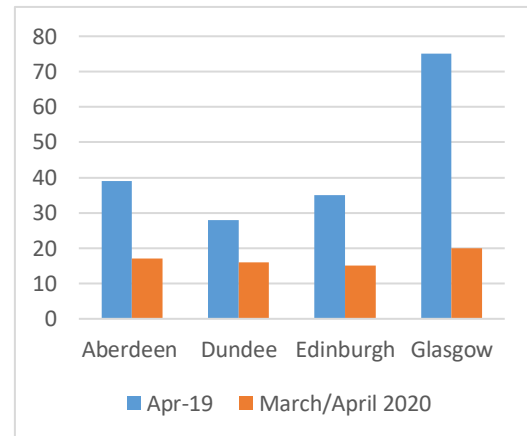


Figure 1. Bar graph illustrating NO₂ concentrations at four Scottish AQ monitoring sites (ug m⁻³)

Ricardo have carried out additional analysis at seven Scottish monitoring sites which further highlights the effect the Covid-19 restrictions have had on Scottish air quality. Available at <http://www.scottishairquality.scot/news/index?id=620>

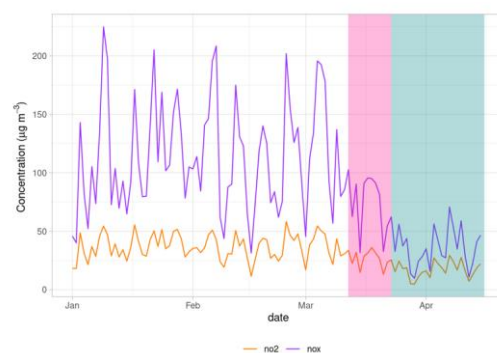


Figure 2. Perth Atholl Street NO₂ and NO_x time series from January – April. Noting the pink and green shadings indicate the periods when social distancing was advised and when lockdown was enforced.

Ricardo Energy and Environment will continue to carry out regular analysis of Scottish sites during the Covid-19 restrictions.

GARDEN BONFIRE GUIDANCE

Due to the current restrictions imposed across the country, Local Authorities may be deprioritising collection of garden waste to focus on essential waste collection. This may result in an increase in domestic bonfires. EPUK have produced the Garden Bonfire Guidance that provides information with regards garden bonfires and its effect on local air quality. The document can be found here <http://www.scottishairquality.scot/news/index?id=617>.

HOW DOES TRANSBOUNDARY POLLUTION AFFECTS AIR QUALITY IN SCOTLAND?

A short article describing how transboundary pollution affects air quality in Scotland has been published on the Air Quality in Scotland website and can be found here <http://www.scottishairquality.scot/assets/documents/news/Transboundary Pollution Final.pdf>.

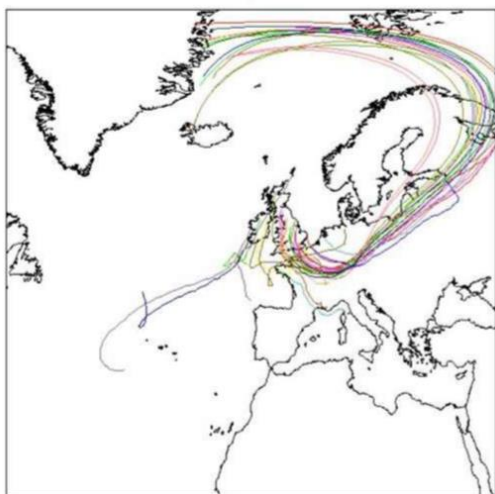


Figure 3. Air Mass Trajectory from 24th March 2020

SCOTTISH AIR QUALITY DATABASE AND WEBSITE ANNUAL SEMINAR – WEDNESDAY 4TH MARCH 2020 – PRESENTATIONS

The Scottish Air Quality Database and Website Annual Seminar took place on Wednesday 4th March 2020 at University of Strathclyde, Glasgow.

In total, there were 12 speakers presenting on a variety of air quality related subjects. These subjects included amongst others; Air Quality at the interface: Between the ambient and indoor environment (Dr Gavin Phillips), Air Pollution and health in Scotland (Dr Duncan Lee), Ozone in the UK (Dr David Fowler), Urban pollution “hot spots” measured from Real World Driving Emissions Tests (Mark Peckham, Combustion Ltd), The Environmental Impact of Domestic solid fuel burning – Seeking clarity (Bruce Allen, HETAS), Ammonia: Emission, Effects and Mitigation (Dr Jeremy Wiltshire), The European CleanAir@Schools Project (Dr Colin Gillespie).

For reference the agenda and all made available presentation slides from the day can be found here <http://www.scottishairquality.scot/news/reports?view=seminars&id=614>.

Due to a lack of time at the SAQD seminar this year, Stephen Stratton (Ricardo) was unable to present his talk titled “Research study to investigate particulate matter monitoring techniques in Scotland”. To compensate for this, we have provided the presentation as a webinar with audio for people to see and hear on the Air Quality in Scotland Website.

If further information is required on any of the presentations slides, please email aq-monitoring-scotland@ricardo.com.



Figure 4. SAQD Seminar Introduction Slide

SUMMARY OF THE RESPONSES TO THE ONLINE SURVEY ON THE CAFS REVIEW RECOMMENDATIONS

A summary of response to the online survey on the CAFS review recommendations is available here <http://www.scottishairquality.scot/news/index?id=613>.

PUBLICATION OF THE AIR QUALITY POLLUTANT INVENTORIES FOR ENGLAND, SCOTLAND, WALES AND NORTHERN IRELAND: 1990 – 2017 REPORT

The Air Quality Pollutant Inventory Report for England, Scotland, Wales and Northern Ireland: 1990-2017 has now been published. The report presents emission inventories for the priority Air Quality pollutants (ammonia, carbon monoxide, nitrogen oxides, non-methane volatile organic compounds, particulate matter, sulphur dioxide and lead) for the constituent countries of the UK.

To read the full report please go to the Air Quality in Scotland Website technical reports page:
<http://www.scottishairquality.scot/news/reports?view=technical&id=610>.

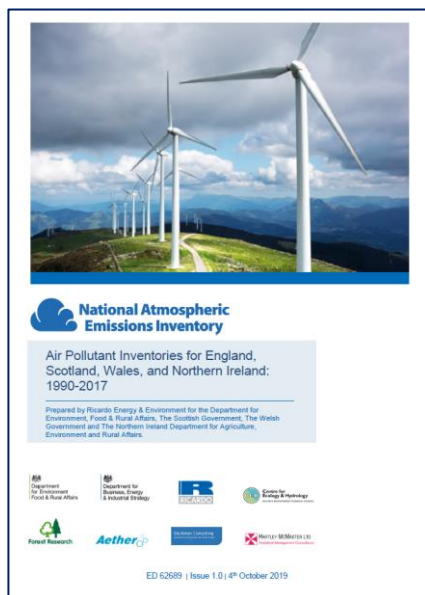


Figure 5. NAEI Air Pollutant Inventory Report

SCOTTISH ENVIRONMENT PROTECTION AGENCY (SEPA)

LAQM UPDATE

SEPA has recently written to all local authorities reminding them of the submission requirements for the Annual Progress Report (APR) for 2020. The updated template is now available on-line via the Defra Report Submission Website. The Scottish Government have indicated that they wish to maintain business as usual as far as possible for LAQM reporting during the current period of restrictions and therefore the APRs will still be due on 30 June 2020. However, as with previous year's reporting cycles, if your authority cannot submit the APR by the specified date you can approach the Scottish Government and SEPA to seek an extension to the deadline which will be considered on a case-by-case basis.

SEPA RESPONSE TO COVID-19

SEPA is helping regulated businesses adjust and adapt to the circumstances in which everyone's resources and capacities are severely constrained. SEPA will be prioritising its efforts on those regulated sectors most crucial to the functioning of society during this public health emergency and will work as much as possible with businesses from other sectors. In order to help with this approach, SEPA has developed a hub which contains all information in relation to its response and how you can contact SEPA on Covid-19 matters. This information can be found at <https://coronavirus.sepa.org.uk/>.

Contact: Graham Applegate

SAQD QAQC ACTIVITIES

Ricardo have completed the 2019 winter six monthly audits. After each local authority audit, a summary of the auditor's findings should have been emailed to you. 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: Will there be any delays to the summer QAQC site audits due to Covid-19?

A: Currently, Ricardo do not envisage any delays to the Summer QAQC audits.

Q: What should I do if calibrations can no longer be carried out at our SAQD sites due to Covid-19 restrictions and other commitments?

A: Contact Ricardo and we will provide advice and advise Scottish Government.

Q: What should I do before each site visit during Covid-19?

A: Before you attend site, it is advised that you check with all relative site users (Engineer Support Unit's (ESU), Ricardo, other LSO's or other known contractors), if they have been to site with 72 hours you must reschedule your visit until the 72 hour period is over.

Q: What text would you suggest for local authorities to use if they want to issue their own authorisation letters?

A: *"The bearer of this letter has been given authorisation to conduct essential site work on Scottish Government Air Quality Monitoring sites across INSERT LOCAL AUTHORITY NAME.*

The data collected on the Scottish Air Quality Database Network, which provides pollution data hourly live to <http://www.scottishairquality.scot/>, is considered extremely important to the ongoing evaluation of risk during the Covid 19 outbreak due to the potential impact of air

pollution on respiratory illnesses. It is also required for statutory compliance purposes with the Air Quality Directive.

Government have made the decision that the maintenance of air quality monitoring equipment should be included in the list of essential activities to be continued throughout the lockdown period.

The sites that are being visited are generally standalone cabins where no other people will be present. Staff will lone work so the risk of spreading the virus during such work is extremely low. Other staff working on these assets will not be visiting within 72hrs of the previous staff member so surface transmission is also deemed extremely low.

Site staff will maintain the cleanliness of the site in accordance with the guidelines provided by the Government Chief Medical Officer, namely: regular washing of hands or use of sanitiser gels, or the use of gloves whilst undertaking duties at site.

For a full list of all the sites which are incorporated within the National Air Quality Networks please see <http://www.scottishairquality.scot/>

If confirmation of the status of this letter is required please call INSERT RELEVANT LOCAL AUTHORITY CONTACT"

STAY CONNECTED

<p>SAQD PROJECT MANAGEMENT</p> <p>David Hector Tel: 01235 753523 E-mail: david.hector@ricardo.com</p> <p>Stuart Sneddon Tel: 01235 753015 Email: stuart.sneddon@ricardo.com</p> <p>SAQD PROJECT DATA MANAGEMENT</p> <p>Stephen Stratton Tel: 01235 753072 Email: stephen.stratton@ricardo.com</p>	<p>SCOTTISH GOVERNMENT</p> <p>Andrew Taylor Email: andrew.taylor2@gov.scot</p>
<p>RICARDO ENERGY & ENVIRONMENT FIELD OPERATIVES</p> <p>Susannah Telfer Tel: 01235 753434 E-mail: susannah.telfer@ricardo.com</p> <p>Sam Copey Tel: 01235 753153 E-mail: sam.copey@ricardo.com</p> <p>Paraic Marry Tel: 01235 753360 E-mail: paraic.marry@ricardo.com</p>	<p>Ashleigh Norrie Tel: 01235 753663 E-mail: ashleigh.norrie@ricardo.com</p> <p>Stephen Gray Tel: 01235 753525 E-mail: stephen.gray@ricardo.com</p>
<p>Visit our YouTube page https://www.youtube.com/user/AirQualityScotland</p> 	<p>Follow us on Twitter</p>  @scotairquality @scotairquality
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