



Department  
for Environment  
Food & Rural Affairs

[www.defra.gov.uk](http://www.defra.gov.uk)

## Changes to Defra's Air Quality Forecasting from 1<sup>st</sup> April 2014



Llywodraeth Cymru  
Welsh Government



## Introduction

Defra provide a [daily air quality forecast](#) to provide information to the public about air pollution. From 1<sup>st</sup> April 2014 this provision will be provided by the Met Office.

This document outlines the main changes so that users of the service can continue to access information on air quality in a simple and useful way.

Following this transition, the service will undergo a program of continuous development in order to improve the service to the public.

## Main Changes

- From 1<sup>st</sup> April 2014, the air quality forecast service will be provided by the Met Office.
- The forecast will be made using the Met Office's specialist air quality model (AQUM); similar to how weather forecasts are produced.
- The forecast will continue to be based on the daily air quality index (DAQI) where air quality is shown on a 10 point scale; ranging from low, moderate, high to very high based on the levels of 5 pollutants. More details of the DAQI can be found here: <http://uk-air.defra.gov.uk/air-pollution/daq>
- The AQ forecast will continue to be based on a UK map together with a text-based forecast (Screen Shot 1).

### Screen Shot 1

**Forecast maps (provided by the Met Office)**

Daily Air Quality Index – Monday 24/03/2014

Enter your postcode to see the forecast for your area:

**Index Bands**

|     |          |   |   |      |   |   |           |   |    |
|-----|----------|---|---|------|---|---|-----------|---|----|
| 1   | 2        | 3 | 4 | 5    | 6 | 7 | 8         | 9 | 10 |
| Low | Moderate |   |   | High |   |   | Very High |   |    |

» Health advice associated with air pollution

» Daily forecast tweets from @DefraUKAir

Up to 5 day forecasts are available, use the links below to step through each day.

« Prev   Next »

**Today (24th March 2014)**

|                             |
|-----------------------------|
| Tuesday (25th March 2014)   |
| Wednesday (26th March 2014) |
| Thursday (27th March 2014)  |
| Friday (28th March 2014)    |

- The map will no longer be based on zones and agglomerations.
- The text forecast will be written by the Met Office's expert forecasters and will be written in a way that is easy for everyone to understand (Screen Shot 2).

## Screen Shot 2

### Latest forecast summary

The latest air pollution forecast was issued at 24/03/2014

#### Today

Air pollution levels will be **Low** for the whole of the UK due to strengthening southerly winds and rain expected in western parts later today.

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#### Tomorrow

Air pollution levels will be **Low** for the whole of the UK.

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#### Outlook

Air pollution levels will remain **Low** for the whole of the UK.

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- The forecast will be for 5 days and will be updated every morning. This will provide more warning of air quality issues, enabling you to minimise or manage any potential effects on your health. You can access forecasts for each day by clicking on the tabs next to the UK map.
- The UK forecast map will be more detailed to enable a better picture of where air quality is more of a concern for you (Screen Shot 1).
- The forecast will be searchable by postcode from the main screen (Screen shot 1). This will enable you to gain an understanding of the air quality in areas of interest to you e.g. home, work or holiday.
- In searching for a postcode you are presented with a local map (centred on that postcode) with the locations of the nearest forecast locations indicated (Screen Shot 3).
- There are 5000 of these representative background forecast locations over the whole of the UK.

### Screen Shot 3

**Air pollution forecast for Today (24th March 2014) near EX1**



- A table of these locations is also presented below the map (Screen Shot 4).

### Screen Shot 4

| Location   | Today 24th Mar     |
|--|--------------------|
| Antony house<br>Distance away: 1.28 miles<br>Make default location         | Moderate (Index 4) |
| Portwrinkle (beach)<br>Distance away: 2.07 miles<br>Make default location  | Moderate (Index 4) |
| Torpoint<br>Distance away: 2.58 miles<br>Make default location             | Low (Index 3)      |
| Whitsand bay<br>Distance away: 2.91 miles<br>Make default location         | Moderate (Index 4) |
| Saltash<br>Distance away: 2.93 miles<br>Make default location              | Moderate (Index 4) |
| Barne barton<br>Distance away: 3.36 miles<br>Make default location         | Low (Index 3)      |
| Kingsand bay (beach)<br>Distance away: 3.53 miles<br>Make default location | Moderate (Index 4) |
| Cawsand bay (beach)<br>Distance away: 3.67 miles<br>Make default location  | Moderate (Index 4) |
| Plymouth youth hostel<br>Distance away: 4.1 miles<br>Make default location | Low (Index 3)      |

- Forecasts for these locations are indicated by markers on the map (coloured index numbers) or in the table as coloured words (low, moderate, high or very high) together with index numbers.

- The tabs above the local map allow you to look at each of the 5 day forecasts for the area that you have searched.
- The map can be navigated by zooming in and out as well as dragging to refine the area displayed.
- A favourite postcode can be saved and the forecast for this location will appear at the top of the main page next time you visit.
- The forecast is a regional scale forecast, so may not be able to represent air pollution close to busy roads under certain weather conditions. The accompanying forecast text will state when weather conditions are likely to occur that could result in higher index values at such locations.

## Additional Services

Alongside the main web page service the forecast is accessible by a number of other means: twitter, RSS, Freephone (0800 55 66 77). The following changes will be made to these services:

- Our twitter service will continue to send out details of the air quality forecast.
- Tweets will be sent early in the morning for today's forecast and early afternoon for tomorrow. You can follow us on twitter @DefraUKair
- The RSS feed will no longer provide regional information (based on zones and agglomerations) but will initially list all 5000 forecast locations (further developments may be considered in future).
- The Freephone (0800 55 66 77) will continue and will provide the national forecast. Due to the level of detail now provided on regional forecasts it is not possible to put the regional forecast on a phone service.

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