

Air Pollution – Brief Analysis for February 2023

Below is a brief representation of data captured by portable devices installed in multiple locations in Korba, Delhi and Ranchi. The analysis has been done for two reporting periods – 1 February to 28 February 2023 and Jan 2022 to February 2023

Section 1 – Data Analysis for period Jan to February 2023

Monthly Average AQI - Different Cities														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan-23	Feb-23
Korba	268	202	217	206	110	123	80	91	106	173	262	222	259	200
Delhi	330	224	188	139	114	80	76	86	96	257	359	333	396	279
Ranchi							158	89	91	174	153	333		

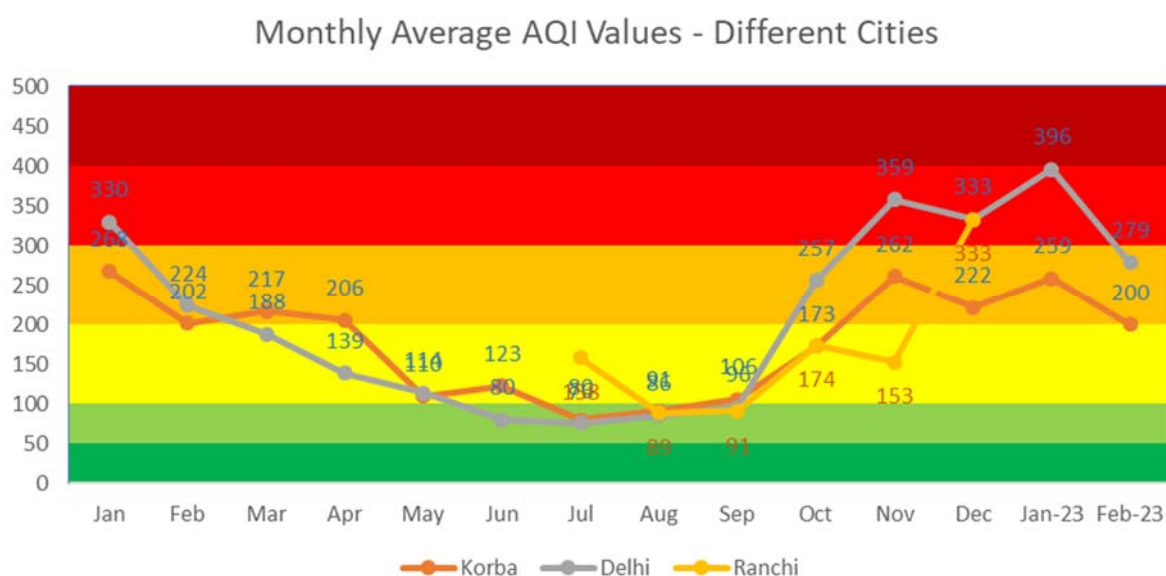


Table and Graph above show the Average Monthly AQI in different Cities. The graph and data clearly showcase the winter months when AQI comes under dangerous levels and summer and monsoon months when the air quality is Satisfactory. It is clear that AQI is showing an increasing trend with the onset of winter and has started decreasing as summer progresses. During this period, Delhi recorded the worst AQI in the month of January 2023. Out of 14 months, for 10-months AQI in Delhi was above 100 while Korba had AQI above 100 for 12 months. February 2023 Air quality has improved over the previous month figures. The overall data for Korba shows that Korba Air is more polluted than Delhi for longer durations in the year. February 2023 AQI is higher in Delhi while it has improved in Korba as compared to February 2022. The different colour bands in the graph respond to the AQI categories as stated in the NAAQs (More later in the document)

Monthly Average HI - Different Cities														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan-23	Feb-23
Korba	19	24	29	36	40	39	37	35	35	30	23	21	21	24

Delhi	17	20	26	32	35	36	39	37	36	28	24	18	16	21
Ranchi							31	30	29	24	20	18	-	-

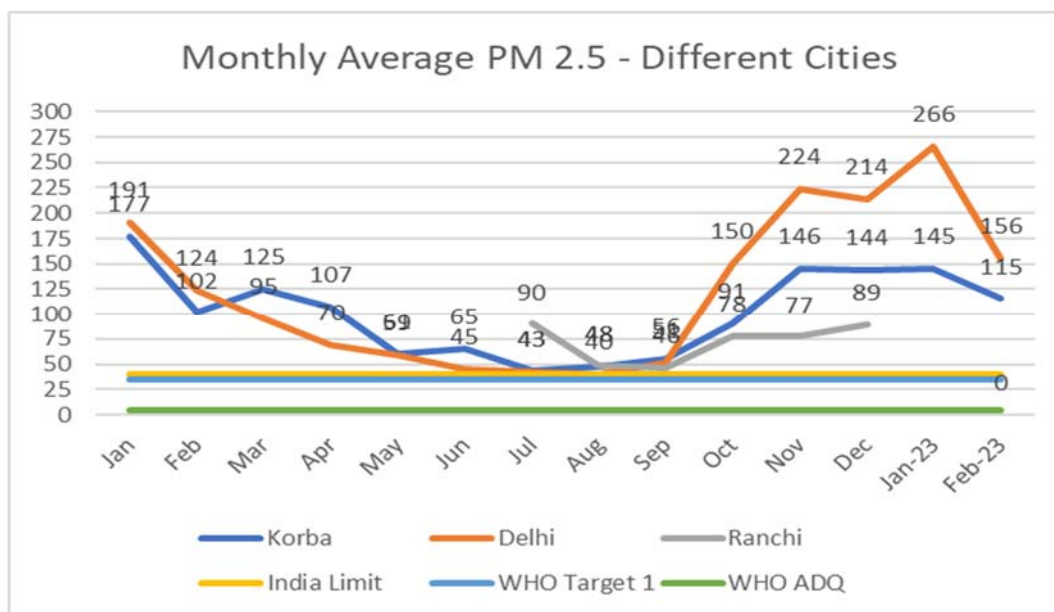
The above table shows the Monthly Average Heat Index for different cities.

Particulate Matter – Particulate matter or PM is the amount of dust particles in the air. These particles can be of different types i.e. organic, metallic etc. There are different sizes for these particles. Particles of size 10 micron are called PM 10. Those between size of 2.5 and 10 micron are called PM 2.5. those between 1 and 2.5 micron are labelled as PM1. The smaller the size of the particles, the easier for it to enter the air stream of the body and cause more impact. NAAQS and WHO (World Health Organisation) have both set limits for amount of such particles in the air for PM 2.5 and PM 10. Below are the limits set. It is clear that the Indian standard is higher than the WHO ADQ standard. There are no standards yet for PM 1 which is considerably more harmful.

	PM 2.5 (ug/m3)	PM 10 (ug/m3)
NAAQS (Annual target)	40	60
WHO Interim target 1	35	70
WHO ADQ Target	5	15

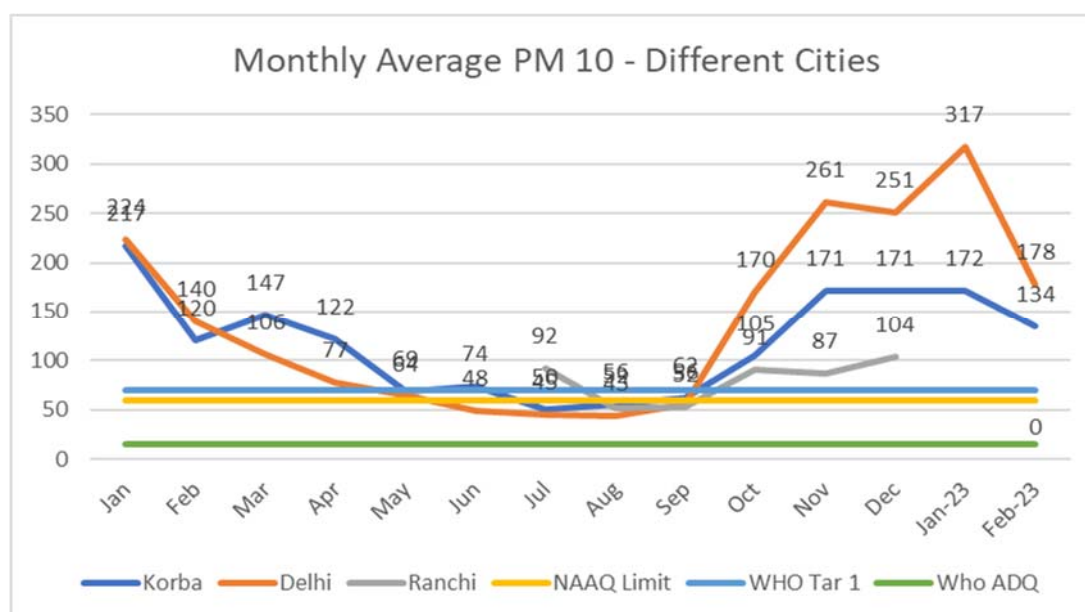
Below is the table and graph showing Monthly Average PM 2.5 values in different cities. In none of the months did any of the cities meet the higher Indian standard. In both Delhi and Korba, the values were more than 4 times the values in some of the months. Only during the monsoon period were the values closer to the standard but were still above. In Delhi the PM 2.5 particles have increased in comparison to December 2022. Even when compared to Jan 22, the values are higher. This is a matter of concern as smaller particles can cause more harm. Both Korba and Delhi had higher concentration of PM 2.5 as compared to Feb 2022 which is of concern.

Monthly Average PM 2.5 - Different Cities														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan-23	Feb-23
Korba	177	102	125	107	61	65	43	48	56	91	146	144	145	115
Delhi	191	124	95	70	59	45	43	40	51	150	224	214	266	156
Ranchi							90	48	46	78	77	89		-



The table and graph below show the Monthly Average PM 10 values in different cities. Except for a few months (Highlighted in Green) which were during the monsoon months, none of the cities met the Indian Standards. In comparison with the WHO ADQ standard, none even came close. Values for both Korba and Delhi have deteriorated as compared to Feb 2022.

Monthly Average PM 10 - Different Cities														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan-23	Feb-23
Korba	217	120	147	122	69	74	50	56	62	105	171	171	172	134
Delhi	224	140	106	77	64	48	45	43	56	170	261	251	317	178
Ranchi							92	52	52	91	87	104		-



Data on AQI categories – Under the NAAQS, AQI categories have been listed which lists the different levels of Air pollution. AQI Classification as per NAAQS -

0-50	51-100	101-200	201-300	301-400	>401
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The Table below shows the AQI Categories for All device's location wise since January 2022. The numbers are daily figures for individual devices which have been added up based on cities. It means that AQI in Korba was between 0-50 on 166 daily intervals as recorded by all devices installed in Korba. The data shows that in all locations more than 65% of the days, AQI has been above 100. Delhi and Korba recorded more than 38% of the intervals with AQI above 200.

Location wise Totals (Since January 2022)									
	0-50	50-100	100-200	200-300	300-400	>400	Grand Total	Percent AQI >100	Percent AQI >200
Korba	166	570	1208	809	533	179	3465	79%	44%
Delhi	380	763	921	563	434	256	3317	66%	38%
Ranchi	4	30	63	11	2	0	110	69%	12%

The Table below show City wise and month wise AQI categories wise information. The numbers are daily figures for individual devices which have been added up based on locations for each month. It means that AQI in Korba was between 50-100 on 12 daily intervals in January 2022 as recorded by all devices installed in Korba. The data shows the severe AQI months for both Korba and Delhi. Atmospheric conditions play a vital role in Air Pollution hence, AQI is Satisfactory in the summer and monsoon month when dispersion of pollutants is high. Weather conditions along with emission sources should be carefully considered and emissions controlled to ensure AQI remains below 100 throughout the year. In Delhi, during Feb 2023, 96% of recorded AQI intervals were above 100 while the figure is 88% for Korba. In fact, in Delhi, AQI was above 200 for 81% of the recorded intervals showing the extent of bad air quality. The corresponding figure in February 22 for Delhi was 62% which shows the deterioration in air quality.

		0-50	50-100	100-200	200-300	300-400	>400	Grand Total	Percent >100	Percent >200
Korba	Jan	0	12	36	48	31	6	133	91%	64%
	Feb	0	22	118	102	19	4	265	92%	47%
	Mar	0	28	99	56	29	16	228	88%	44%
	Apr	2	13	72	55	27	6	175	91%	50%
	May	4	70	101	9	0	0	184	60%	5%
	June	3	68	113	21	0	0	205	65%	10%
	July	50	74	46	5	0	0	175	29%	3%
	Aug	58	61	52	13	1	0	185	36%	8%
	Sep	19	68	35	2	0	0	124	30%	2%
	Oct	25	63	127	72	44	13	344	74%	38%
	Nov	3	23	64	115	141	40	386	93%	77%
	Dec	0	21	99	112	90	47	369	94%	67%
	Jan-23	0	9	97	117	113	27	363	98%	71%
	Feb-23	2	38	149	82	38	20	329	88%	43%

Delhi	Jan	0	2	20	88	101	81	292	99%	92%
	Feb	15	32	74	96	85	14	316	85%	62%
	Mar	2	49	172	145	27	0	395	87%	44%
	Apr	10	85	219	59	0	0	373	75%	16%
	May	44	119	187	12	0	0	362	55%	3%
	June	152	134	63	9	3	1	362	21%	4%
	July	76	192	71	5	0	0	344	22%	1%
	Aug	47	83	29	0	0	0	159	18%	0%
	Sep	24	50	38	7	0	0	119	38%	6%
	Oct	10	13	16	31	24	21	115	80%	66%
	Nov	0	0	5	26	57	32	120	100%	96%
	Dec	0	0	7	20	58	39	124	100%	94%
	Jan-23	0	0	3	21	44	56	124	100%	98%
	Feb-23	0	4	17	44	35	12	112	96%	81%

The Table below show Device wise AQI categories wise information. The numbers are daily figures for individual devices which have been added up till date. It means that AQI measured by device number ending with 66644 was between 50-100 on 30 daily intervals.

Device Wise Totals (Selected Devices) – Since January 2022									
	0-50	50-100	100-200	200-300	300-400	>400	Grand Total	Percent >100	Percent >200
861480034766644	12	30	64	37	57	33	233	81.97%	54.51%
861480034786105	17	49	140	109	74	11	400	83.50%	48.50%
861480034775850	36	110	135	84	31	1	397	63.22%	29.22%
861480034777765	4	11	41	15	5	2	78	80.77%	28.21%
861480034765562	38	91	137	57	22	0	345	62.61%	22.90%
861480034757130	23	69	130	33	6	2	263	65.02%	15.59%
862649042673930	1	46	114	73	26	8	268	82.46%	39.93%
861480034765406	0	12	126	117	45	16	316	96.20%	56.33%
861480034774176	6	44	86	64	51	3	254	80.31%	46.46%
862649042685215	23	78	79	12	3	2	197	48.73%	8.63%
861480034766461	21	79	90	87	77	69	423	76.36%	55.08%
861480034784522	42	80	99	60	53	35	369	66.94%	40.11%
862649043466961	46	77	105	66	73	45	412	70.15%	44.66%
861480034785552	40	84	93	72	76	31	396	68.69%	45.20%

Section 2 –Information and Analysis for February 2023

Location wise Information				
Location	Avg PM 2.5	Avg PM 10	Avg AQI	Max AQI
Korba	115	134	200	1984
Delhi	156	178	279	963
Ranchi	-	-	-	-

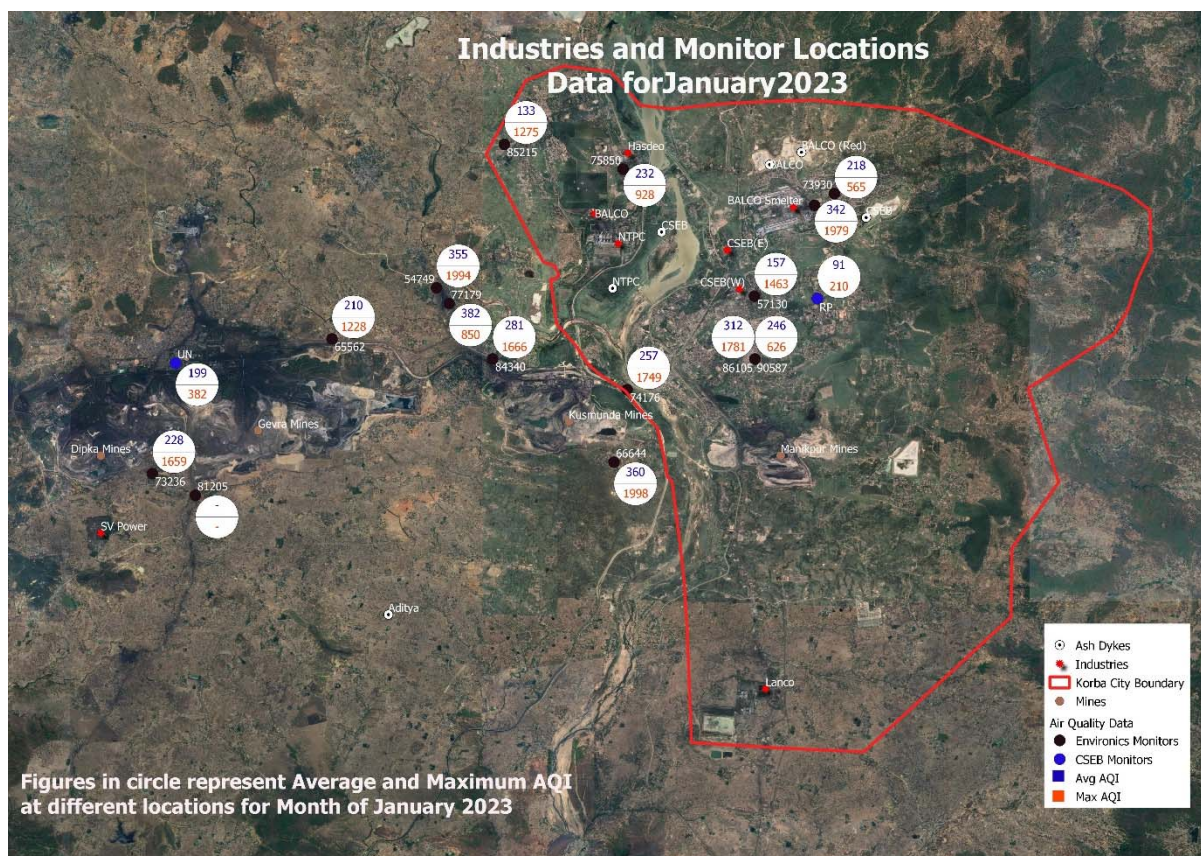
Table above shows the city wise Average PM 2.5, PM 10, AQI and Max AQI for February 2023. During this period Average AQI is highest in Delhi although the Max AQI is recorded highest in Korba and has been recorded just below 2000. Although such high numbers have been recorded only for a few intervals but getting such high number for AQI is a matter of grave concern. In Delhi also, the Max AQI recorded has almost reached 1000 which is a matter of concern and immediate action.

Data for individual devices placed at Korba can be seen in below table. Out of 13 devices which worked in Korba in this period 11 devices recorded maximum AQI greater than 1000. Average Monthly AQI is above 100 at all locations. Device placed at Surakachar chowk near the underground Mines recorded the highest Average AQI at 404. 1 device have recorded Average AQI above 300 and another 4 above 200

Location wise Avg and Max AQI for devices placed at Korba			
Device Number	Location	Avg	Max
861480034766644	Village Pali	-	-
861480034786105	RSS nagar	217	1480
861480034775850	Child Home Darri	141	998
861480034777765	Sirki	303	1875
861480034765562	Gevra Mines Rehabilitated Area	131	1473
861480034757130	Korba City, Patharipara	137	1283
861480034765406	RSS Nagar	160	1368
861480034765406	Vijaynagar. Gevra Rehab Colony	236	1980
861480034774176	Old Age Home, Near Sarvmangla Mandir	188	1464
862649042685215	NTPC Jamnipalli Housing Colony	-	-
861480034781205	sarai singar chowk	-	-
861480034777179	Surakachar chowk (underground Mines)	404	1180
861480034784340	Kanha Auto repairs, Station road	202	1369
861480034773236	Aryan Public School, Hardi Bazaar	145	1940
862649042690587	Near BALCO Power Plant	131	449
861480034754749	Gud Deva (Coal Siding)	259	1984

The map image below shows the locations of the devices installed in Korba along with the locations of major coal mines, Thermal power plants and ash dykes. The Korba municipal boundary is marked in Red colour. The numbers in the map show the Average and Max AQI for each location along with the device number. Two monitors have been installed by CSEB at Ram Pur and Urja Nagar. Average Monthly AQI for February 2023 recorded by these devices is as below. Devices placed by Environics have been consistently recording higher AQI values. It may be because of placement of devices around Pollution sources which show such stark differences

	Ram Pur	Urja Nagar	ET Devices
February 2023	75	137	200



Map - Install and industrial locations at Korba. Numbers reflect Average and Max AQI of the location for February 2023. Map also shows the location of major coal mines, Thermal Power Plants and Ash Dykes. Korba Municipal Boundary is marked in Red colour

Daily average AQI for Different Cities for February 2023																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Korba	149	145	168	190	198	198	189	149	159	194	194	116	206	154	186	241
Delhi	261	273	289	299	250	326	264	173	247	248	350	114	79	102	228	370
Ranchi	-	-	-	-	-	-	-	-	-	-	-	-				

	17	18	19	20	21	22	23	24	25	26	27	28
Korba	319	344	347	321	304	316	277	272	259	269	300	319
Delhi	456	443	409	354	343	371	264	214	316	333	315	315
Ranchi												

The Tables above show Daily Average AQI between different cities for February 2023. Cells where AQI >100 have been highlighted. Other than on Feb 13 in Delhi, Air Quality in both Korba and Delhi has been above 100 for the entire month. AQI in Delhi was the lowest at 79 and went up to 456. AQI was above 400 for 3 days in the month. Even in Korba, AQI has been above 100 for the entire month. Both Korba and Delhi are fighting for the top spot in bad air quality with Delhi edging out Korba. This information in terms of AQI categories can be seen in the table below

City	0-50	51-100	101-200	201-300	301-400	>401	Not Work	Total
Korba	0	0	14	7	7	0	0	28

Delhi	0	1	3	11	10	3	0	28
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Table - City wise categories for February 2023

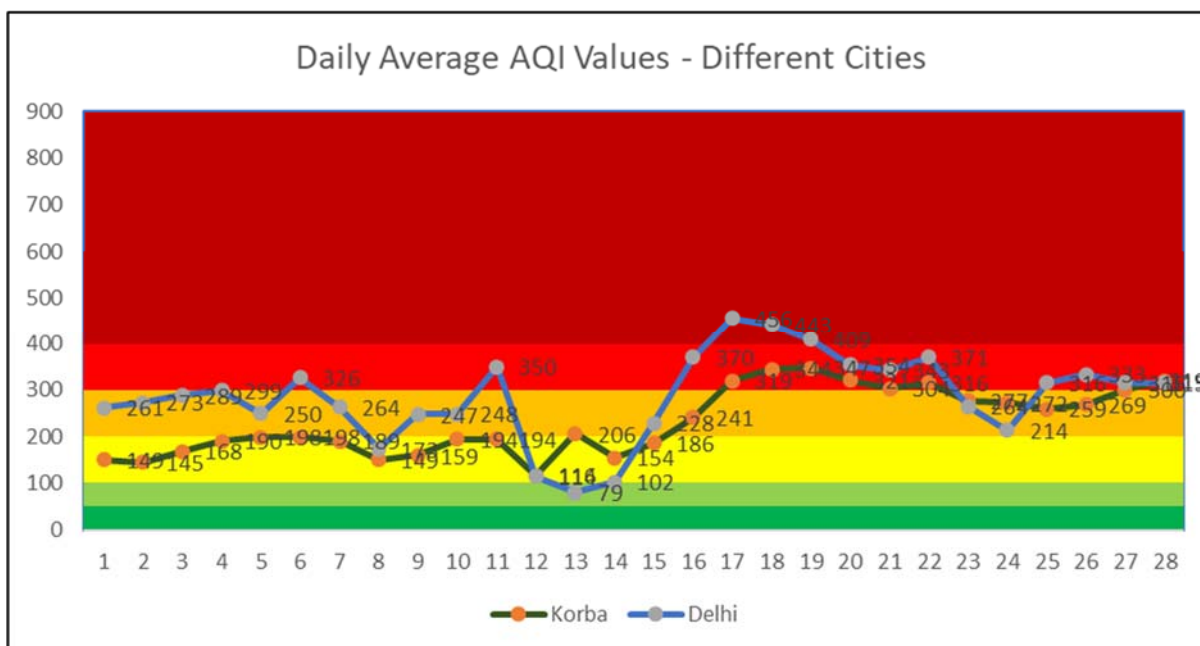


Table below shows the Daily Average AQI for individual devices placed at Korba. Figures above 250 have been marked in Red. The data reads like a sorry state of affairs.

Average AQI, Device Wise at Korba for February 2023																
Date	666 44	861 05	758 50	777 65	655 62	571 30	739 30	654 06	741 76	852 15	812 05	771 79	843 40	732 36	905 87	547 49
1	-	178	81		98	88	104	138	88	-	-	390	278	73	117	173
2	-	137	81		89	81	96	160	94	-	-	416	205	96		187
3	-	148	94		110	117	165	244	142	-	-	415	170	173	113	239
4	-	184	109		120	147	250	310	154	-	-	414	183	148	185	210
5	-	234	123		129	118	253	327	204	-	-	420	168	122	146	269
6	-	312	138		108	141	141	269	186	-	-	401	230	141	106	342
7	-	230	181		86	142	125	222	190	-	-	391	211	127	129	308
8	-	205	64		84	111	144	187	129	-	-	393	164	62	99	166
9	-	170	89		113	107	188	193	148	-	-	422	156	63	145	173
10	-	243	136		121	145	116	271	208	-	-	421	237	125	127	269
11	-	188	128		147	133	96	208	190	-	-	410	233	199	115	285
12	-	74	46		54	59	48	144	91	-	-	404	98	85		110
13	-	153	96		113	105	82	194	147	-	-	414	159	111		177
14	-	105	54		67	88	58	134	133	-	-	429	127	81		171
15	-	117	79		70	97	105	187	161	-	-	414	170	95		148
16	-	189	137		110	100	172	207	178	-	-	386	207	147		203
17	-	299	258		222	186	260	336	287	-	-	385	259	154		347
18	-	353	275	452	203	228	296	340	301	-	-	383	247	314		386

19	-	398	306	408	270	246	324	363	305	-	-	384	328	247		405
20	-	289	207	338	200	192	239	324	287	-	-	394	230	194		333
21	-	259	155	290	118	123	164	257	197	-	-	395	229	197		304
22	-	248	157	308	175	236	174	285	242	-	-	402	246	266		324
23	-	247	101	269	154	147	168	205	187	-	-	386	145	221		231
24	-	218	141	246	101	120	154	154	201	-	-	425	208	96		282
25	-	215	132	246	116	116	128	205	185	-	-	392	183	108		247
26	-	214	138	240	120	134	111	171	158	-	-	408	186	112		282
27	-	264	144	298	129	164	139	233	143	-	-	403	196	140		275
28	-	265	208	337	192	198	184	322	247	-	-	404	229	112		390

Table – Daily Average AQI at Korba for February 2023 (blank implies device did not work)

Table - AQI Category wise information for individual devices (**February 2023**)

AQI categories Wise Information for Different Devices - February 2023										
Device Number	Location	0-50	50-100	100-200	200-300	300-400	>400	Grand Total	Percent >100	Percent >200
861480034766644	Korba								-	-
861480034786105	Korba		1	10	14	3		28	96%	61%
861480034775850	Korba	1	8	14	4	1		28	68%	18%
861480034777765	Korba				6	3	2	11	-	-
861480034765562	Korba		7	17	4			28	75%	14%
861480034757130	Korba		5	20	3			28	82%	11%
862649042673930	Korba	1	4	17	5	1		28	82%	21%
861480034765406	Korba			10	11	7		28	100%	64%
861480034774176	Korba		3	16	7	2		28	89%	32%
862649042685215	Korba	-	-	-	-	-	-	-	-	-
861480034781205	Korba	-	-	-	-	-	-	-	-	-
861480034777179	Korba					11	17	28	100%	100%
861480034784340	Korba		1	12	14	1		28	96%	54%
861480034773236	Korba		8	16	3	1		28	71%	14%
862649042690587	Korba		1	9				10	90%	0%
861480034754749	Korba			8	11	8	1	28	100%	71%
861480034766461	Delhi			3	8	13	4	28	100%	89%
861480034784522	Delhi		1	4	14	6	3	28	96%	82%
862649043466961	Delhi		1	6	9	10	2	28	96%	75%
861480034785552	Delhi		2	4	13	6	3	28	93%	79%

Time Interval wise Average AQI City wise and Device wise for February 2023 can be seen in table below

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to midnight	Grand Total
Delhi	323	321	197	276	280
66461	354	352	193	327	307

66961	298	302	227	280	278
84522	343	316	159	269	272
85552	297	314	209	230	262
Korba	188	208	120	298	206
54749	238	250	144	397	259
57130	88	173	79	196	137
65406	189	192	100	458	236
65562	101	116	76	222	131
73236	146	142	71	200	145
73930	205	154	75	201	160
74176	172	228	88	246	188
75850	123	150	65	216	141
77179	400	405	386	423	404
77765	268	310	165	464	303
84340	181	199	78	342	202
86105	195	248	111	311	217
90587	117	149	67	194	131

Time Interval Wise Maximum AQI at different Cities and devices for February 2023

Row Labels	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to midnight
Delhi	723	963	636	938
66461	635	883	428	938
66961	603	963	616	619
84522	723	809	636	793
85552	498	537	510	512
Korba	1984	1913	1923	1980
54749	1984	1913	1923	1915
57130	335	1238	1283	821
65406	1155	1219	1648	1980
65562	675	1135	1473	417
73236	758	1393	1621	1940
73930	1368	614	328	951
74176	655	1400	1464	713
75850	870	998	512	565
77179	586	1180	668	710
77765	544	1875	628	1609
84340	623	597	389	1369
86105	1144	1018	1095	1480
90587	329	449	345	432

Annexure 1 – Device Locations

Device Name / Location	Current City	City
861480034766644	Village Pali	Korba
861480034786105	RSS nagar	Korba
861480034775850	Child Home Darri	Korba
861480034777765	Sirki Village	Korba
861480034765562	Gevra Mines Rehabilitated Area	Korba
861480034757130	Korba City, Patharipara	Korba
862649042673930	Balco Housing Board	Korba
861480034765406	Dipka Mines Main Road	Korba
861480034774176	Old Age Home, Near Sarvmangla Mandir	Korba
862649042685215	NTPC Jamnipalli Housing Colony	Korba
861480034781205	sarai singar chowk	Korba
861480034777179	Surakachar chowk (underground Mines)	Korba
861480034784340	Station road	Korba
861480034773236	Hardi Bazaar	Korba
862649042690587	Near BALCO Main Plant	Korba
861480034754749	Gud Deva	Korba
861480034766461	Delhi	Delhi
861480034784522	Delhi	Delhi
862649043466961	Delhi	Delhi
861480034785552	Delhi	Delhi
861480034766453	Ranchi	Ranchi

Some Graphs and Data for Devices Placed at Korba

- 861480034766644 - Greenvoice Office dadar. Relocated to Village Pali in October

Table - Monthly Average and Max AQI and HI

	Avg AQI	Avg HI	Max AQI	Max HI
Jan	426	19	1994	22
Feb	258	23	1326	34
May	128	40	1150	54
Jun	147	39	1033	54
Jul	85	36	560	50
Aug	102	34	558	53
Sep	163	35	394	53
Oct	312	30	6113	50
Nov	384	23	2001	49
Dec	349	22	1910	47
Jan 2023	360	20	1998	28

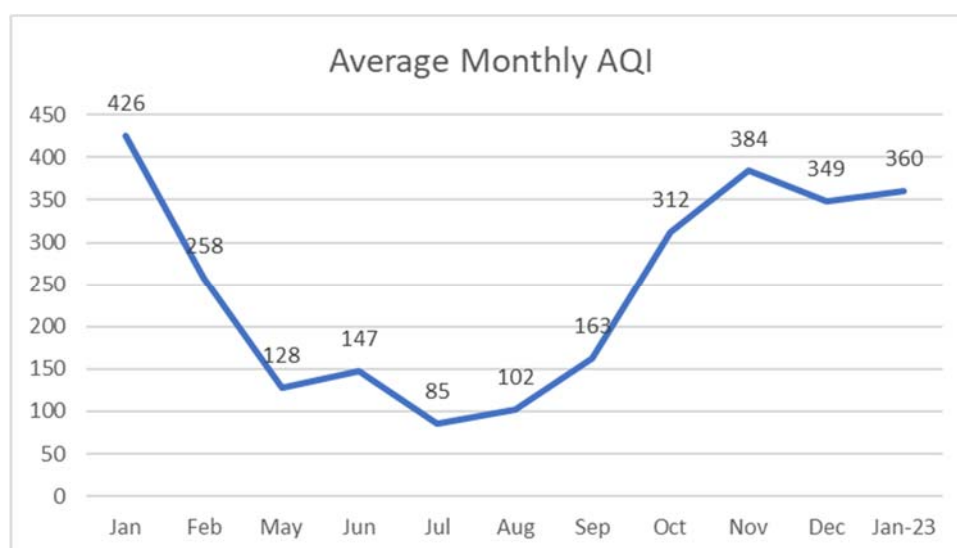


Table - AQI Categories Month Wise

	0-50	50-100	100-200	200-300	300-400	>400	Total
Jan				2	1	1	4
Feb			1	15	5		21
May		7	17				24
Jun		4	24	2			30
Jul	9	12	9				30
Aug	3	7	6	1			17

Sep			2				2
Oct			3	5	13	2	23
Nov					19	11	30
Dec			2	6	13	10	31
Jan-23				6	6	9	21

Table - Max AQI Time Intervals Wise (15 Minute Interval)

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Jan	391		1994	1205
Feb	978	1221	514	1326
May	1003	507	1150	836
Jun	381	677	514	1033
Jul	409	413	560	423
Aug	412	451	369	558
Sep	48	277	327	394
Oct	889	6113	6113	1675
Nov	1538	2001	1988	1726
Dec	1174	1895	1910	1839
Jan-23	983	1954	1878	1998

Table - Avg AQI Time Interval Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Jan	237		340	474
Feb	234	318	121	364
May	132	145	90	148
Jun	141	175	105	167
Jul	62	88	85	103
Aug	74	117	87	131
Sep	26	132	194	187
Oct	241	366	295	343
Nov	338	434	342	424
Dec	308	401	287	398
Jan-23	296	424	294	425

Note - The device did not work between 21 Feb to 6 May 2022. Device did not work in Feb 2023

- 861480034786105 - RSS Nagar

Table - Monthly Average and Max AQI and HI

	Avg AQI	Avg HI	Max AQI	Max HI
Jan	298	18	1898	29
Feb	205	22	939	36
Mar	273	29	1225	44
Apr	238	36	1190	52
May	125	39	1205	58
Jun	134	39	1278	58
Jul	81	36	1010	62
Aug	102	34	963	58
Sep	119	34	730	60
Oct	179	29	1125	49
Nov	327	23	1115	38
Dec	317	21	1315	36
Jan-23	312	22	1781	40
Feb-23	217	25	1480	53

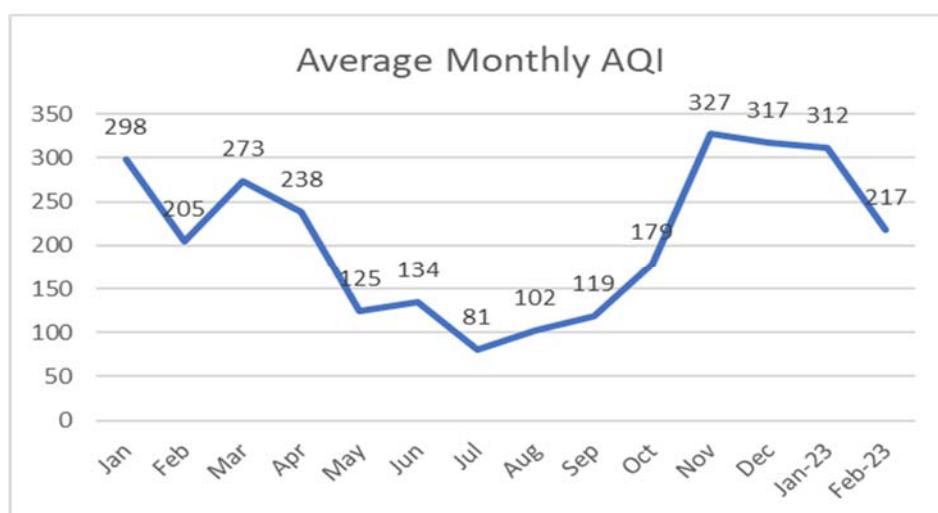


Table - AQI Categories Month Wise

	0-50	50-100	100-200	200-300	300-400	>400	Total
Jan				11	9		20
Feb			14	12	2		28
Mar			12	7	8	4	31
Apr			6	18	5	1	30
May		6	25				31
Jun		3	26	1			30
Jul	9	14	7				30
Aug	5	11	11	2			29
Sep	2	7	19	2			30
Oct	1	7	8	15			31
Nov				7	22	1	30
Dec			1	6	12	2	21

Jan-23			1	14	13	3	31
Feb-23		1	10	14	3		28

Table - Max AQI Time Intervals Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Jan	554	758	1898	1593
Feb	562	918	582	939
Mar	1060	1068	1225	1048
Apr	845	1103	1190	1118
May	628	1040	1030	1205
Jun	625	1118	1278	970
Jul	709	635	1010	505
Aug	359	963	394	629
Sep	330	578	377	730
Oct	494	705	363	1125
Nov	765	853	1115	1115
Dec	1203	1130	1180	1315
Jan-23	1033	844	840	1781
Feb-23	1144	1018	1095	1480

Table - Avg AQI Time Interval Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Jan	258	344	209	383
Feb	170	265	109	278
Mar	287	328	141	337
Apr	232	288	134	298
May	105	156	97	142
Jun	114	173	100	151
Jul	58	86	75	102
Aug	82	103	74	148
Sep	94	140	84	156
Oct	158	188	123	247
Nov	311	355	238	404
Dec	306	362	209	389
Jan-23	313	348	219	374
Feb-23	195	248	111	311

- 861480034775850 - Child Home Darri

	Avg AQI	Avg HI	Max AQI	Max HI
Jan	293	19	694	28
Feb	175	23	1574	41
Mar	194	30	723	49
Apr	159	35	586	55
May	76	39	545	58
Jun	88	38	1225	59
Jul	65	34	466	54
Aug	77	33	726	57
Sep	80	33	547	54
Oct	134	30	1511	53
Nov	252	24	1275	43
Dec	219	22	985	41
Jan-23	232	22	928	43
Feb-23	141	25	998	45

Table - Monthly Average and Max AQI and HI

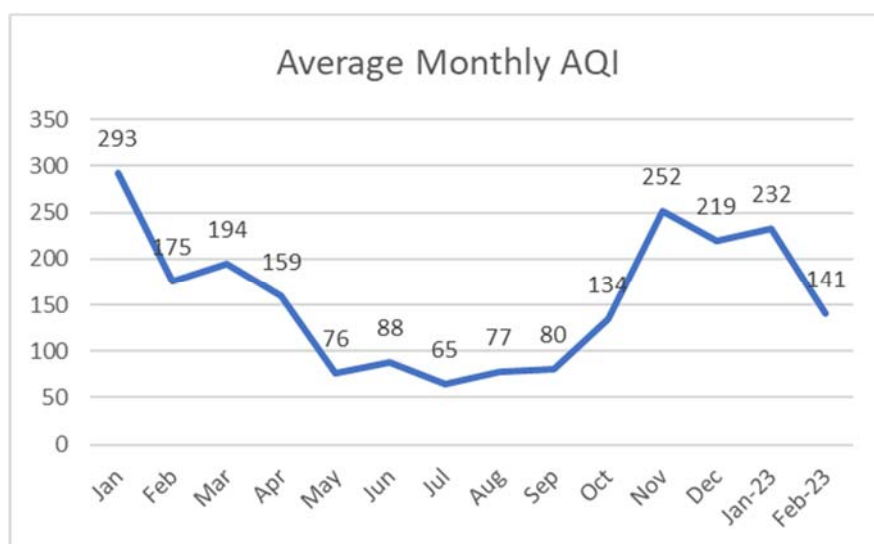


Table - AQI Categories Month Wise

	0-50	50-100	100-200	200-300	300-400	>400	Total
Jan		1		8	4	1	14
Feb		1	18	8	1		28
Mar		5	12	9	5		31
Apr		2	22	4	2		30
May	3	21	3				27
Jun	2	17	11				30
Jul	12	13	3				28
Aug	12	11	8				31
Sep	5	18	4				27
Oct	1	9	18	3			31

Nov			4	22	4		30
Dec		4	5	17	5		31
Jan-23			13	9	9		31
Feb-23	1	8	14	4	1		28

Table - Max AQI Time Intervals Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Jan	411	562	501	694
Feb	426	876	368	1574
Mar	582	723	418	628
Apr	469	586	333	583
May	367	417	436	545
Jun	433	1225	297	963
Jul	378	369	305	466
Aug	381	445	306	726
Sep	311	514	381	547
Oct	423	420	849	1511
Nov	393	675	751	1275
Dec	607	602	728	985
Jan-23	432	789	768	928
Feb-23	870	998	512	565

Table - Avg AQI Time Interval Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Jan	272	327	224	346
Feb	148	201	87	263
Mar	195	222	102	259
Apr	172	195	73	198
May	68	91	50	95
Jun	73	113	59	107
Jul	38	71	57	87
Aug	57	75	62	116
Sep	57	87	71	106
Oct	108	119	98	207
Nov	257	259	163	332
Dec	229	227	128	293
Jan-23	225	249	152	301
Feb-23	123	150	65	216

- 861480034777765- Sikri Village (Relocated to sikri in Feb 2023)

Table - Monthly Average and Max AQI and HI

	Avg AQI	Avg HI	Max AQI	Max HI
Jan	194	18	1543	28
Feb	157	22	1371	47
Mar	137	28	1281	43
Jul	43	42	103	52
Aug	91	38	694	51
Feb-23	303	26	1875	37

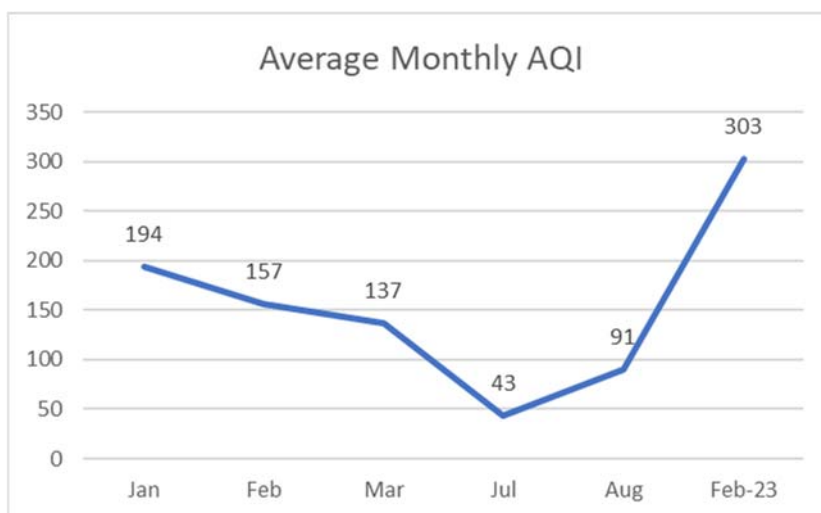


Table - AQI Categories Month Wise

	0-50	50-100	100-200	200-300	300-400	>400	Total
Jan			7	3	1		11
Feb		3	16	5			24
Mar		4	14	1	1		20
Jul	1						1
Aug	3	4	4				11
Feb-23				6	3	2	11

Table - Max AQI Time Intervals Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Jan	464	700	1543	1501
Feb	458	1179	1145	1371
Mar	405	884	392	1281
Jul	67	68	103	97
Aug	335	408	499	694
Feb-23	544	1875	628	1609

Table - Avg AQI Time Interval Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Jan	164	209	100	306
Feb	133	174	81	234
Mar	122	126	76	220
Jul	36	41	40	59
Aug	61	101	101	102
Feb-23	268	310	165	464

- 861480034765562 - Gevra Mines Rehabilitated Area

Table - Monthly Average and Max AQI and HI

	Avg AQI	Avg HI	Max AQI	Max HI
Jan	350	20	1168	27
Feb	185	23	1640	39
Mar	212	29	1515	48
Apr	238	35	1040	52
May	98	38	1300	56
Jun	109	38	1156	52
Jul	66	36	939	56
Aug	69	35	633	49
Sep	74	36	1110	55
Oct	99	31	883	54
Nov	185	25	1220	38
Dec	230	23	1468	31
Jan-23	210	21	1228	28
Feb-23	131	25	1473	37

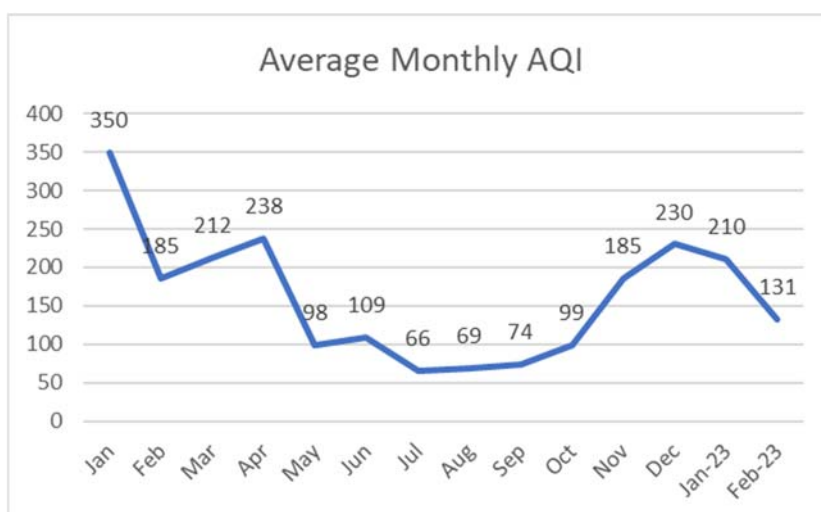


Table - AQI Categories Month Wise

	0-50	50-100	100-200	200-300	300-400	>400	Total
Jan					1		1
Feb			17	9	1		27
Mar		1	14	10	6		31
Apr			7	13	5		25
May	1	14	13				28
Jun		15	14	1			30
Jul	11	17	3				31
Aug	15	11	5				31
Sep	6	15	3				24
Oct	5	10	16				31
Nov			11	7			18

Dec			8	8	5		21
Jan-23		1	9	5	4		19
Feb-23		7	17	4			28

Table - Max AQI Time Intervals Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Jan			267	1168
Feb	750	1448	1248	1640
Mar	550	1515	1415	1064
Apr	1040	546	463	1020
May	330	970	798	1300
Jun	1114	598	358	1156
Jul	522	939	619	673
Aug	277	633	409	485
Sep	227	450	1110	728
Oct	883	706	585	443
Nov	362	589	1220	414
Dec	428	1468	1164	993
Jan-23	1015	568	993	1228
Feb-23	675	1135	1473	417

Table - Avg AQI Time Interval Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Jan			81	519
Feb	179	194	99	271
Mar	214	231	126	278
Apr	265	284	140	249
May	93	111	69	120
Jun	110	125	70	131
Jul	46	85	62	72
Aug	51	79	65	84
Sep	50	87	80	82
Oct	75	100	83	147
Nov	150	187	155	257
Dec	210	242	159	313
Jan-23	200	221	158	275
Feb-23	101	116	76	222

- 861480034757130 - Korba City

Table - Monthly Average and Max AQI and HI

	Avg AQI	Avg HI	Max AQI	Max HI
Jan	393	19	1984	24
Feb	252	23	1243	46
Mar	275	25	413	31
Apr	165	37	1305	50
May	119	40	1210	59
Jun	132	39	445	53
Jul	96	36	1965	53
Aug	58	34	1455	44
Sep	71	35	1278	45
Oct	85	32	3158	44
Nov	158	22	885	41
Dec	150	22	1260	37
Jan-23	157	23	1463	39
Feb-23	137	24	1283	42

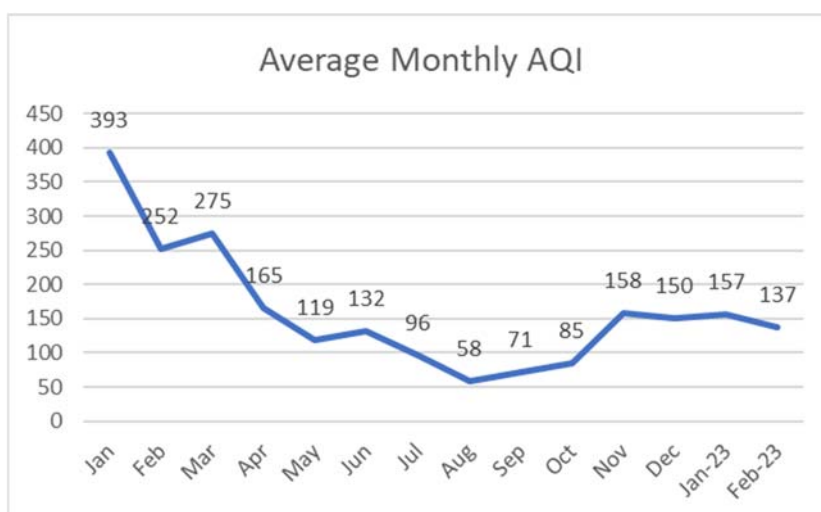


Table - AQI Categories Month Wise

	0-50	50-100	100-200	200-300	300-400	>400	Total
Jan			2	1	3	1	7
Feb		1	3	21	3		28
Mar			1			1	2
Apr			5				5
May		7	17				24
Jun		3	12	1			16
Jul	3	6	3	1			13
Aug	12	11	2				25
Sep	5	22	3				30
Oct	3	10	7				20
Nov		1	14	1			16

Dec		3	23	2			28
Jan-23			18	3			21
Feb-23		5	20	3			28

Table - Max AQI Time Intervals Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Jan	367	387	1984	1369
Feb	368	923	1243	1011
Mar	0	137		413
Apr	598	955	328	1305
May	933	1210	1175	389
Jun	207	445	429	435
Jul	808	1233	1965	385
Aug	948	468	1348	1455
Sep	1100	435	673	1278
Oct	609	3158	1303	1280
Nov	306	885	810	585
Dec	1260	1185	918	885
Jan	320	1463	1273	1048
Feb-23	335	1238	1283	821

Table - Avg AQI Time Interval Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Jan	282	364	334	445
Feb	209	328	127	340
Mar		137		413
Apr	117	244	87	212
May	97	134	104	140
Jun	93	159	112	162
Jul	52	95	128	114
Aug	40	49	56	82
Sep	43	76	64	100
Oct	51	103	72	114
Nov	107	209	100	215
Dec	114	194	102	189
Jan	100	198	109	213
Feb-23	88	173	79	196

- 862649042673930- Balco Housing Area

Table - Monthly Average and Max AQI and HI

	Avg AQI	Avg HI	Max AQI	Max HI
Jan	240	17	770	26
Feb	137	23	958	52
Mar	215	31	1059	62
Apr	181	38	703	70
May	86	44	335	76
Jun	86	42	306	77
Oct	73	44	123	53
Nov	221	20	1005	43
Dec	202	21	1418	44
Jan-23	218	21	565	46
Feb-23	160	23	1368	51

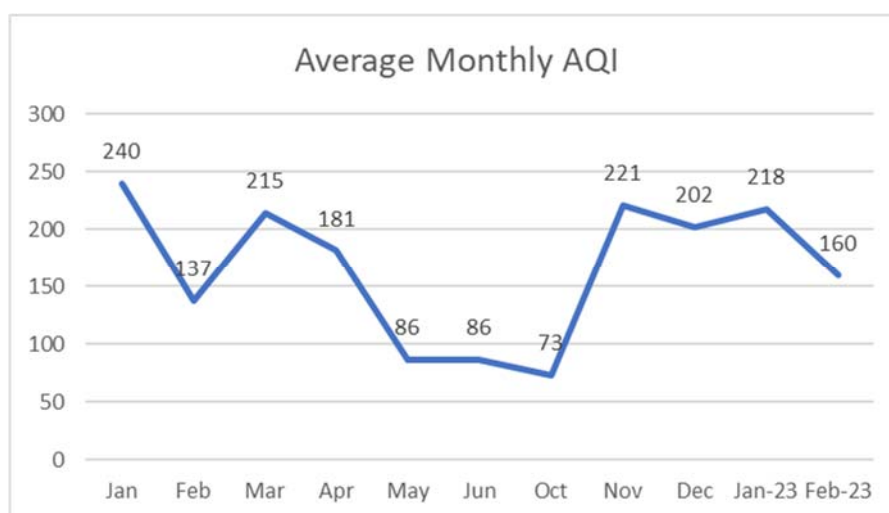


Table - AQI Categories Month Wise

	0-50	50-100	100-200	200-300	300-400	>400	Total
Jan			5	15	8	3	31
Feb		6	18	4			28
Mar		7	10	8	2	4	31
Apr		2	19	5	3	1	30
May		15	6				21
Jun		10	6				16
Oct		1					1
Nov			5	10	5		20
Dec		1	14	15	1		31
Jan-23			14	11	6		31
Feb-23	1	4	17	5	1		28

Table - Max AQI Time Intervals Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Jan	475	770	352	701
Feb	364	836	277	958
Mar	1059	1019	394	824
Apr	703	559	336	519
May	240	328	240	335
Jun	300	306	233	302
Oct		123		
Nov	451	471	925	1005
Dec	477	534	843	1418
Jan	465	427	420	565
Feb-23	1368	614	328	951

Table - Avg AQI Time Interval Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Jan	215	292	128	307
Feb	118	169	76	186
Mar	252	248	117	242
Apr	190	229	109	197
May	85	85	77	96
Jun	94	112	59	81
Oct		73		
Nov	177	222	171	312
Dec	178	202	136	294
Jan	223	213	158	276
Feb-23	205	154	75	201

- 861480034765406 - Kusmunda Mines Area

Table - Monthly Average and Max AQI and HI

	Avg AQI	Avg HI	Max AQI	Max HI
Jan	221	18	1555	25
Feb	258	25	1683	52
Mar	260	32	1774	60
Apr	319	37	1921	49
May	179	40	1996	61
Jun	200	40	1969	55
Jul	157	37	1984	50
Aug	168	36	1955	53
Sep	184	41	452	44
Oct	176	30	8675	42
Nov	279	24	1948	31
Jan-23	342	23	1979	33
Feb-23	236	24	1980	36

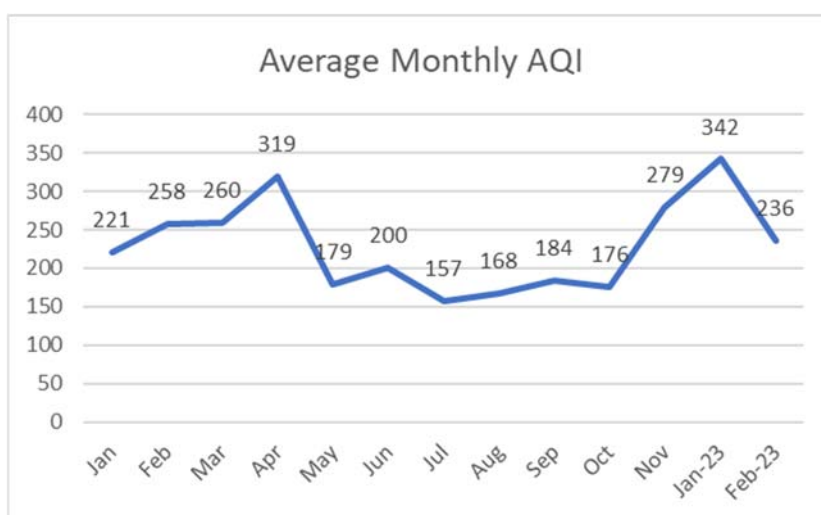


Table - AQI Categories Month Wise

	0-50	50-100	100-200	200-300	300-400	>400	Total
Jan		1	8	7	4		20
Feb			5	17	4	1	27
Mar			10	9	2	5	26
Apr				14	12	4	30
May			20	9			29
Jun			14	16			30
Jul		6	21	4			31
Aug		4	16	10	1		31
Sep			2				2
Oct		1	17	2	1		21
Nov			2	12	9	1	24
Jan_23			1	6	5	5	17
Feb-23			10	11	7		28

Table - Max AQI Time Intervals Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Jan	434	497	580	1555
Feb	590	1428	1683	1646
Mar	660	1371	1234	1774
Apr	936	1921	1816	1725
May	508	1730	1996	1013
Jun	681	1969	1853	1169
Jul	492	1984	1786	1261
Aug	427	1955	1853	946
Sep	270	452	308	414
Oct	427	835	766	8675
Nov	457	720	1489	1948
Jan	881	1733	876	1979
Feb-23	1155	1219	1648	1980

Table - Avg AQI Time Interval Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Jan	181	234	119	342
Feb	170	283	159	421
Mar	183	304	174	383
Apr	265	402	245	367
May	116	249	169	182
Jun	117	291	210	183
Jul	65	241	179	139
Aug	83	219	200	169
Sep	103	241	164	292
Oct	99	159	101	340
Nov	201	276	210	445
Jan	294	383	212	478
Feb-23	189	192	100	458

Note- Device did not work in December 2022

- 861480034774176 - Old Age Home near Sarvmangla Mandir

Table - Monthly Avg and Max AQI and HI

	Avg AQI	Avg HI	Max AQI	Max HI
Feb	116	21	686	51
Mar	199	28	1043	52
Apr	165	34	666	51
May	73	37	438	50
Jul	35	39	318	44
Sep	93	31	367	41
Oct	176	31	1419	56
Nov	322	24	1138	46
Dec	280	23	1149	41
Jan_23	257	22	1749	43
Feb-23	188	25	1464	44

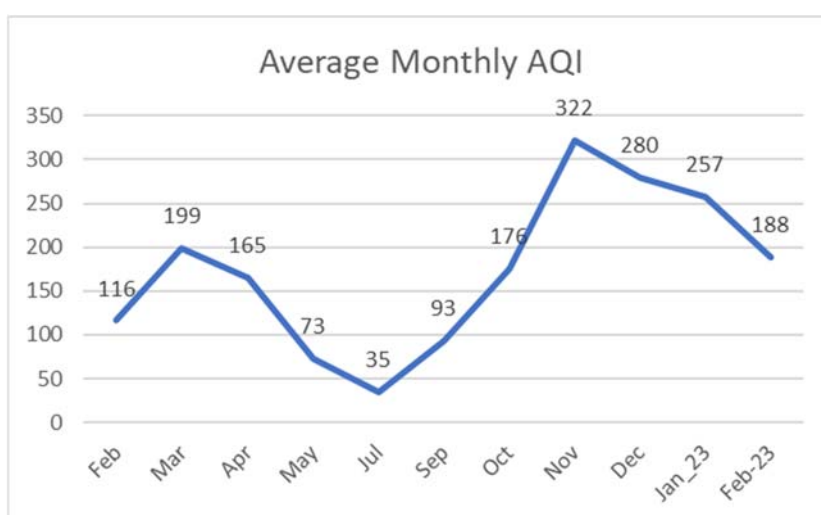


Table - AQI Categories Month Wise

	0-50	50-100	100-200	200-300	300-400	>400	Total
Feb		10	14	1			25
Mar		10	7	8	3	3	31
Apr		5	15	6	2		28
May	2	9	3				14
Jul	4	1					5
Sep		2	1				3
Oct		4	16	8			28
Nov				8	22		30
Dec			6	13	12		31
Jan_23			8	13	10		31
Feb-23		3	16	7	2		28

Table - Max AQI Time Intervals Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Feb	383	556	514	686
Mar	1043	939	385	856
Apr	666	592	329	437
May	263	438	273	280
Jul	17	95	43	318
Sep	283	367	342	338
Oct	626	1061	1419	550
Nov	1138	988	431	728
Dec	805	828	474	1149
Jan	504	924	1749	700
Feb-23	655	1400	1464	713

Table - Avg AQI Time Interval Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Feb	106	126	65	165
Mar	249	209	91	244
Apr	192	200	81	187
May	77	79	58	79
Jul	13	25	16	52
Sep	58	143	72	101
Oct	174	200	114	215
Nov	343	343	232	367
Dec	302	307	171	336
Jan	262	287	169	303
Feb-23	172	228	88	246

- 862649042685215 - NTPC Jamnipalli

Table - Monthly Avg and Max AQI and HI

	Avg AQI	Avg HI	Max AQI	Max HI
Feb	152	22	1369	33
Mar	193	28	1343	43
Apr	179	36	764	51
Jun	84	37	537	56
Jul	72	34	338	51
Aug	37	34	365	50
Sep	66	34	383	52
Oct	61	29	496	46
Nov	99	21	568	32
Dec	119	21	981	29
Jan	133	18	1275	28

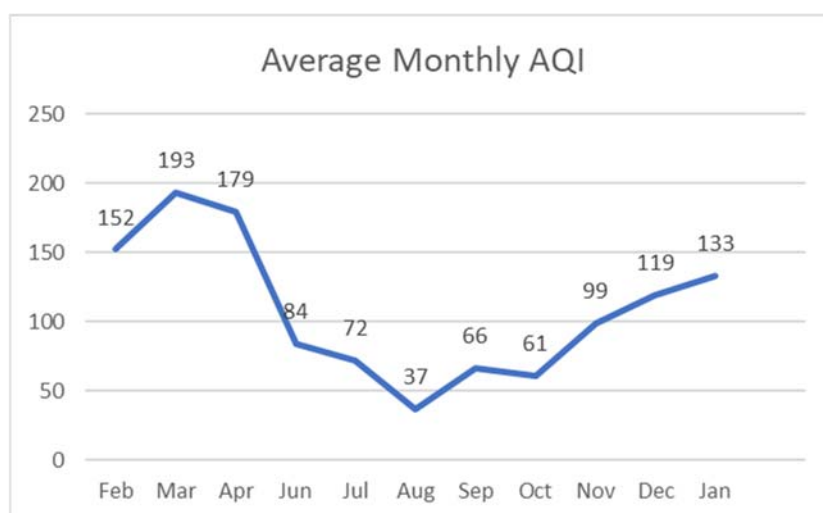


Table - AQI Categories Month Wise

	0-50	50-100	100-200	200-300	300-400	>400	Total
Feb		1	19	3			23
Mar		6	11	6	3	2	28
Apr			10	1			11
Jun	1	16	6				23
Jul	1	5					6
Aug	8	2					10
Sep	1	4	1				6
Oct	12	12	1				25
Nov		16	8				24
Dec		9	14				23
Jan		7	9	2			18

Table - Max AQI Time Intervals Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Feb	351	619	313	1369

Mar	718	861	346	1343
Apr	385	443	431	764
Jun	458	365	336	537
Jul	150	287	338	325
Aug	167	365	163	314
Sep	200	383	157	341
Oct	325	429	335	496
Nov	326	360	442	568
Dec	353	418	380	981
Jan	372	1275	489	591

Table - Avg AQI Time Interval Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Feb	139	176	83	207
Mar	186	231	111	243
Apr	187	238	86	207
Jun	78	108	61	90
Jul	46	70	77	100
Aug	29	41	35	42
Sep	65	56	47	96
Oct	50	61	54	76
Nov	86	101	83	121
Dec	99	141	91	141
Jan	115	154	109	151

- 861480034781205 sarai singar chowk – Installed in October 2022

Table – Monthly Average and Max AQI and HI

	Avg AQI	Avg HI	Max AQI	Max HI
Oct	236	27	2491	44
Nov	267	23	821	39
Dec	160	21	465	29

Table – AQI Categories Month Wise

	0-50	50-100	100-200	200-300	300-400	>400	Total
Oct		1	4	6	10	1	22
Nov			8	6	16		30
Dec			5	1			6

Table – Max AQI Time Intervals Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Oct	517	571	623	2491
Nov	656	821	768	813
Dec	353	405	465	448

Table – Avg AQI Time Interval Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Oct	220	225	174	303
Nov	263	273	224	311
Dec	146	173	125	199

Note – Device did not work in January and February 2023

- 861480034777179 Surakachar chowk (underground Mines) – Installed in October 2022

Table - Monthly Avg and Max AQI and HI

	Avg AQI	Avg HI	Max AQI	Max HI
Oct	370	29	1371	45
Nov	428	22	1620	36
Dec	443	21	1168	30
Jan	382	22	850	32
Feb-23	404	23	1180	35

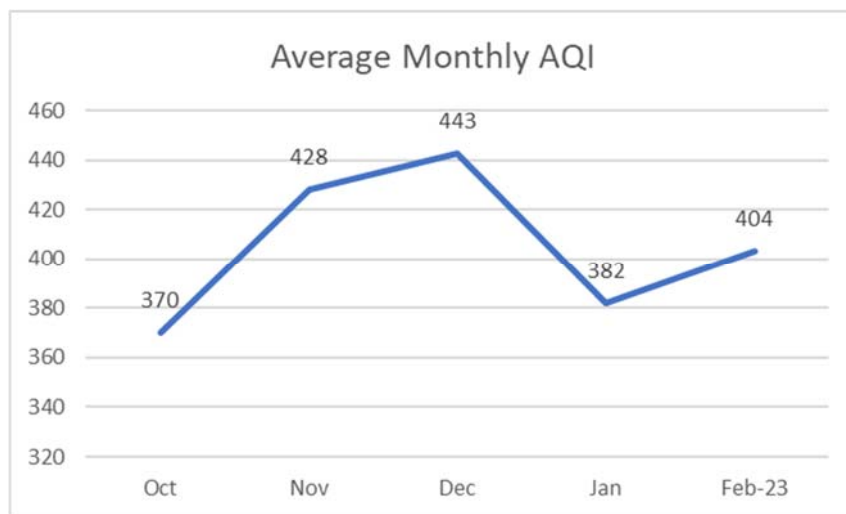


Table - AQI Categories Month Wise

	0-50	50-100	100-200	200-300	300-400	>400	Total
Oct			1	3	17	6	27
Nov					9	21	30
Dec					5	19	24
Jan					17		17
Feb-23					11	17	28

Table - Max AQI Time Intervals Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Oct	646	701	652	1371
Nov	804	1228	948	1620
Dec	585	826	916	1168
Jan	483	610	546	850
Feb-23	586	1180	668	710

Table - Avg AQI Time Interval Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Oct	332	355	342	439
Nov	383	425	459	459
Dec	436	438	395	487
Jan	368	384	361	412
Feb-23	400	405	386	423

- 861480034784340 Kanha Auto repairs, Station road – Installed in October 2022

Table - Monthly Avg and Max AQI and HI

	Avg AQI	Avg HI	Max AQI	Max HI
Oct	218	27	2295	46
Nov	331	21	1300	31
Dec	326	20	1948	29
Jan	281	19	1666	30
Feb-23	202	23	1369	32

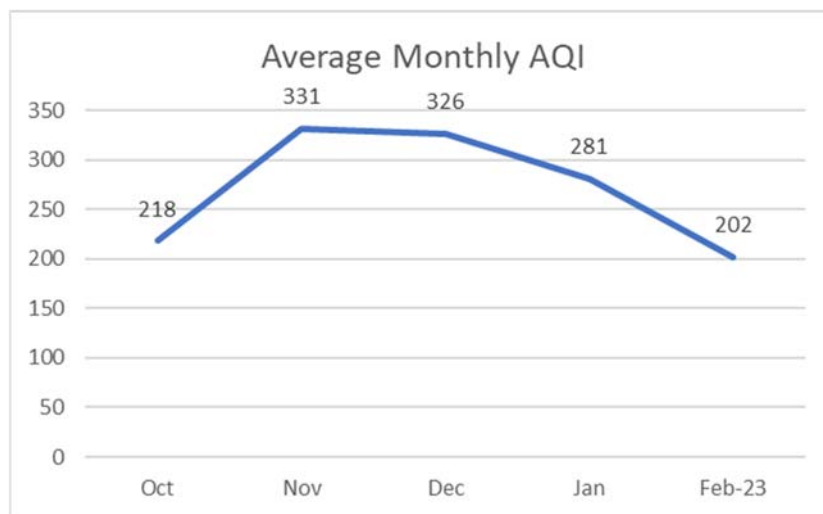


Table - AQI Categories Month Wise

	0-50	50-100	100-200	200-300	300-400	>400	Total
Oct			9	13		1	23
Nov			2	5	14	4	25
Dec			2	7	15	7	31
Jan			3	11	16	1	31
Feb-23		1	12	14	1		28

Table - Max AQI Time Intervals Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Oct	674	1083	1083	2295
Nov	808	1073	1029	1300
Dec	841	1948	1121	1714
Jan	552	1666	603	1165
Feb-23	623	597	389	1369

Table - Avg AQI Time Interval Wise

	Midnight to 6 AM	6 AM to 12 Noon	12 Noon to 6 PM	6 PM to Midnight
Oct	148	209	163	347
Nov	285	325	257	451
Dec	286	332	197	478
Jan	232	312	191	379
Feb-23	181	199	78	342