Sussex Monthly Air Quality Alert Service Report

Sussex Air Quality Partnership / East Sussex County Council

February 2025

Document Control Sheet

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TABLE OF CONTENTS

LIST OF TABLES

1 Sussex Air Quality Alert Service

The Sussex Air Quality Alert service was developed by the Sussex Air Quality Partnership ("Sussex-air"), which is made up from the Sussex local authorities and Public Health bodies. Bureau Veritas provides this service on behalf of the Sussex Air Quality Partnership.

The Sussex Air Quality Alert service was established over 15 years ago to provide a Sussex-wide air pollution forecasting and alert service to support vulnerable persons such as those with respiratory and heart conditions and the public.

- The service provides pollution alerts direct to subscribers for "FREE" via different delivery methods such as text/SMS, email, or telephone message to landlines.
- The Alerts are sent to subscribers 24 to 48 hours prior to an episode of elevated air pollution.
- Subscribers can select either the general area alerts for East or West Sussex or to specific areas more representative of where they live or work.
- Subscribers can cancel the service at any time.

Further details on the service and live pollution forecasts are shown on the homepage https://sussex-air.net/

1.1 How the Alert Service works

Air quality is measured for a variety of pollutants and can have a variety of effects on different people in society. The UK Air Quality Banding system is used to inform the public about the levels of pollution that they may be exposed to and are based on health advice approved by the Committee on Medical Effects of Air Pollution Episodes (COMEAP).

The system uses an index divided into four bands to provide more detail about air pollution levels in a simple way; these bandings range from Low, Moderate, High to Very High. The overall air pollution index is calculated from the highest index value of five pollutants: nitrogen dioxide, sulphur dioxide, ozone, carbon monoxide and particles < 10µm (PM_{10}). The bandings, pollutant concentrations and periods of exposure are provided in Appendix A.

Using the national UK Met Office air pollution service, we check and send out air pollution alerts only when pollution levels are likely to affect people's health. Forecasts of air quality are generated daily and cover a 5-day period and are available 365 days of the year.

Alerts are only sent if:

- air quality is forecast to be "Moderate" or above on the day of the forecast; or
- on any of the other 4 days within the 5-day forecast period.

Alerts are sent;

- in the morning and sent by mid-day each day; and
- cover a 5-day period.

Subscribers will be sent the alert if:

- there is an alert for an area they are subscribed to which is "Moderate" or above; and
- an alert is forecast for the present day or one day over the following 4 days.

We will not resend alerts if:

- the air pollution levels stay the same or go back down to "Low".

We will only send alerts if:

- the level changes to "High" or "Very High" in that period.

2 Service Users – February 2025

2.1 Service users in 2025

The service users reported here are those that have been subscribed since January 2025. Table 2-1 shows the subscribers and delivery method type for the service.

Table 2-1: New Subscribers 2025

Service type	Email	Text/SMS	Voice message
Pre 2025	**455**	**366**	5
January	51	37	0
February	1	1	0
Total Subscribers to date	**506**	**404**	**5**

Note: The total number of subscribers can vary from month to month, with some leaving as well as new people subscribing. The total at the end of the period includes all those who stayed with the service plus new recruits and leavers, hence the difference in the totals.

The alert service is delivered mainly by email (506 users) and text/SMS (404 users) services, these account for 55.3% and 44.2% of the users respectively. The remaining (5) 0.5% of users still prefer to receive alerts via land-line telephone voice messages.

Table 2-2 Total Subscribers

Total Number of Subscribers as of end of February 2025 by all Communication Methods	**915**

3 Air Quality Forecasts and Alerts – February 2025

Air quality forecasts are produced daily, as described in section 1, with alerts only being issued when above the “Moderate” Daily Air Quality Index (DAQI) level.

3.1 Forecasts

There are 31 area forecasts produced daily, which can vary slightly dependent on conditions, locations and other model forecast factors the Met Office determines. The full list of DAQI days for all 31 sites in 2025 (February) is provided in Appendix B and Table B-1 sets out the number of days that were categorised as ‘low’, ‘moderate’, ‘high’ and ‘very high’ at the alert area locations. These data demonstrate the variance in the numbers of DAQI days across different locations.

Table 3-1 shows the number of forecast DAQI days in February 2025 at selected sites. It can be found that on average, there is no day where Moderate, High or Very High pollution forecasted across the selected sites.

Table 3-1: Number of forecast DAQI days in 2025 (February) at selected sites

Alert location	Low (1-3)	Moderate (4-6)	High (7-9)	Very High (10)
Brighton	28	0	0	0
Chichester	28	0	0	0
Eastbourne	28	0	0	0
East Grinstead	28	0	0	0
Hastings	28	0	0	0
Haywards Heath	28	0	0	0
Horsham	28	0	0	0
Lewes	28	0	0	0
Rye	28	0	0	0
Worthing	28	0	0	0
Average	28	0	0	0
Percentage of period	100%	0%	0%	0%

The data shown in the table is rounded to the integers.

The full set of 31 sites data identifies that all the days were ‘low’ air pollution days in February 2025 accounting for on average 31 out of 31 days (100%). There were no days where ‘moderate’, ‘high’ pollution and ‘very high’ pollution was forecasted.

3.2 Alerts

Table 3-2 shows the number of alerts sent via the three main service distribution routes. The number of alerts sent are relative the number of service users, the areas they have selected and the number of ‘moderate’ or above forecasts produced in a month.

Table 3-2: Alerts sent (February 2025)

Period	Service type		
	Email	Text/SMS	Voice message
2024 Total	2,866	2,216	35
January	0	0	0
February	0	0	0
Totals to date (2025)	**0**	**0**	**0**

During February 2025, there were no email alerts, no text/SMS alerts and no voice alerts sent to subscribers across Sussex.

Appendix A – Air Quality Bandings

Table A - 1 UK Air Quality Bandings

Band	Index	Ozone	Nitrogen Dioxide	Sulphur Dioxide	PM2.5 Particles	PM10 Particles
		Running 8 hourly mean	Hourly mean	15 minute mean	24 hour mean	24 hour mean
		µg m-3	µg m-3	µg m-3	µg m-3	µg m-3
Low						
	1	0-33	0-67	0-88	0-11	0-16
	2	34-66	68-134	89-177	12-23	17-33
	3	67-100	135-200	178-266	24-35	34-50
Moderate						
	4	101-120	201-267	267-354	36-41	51-58
	5	121-140	268-334	355-443	42-47	59-66
	6	141-160	335-400	444-532	48-53	67-75
High						
	7	161-187	401-467	533-710	54-58	76-83
	8	188-213	468-534	711-887	59-64	84-91
	9	214-240	535-600	888-1064	65-70	92-100
Very High						
	10	241 or more	601 or more	1065 or more	71 or more	101 or more

Appendix B – Number of Forecast DAQI days in 2025 (to date)

Table B - 1 Number of Forecast DAQI days in 2025 (to date)

Alert location	Low (1-3)	Moderate (4-6)	High (7-9)	Very High (10)
Arundel	59	0	0	0
Battle	59	0	0	0
Bexhill	59	0	0	0
Billingshurst	59	0	0	0
Bognor Regis	59	0	0	0
Burgess Hill	59	0	0	0
Brighton	59	0	0	0
Chichester	59	0	0	0
Crowborough	59	0	0	0
Eastbourne	59	0	0	0
East Grinstead	59	0	0	0
Goodwood	59	0	0	0
Hailsham	59	0	0	0
Hastings	59	0	0	0
Haywards Heath	59	0	0	0
Heathfield	59	0	0	0
Horsham	59	0	0	0
Hove	59	0	0	0
Lewes	59	0	0	0
Littlehampton	59	0	0	0
Newhaven	59	0	0	0
Petworth	59	0	0	0
Portslade by Sea	59	0	0	0
Rye	59	0	0	0
Seaford	59	0	0	0
Selsey	59	0	0	0
Shoreham	59	0	0	0
Steyning	59	0	0	0
Storrington	59	0	0	0
Uckfield	59	0	0	0
Worthing	59	0	0	0
Average	**59**	**0**	**0**	**0**

Appendix C – Alert Service information from 2022 to 2024

The Sussex Alert service was operational from March of 2022; however, the service was updated in October 2022 with a new service and all users invited to re-register. The service was enhanced to provide more localised air quality forecasts instead of the general “West” and “East Sussex” and “Brighton only” forecasts and alerts. There are currently 32 different areas across Sussex that have specific forecasts.

Table C - 1 Historical subscriber numbers 2022, 2023 and 2024

Service type	Email	Text/SMS	Voice message
Pre-October existing subscribers	37	14	0
2022			
October	150	129	3
November	99	90	2
December	21	13	0
2023			
January	7	2	0
February	6	2	0
March	3	2	0
April	2	3	0
May	4	3	0
June	15	10	0
July	9	4	0
August	6	4	0
September	1	1	0
October	4	1	0
November	2	3	0
December	0	0	0
2024			
January	2	2	0
February	2	0	0
March	3	1	0
April	0	0	0
May	9	2	0
June	1	3	0
July	63	63	0
August	20	15	0
September	1	2	0
October	4	0	0
November	0	1	0
December	1	1	0
Total new subscribers	**435**	**280**	**5**
End of 2024 total subscribers	**455**	**366**	**5**

Note: The total number of subscribers can vary from month to month, with some leaving as well as new people subscribing. The total at the end of the period includes all those who stayed with the service plus new recruits and leavers, hence the difference in the totals.

Table C - 2 Email subscribers by location and month in 2024/25

2024	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2025	Jan	Feb
Email (totals)	**2**	**2**	**3**	**0**	**9**	**1**	**63**	**20**	**1**	**4**	**0**	**1**		**51**	**1**
Arundel															
Battle					1		1	1						2	
Billingshurst												1		1	
Brighton Centre	1														
Brighton East															
Brighton_and_Hove														1	
Chichester								1		1					
Crawley															
Crowborough							3	1							
East Grinstead														1	
East Sussex	1		1		2	1	13	3						10	
Eastbourne					1		15	2						5	
Hailsham							3	1						2	
Hastings Bexhill					4		10	4						12	
Haywards Heath Burgess Hill									1					1	
Heathfield							1								
Horsham					1										
Hove															
Lewes			1		1		3			1					1
Littlehampton Bognor Regis								1		1					
Newhaven Seaford			1		1		9	2						4	
Portslade Shoreham															
Rottingdean Saltdean							2							1	

Rye							1							3	
Selsey Whitterings															
Steyning		2			2										
Storrington								2							
Uckfield							2							2	
West Sussex										1				1	
Worthing								2						1	

Table C - 3 Mobile text subscribers by location and month in 2024/25

2024	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2025	Jan	Feb
Mobile Text (totals)	**2**	**0**	**1**	**0**	**2**	**3**	**63**	**15**	**2**	**0**	**1**	**1**		**37**	**1**
Arundel														2	
Battle					1		1								
Billingshurst							1								
Brighton Centre															
Brighton East															
Brighton Falmer															
Brighton_and_Hove	1					1	1								
Chichester	1														
Crawley											1				
Crowborough						1	1								
East Grinstead														2	
East Sussex							14	3				1		10	
Eastbourne							10	3						9	
Hailsham							2								
Hastings Bexhill							14	4	1					3	
Haywards Heath Burgess Hill														2	

Heathfield							1							2	
Horsham															
Hove						1									
Lewes							2	1						1	1
Littlehampton Bognor Regis							1								
Newhaven Seaford			1				7	1						1	
Petworth															
Portslade Shoreham									1					1	
Rottingdean Saltdean															
Rye							3	1						2	
Selsey Whitterings															
South Downs South Harting														1	
Steyning															
Storrington															
Uckfield							4							1	
West Dean Goodwood															
West Sussex					1		1	1							
Worthing								1							

Table C - 4 Voice text subscribers by location and month in 2024/25

2024	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2025	Jan	Feb
Voice Text (totals)	0	0	0	0	0	0	0	0	0	0	0	0		0	0
Brighton Falmer															
Brighton_and_Hove															
East Sussex															
West Sussex															