



Department
for Environment
Food & Rural Affairs

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uk

www.defra.gov.uk

Our ref: RFI 5707

Date: 4th September
2013

Dear Mr Birkett

REQUEST FOR INFORMATION

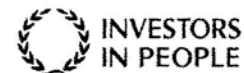
Thank you for your request for information about ozone monitoring in relation to information alerts and the UK's Automatic Urban and Rural Network, which we received on 8th August 2013. As you know we have handled your request under the Environmental Information Regulations 2004 (EIRs).

The EIRs apply to requests for environmental information, which is a broad category of information defined in regulation 2 of the EIRs. Public authorities are required to handle requests for environmental information under the EIRs. They give similar access rights to the Freedom of Information Act 2000 (FOIA).

I enclose a copy of the information you requested and responses to your questions.

The London Air Quality Network (including the London Barnes Wetlands monitoring station) is separate from Defra and run by King's College London on behalf of local authorities, for the purpose of local air quality management. Defra's air pollution alert systems are automated based on data in the UK-AIR website databases and the UK wide network of stations which form part of Defra's compliance monitoring network.

Technical issues at the Canterbury station on the 22nd July 2013 led to a disruption in the live data feeds, ie Defra's air quality data managers did not receive any data from this station for a period of time. These issues were caused by a separate repair on the NOx analyser which interfered with the communications for the whole station for several hours. Once communications were restored, data was retrieved to populate the UK-AIR database but this was not until 24th July at 10:29. Thus an alert was not triggered as it was not part of a live data feed and Defra's database did not receive the data until 2 days after the



information threshold was breached. There were additional issues with the ozone data between 09:45 and 11:45 on the 22nd July because the instrument suffered a period of date and time record corruption, resulting in missing data for the period in question, hence why some data are missing from UK-AIR downloads.

With regards to the second part of your question, in Annex C below, is a copy of all correspondence relating to exceedences of the ozone information threshold and ozone monitors going offline during July. In order to provide a fuller and more helpful response, I have reviewed your tweets to @defraukair and enquired with Defra's network contractors about the stations and periods you have mentioned.

Charlton Mackrell, 14th July: contractors report that communications were lost during this period and this may be linked to the high temperatures affecting the equipment although we cannot pinpoint an exact cause. Unfortunately on this occasion the data were not recoverable.

Teddington 18th July: In this instance contractors gathered data via a standard modem connected to a CAS (Code Activated Switch) linked to each individual site instrument. In this particular case the CAS 'locked up' (froze with regards to accepting instructions to communicate) as sometimes happens. The local site operator restored correct functionality and resumption of routine data collection from the instruments (NO_x and O₃) was made at 15:00BST and sent to the data management unit at 15:25.

It is worth bearing in mind that there is a diverse range of instruments and communication methods deployed on the network. Data gathering issues occur for a variety of reasons depending on the type of communications installation deployed and instruments at site. This means that there are many opportunities for faults to occur in measurement and data handling.

Defra has a rigorous site management and quality control/assurance procedures in place to minimise these instances. In some cases, the next data gathering sequence initiated by Central Management and Control Unit following an issue will be successful and the data management software can retrieve the data. Where communication continues to be at fault there are instances where on board instrument logging can provide a means by which data continues to be collected but not disseminated. In the worst case scenario, instrument malfunction/vandalism/power failure can lead to a loss of data irrespective of the extent of communication attempted via telemetry (as was the case with the Canterbury data between 09:45 and 11:45 on the 22nd July).

In keeping with the spirit and effect of the EIRs, and in keeping with the government's Transparency Agenda, all information is assumed to be releasable to the public unless exempt. Therefore, the information released to you will now be published on www.gov.uk together with any related information that will provide a key to its wider context. Please note that this will not include your personal data.

I attach Annex A, which explains the copyright that applies to the information being released to you.

I also attach Annex B giving contact details should you be unhappy with the service you have received.

If you have any queries about this letter, please contact me.

Yours sincerely

A handwritten signature consisting of several slanted, parallel lines.A rectangular area of the document that has been completely redacted with black ink.