

Air Quality around Arnolds Field in September 2023

Air quality data for September 2023 from nodes close to the Arnold's field site as well as sites located further away from Arnold's Field are shown below.

Fire incidents

The London Fire Brigade (LFB) were called 4 times to the site in September on the 11th, 12th, 14th and 25th however, in each case no action was necessary by the LFB.

The data shows levels of particulates (PM_{2.5}) and Nitrogen Dioxide (NO₂) in residential areas adjacent to Arnold's Field.

In summary, levels of these two pollutants:

- Table 1 shows that NO₂ levels were consistently 'low' when compared to the short term thresholds (hourly mean) set in the UK Government's 'Daily Air Quality Index' (DAQI).
- Table 2 shows that PM_{2.5} levels were consistently 'low' when compared to the short-term thresholds (daily mean) set in the UK Government's 'Daily Air Quality Index' (DAQI) except on the 7th and 10th September when sites further away from Arnold's field - Slade Green and Goresbrook school, 3km and 6.5km away from the Arnold's field site respectively reach an index of '4' on the DAQI scale indicating a 'moderate' level of PM_{2.5} but this was not observed in monitoring locations closer to Arnold's field.
- Table 3 shows that PM_{2.5} hourly levels were at times elevated however, this mirrored the trend seen in areas further away from Arnold's field.

You can see further information about UK legal limits for [air pollution and guidance from Breathe London here](#).

You can find data from all the nodes around Arnolds Field are shared in more or less real time on the [Breathe London website](#).

Table 1. September 2023 – Nitrogen Dioxide Level (Index) by Node Site (Hourly)

Approx. distance from Arnolds Field	Site Name	01-Sep	02-Sep	03-Sep	04-Sep	05-Sep	06-Sep	07-Sep	08-Sep	09-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep	20-Sep	21-Sep	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep
0.5 km N	Acer Avenue																														

Based on the hourly mean concentration

Table 2. September 2023 - PM2.5 Particles Level (Index) by Node Site (Daily)

Approx. distance from Arnolds Field	Site Name																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
0.5 km N	Acer Avenue	1	1	1	2	2	2	3	2	2	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1
1 km N	King Edwards Ave	1	1	2	2	2	2	3	3	2	3	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1
1.1km W	Orchard Avenue	1	1	2	2	2	2	3	3	2	3	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	
1.2 km NW	Rainham (refer	1	1	2	2	2	2	3	3	2	3	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	
1.2 km	Spring Farm Park	1	1	2	2	2	2	3	3	2	3	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	
1.3km W	Harris Academy	1	1	2	2	2	2	3	3	2	3	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	
1.8 km	Ingrebourne Golf	1	1	2	2	2	2	3	3	2	3	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	
3 km N	Scotts Primary	1	1	2	2	2	2	3	3	2	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	
3 km	Slade Green	1	1	2	2	2	3	4	2	2	3	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	
3.6 km	Fontain Avenue	1	1	1	2	2	2	3	3	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
6.5km W	Goresbrook School	1	1	2	2	2	2	3	3	2	4	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	
7 km N	Cotleigh Road	1	1	2	2	2	2	3	3	3	3	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	2	1	1	2
10 km N	Bedfords Park	1	2	2	2	2	2	3	3	2	3	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	

Based on the daily mean concentration for historical data, latest 24 hour running mean of current day

In the analysis of the PM_{2.5} daily values (Table 2), looking at the values which are not Index 1:

- on the 7th and 10th September when sites further away from Arnold’s field - Slade Green and Goresbrook school, 3km and 6.5km away from the Arnold’s field site respectively reach an index of ‘4’ on the DAQI scale indicating a ‘moderate’ level of PM_{2.5} whereas monitoring locations closer to Arnold’s field on the same days were ‘3’ on the DAQI scale indicating a ‘low’ level of PM_{2.5}.

Table 3. September 2023 PM_{2.5} Particles Level (Index) by Node Site (Hourly)

Legend					PM _{2.5} - 1 hour mean (mg/m ³)																									
0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300

Approx. distance from Arnolds Field	Site Name	01-Sep	02-Sep	03-Sep	04-Sep	05-Sep	06-Sep	07-Sep	08-Sep	09-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep	20-Sep	21-Sep	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep	
0.5 km N	Acer Avenue																															
1 km N	King Edwards Ave																															
1.1km W	Orchard Avenue																															
1.2 km NW	Rainham (reference site)																															
1.2 km	Spring Farm Park																															
1.3km W	Harris Academy																															
1.8 km	Ingrebourne Golf																															
3 km N	Scotts Primary																															
3 km	Slade Green																															
3.6 km	Fontain Avenue																															
6.5km W	Goresbrook Schoc																															
7 km N	Cotleigh Road																															
10 km N	Bedfords Park																															

Based on the hourly mean concentration

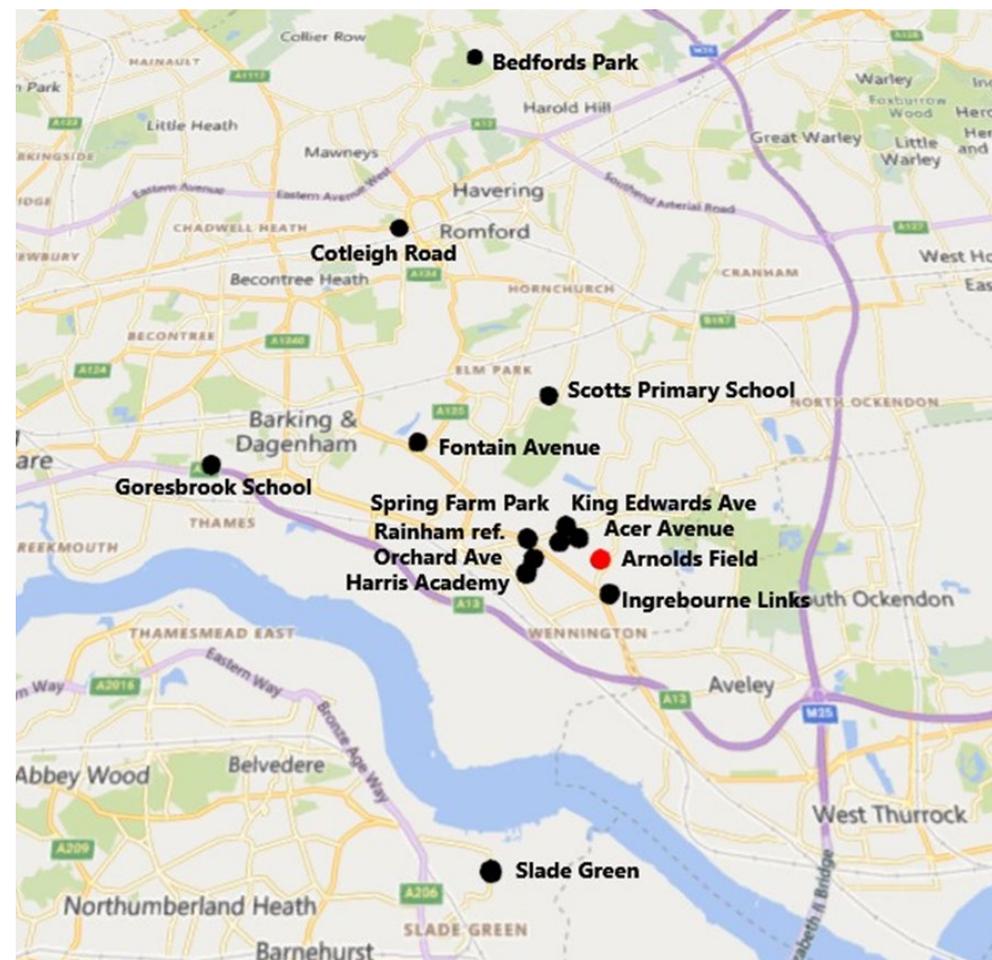
The reference stations and Breathe London Nodes on the map (Figure 1) are coloured in Table 1 and Table 2 according to the government's 'Daily Air Quality Index' (DAQI) shown below (Figure 2).

You can find the DAQI on the [Defra website](https://www.gov.uk/government/organisations/defra)

Figure 2. The Daily Air Quality Index (DAQI)

Band	Index	PM2.5 (24 hour mean mg/m3)	Nitrogen dioxide (1 hour mean mg/m3)
Low	1	0-11	0-66
	2	12-23	67-133
	3	24-35	134-200
Moderate	4	36-41	201-267
	5	42-46	268-334
	6	47-53	335-400
High	7	54-58	401-467
	8	59-64	468-534
	9	65-70	535-600
Very High	10	>71	>601

Figure 1. Map of air quality monitoring stations (Breathe London nodes and reference sites).



- Arnolds Field (Launders Lane)
- Breathe London air quality monitors