

## Air Pollution – Brief Analysis for November 2022

With the onset of winter, Air pollution becomes a major problem especially in the Northern part of the country. Delhi and surrounding areas bear the brunt of this problem due to various reasons which include vehicular and industrial exhaust, bio-mass burning, construction and road dust etc. But not just Delhi, Air pollution also becomes a critical issue in mining and industrial areas.

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 November to 30 November 2022 and Jan to November 2022

### **Section 1 – Data Analysis for period Jan to November 2022**

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

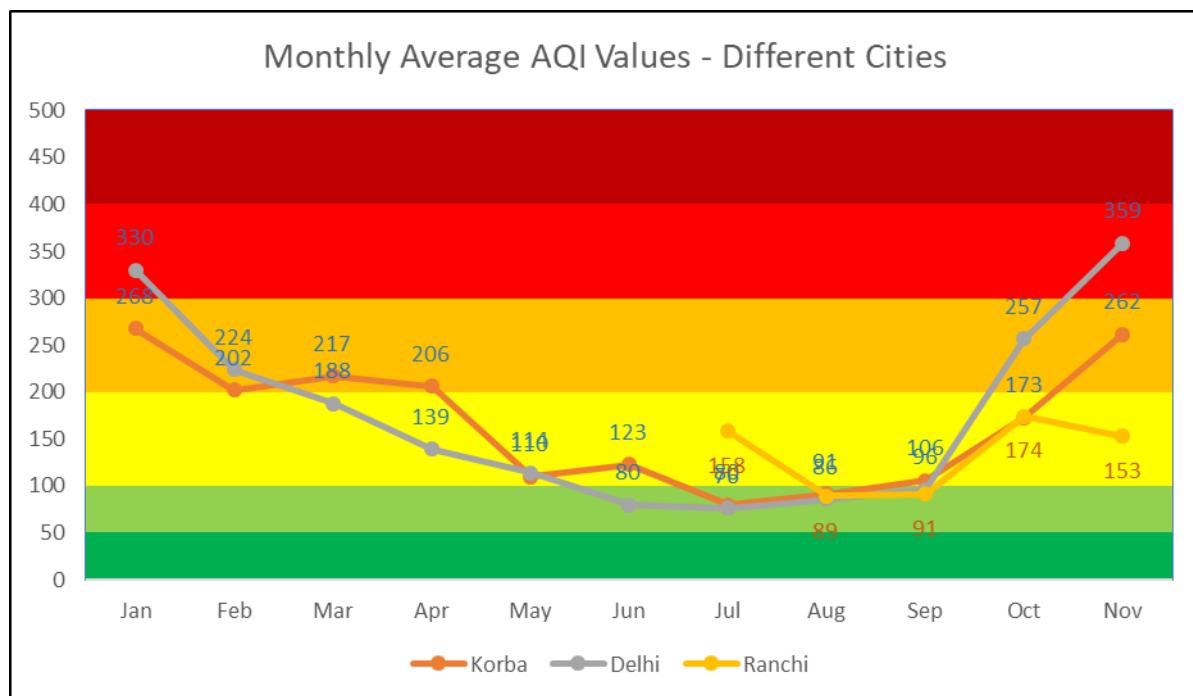


Table and Graph above show the Average Monthly AQI in different Cities. The graph and data clearly showcase the winter months when AQI comes under dangerous levels and summer and monsoon months when the air quality is Satisfactory. It is clear that AQI is showing an increasing trend with the onset of winter. Air quality improvement needs to be yearlong activity and the base load factors like vehicle exhausts, industrial exhausts, construction dust etc need to be controlled better. Currently in the entire country the base load of air pollutants is very high and any short or seasonal factors take the air quality into severe one which can be very hazardous for health. During this period, Delhi recorded the worst AQI in the month of November. Out of 11 months, for 6-month AQI in Delhi was above 100 while Korba had AQI above 100 for 9 months. The overall data for Korba shows that Korba

Air is more polluted than Delhi for longer durations in the year. 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
Korba	19	24	29	36	40	39	37	35	35	30	23
Delhi	17	20	26	32	35	36	39	37	36	28	24
Ranchi							31	30	29	24	20

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

**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
------	--------	---------	---------	---------	------

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 164 daily intervals as recorded by all devices installed in Korba. The data shows that in all locations more than 60% of the days, AQI has been above 100. Delhi and Korba recorded more than 31% of the intervals with AQI above 200.

Location wise Totals (Since January 2022) - use master									
	0-50	50-100	100-200	200-300	300-400	>400	Grand Total	Percent AQI >100	Percent AQI >200
Korba	164	502	863	498	292	85	2404	72%	36%
Delhi	380	759	894	478	297	149	2957	61%	31%
Ranchi	4	28	53	8	1	0	94	66%	10%

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 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.

		0-50	50-100	100-200	200-300	300-400	>400	Grand Total	Percent AQI >100
Korba	Jan	0	12	36	48	31	6	133	91%
	Feb	0	22	118	102	19	4	265	92%
	Mar	0	28	99	56	29	16	228	88%
	Apr	2	13	72	55	27	6	175	91%
	May	4	70	101	9	0	0	184	60%
	June	3	68	113	21	0	0	205	65%
	July	50	74	46	5	0	0	175	29%

	Aug	58	61	52	13	1	0	185	36%
	Sep	19	68	35	2	0	0	124	30%
	Oct	25	63	127	72	44	13	344	74%
	Nov	3	23	64	115	141	40	386	93%
Delhi	Jan	0	2	20	88	101	81	292	99%
	Feb	15	32	74	96	85	14	316	85%
	Mar	2	49	172	145	27	0	395	87%
	Apr	10	85	219	59	0	0	373	75%
	May	44	119	187	12	0	0	362	55%
	June	152	134	63	9	3	1	362	21%
	July	76	192	71	5	0	0	344	22%
	Aug	47	83	29	0	0	0	159	18%
	Sep	24	50	38	7	0	0	119	38%
	Oct	10	13	16	31	24	21	115	80%
	Nov	0	0	5	26	57	32	120	100%

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. Except 1 device in Korba, all other devices have recorded AQI above 100 above 50% of the daily monitored intervals. In one case this number is above 95% which is alarming.

Device Wise Totals (Selected Devices) – Since January 2022									
		0-50	50-100	100-200	200-300	300-400	>400	Grand Total	Percent AQI >100
861480034766644	Korba	12	30	62	25	38	14	181	76.80%
861480034786105	Korba	17	48	128	75	46	6	320	79.69%
861480034775850	Korba	35	98	103	54	16	1	307	56.68%
861480034777765	Korba	4	11	41	9	2	0	67	77.61%
861480034765562	Korba	38	83	103	40	13	0	277	56.32%
861480034757130	Korba	23	61	69	25	6	2	186	54.84%
862649042673930	Korba	0	41	69	42	18	8	178	76.97%
861480034765406	Korba	0	12	115	100	33	11	271	95.57%
861480034774176	Korba	6	41	56	31	27	3	164	71.34%
862649042685215	Korba	23	62	56	10	3	2	156	45.51%
861480034766461	Delhi	21	79	87	73	44	29	333	69.97%
861480034784522	Delhi	42	79	93	34	20	11	279	56.63%
862649043466961	Delhi	46	76	96	46	36	22	322	62.11%
861480034785552	Delhi	40	82	84	47	42	11	306	60.13%
861480034766453	Ranchi	4	28	53	8	1	0	94	65.96%

## Section 2 –Information and Analysis for November 2022

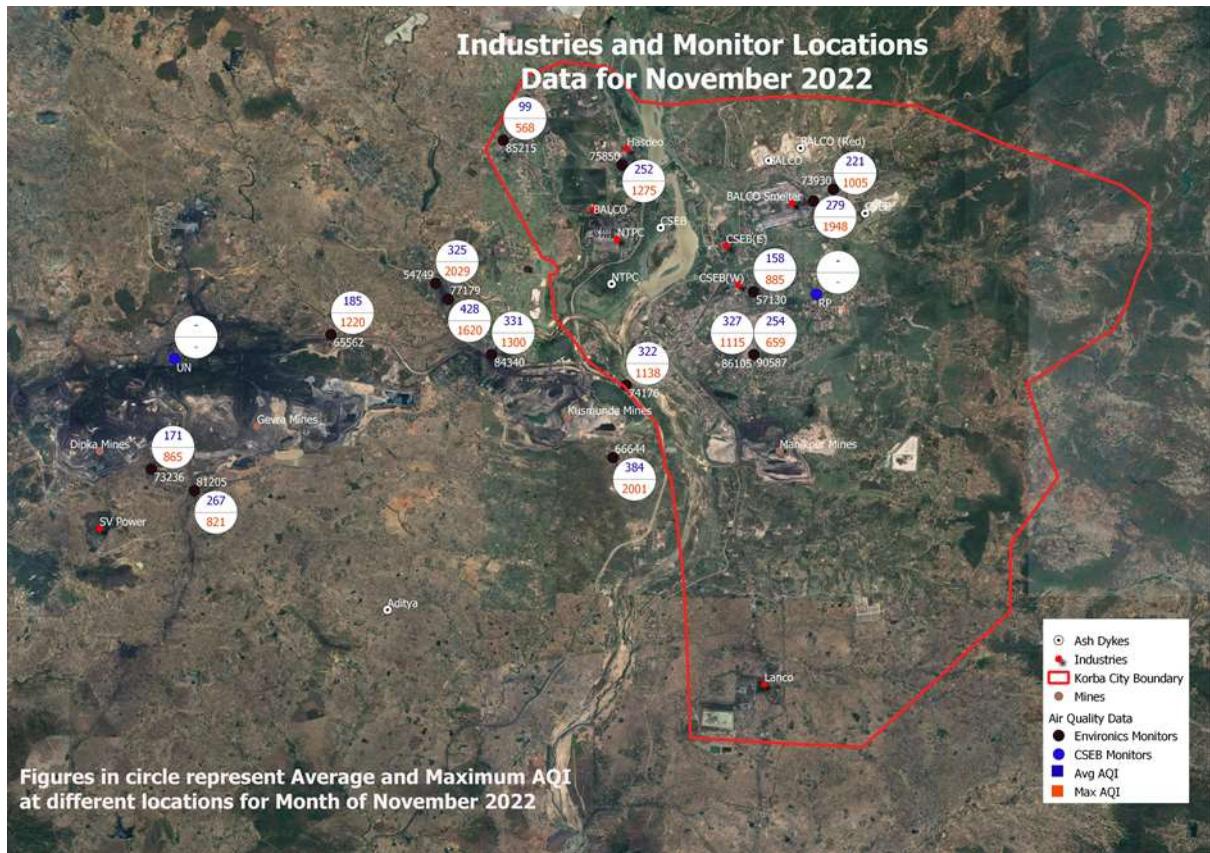
Location wise Avg and Max AQI		
Location	Avg	Max
Korba	262	2029
Delhi	359	1308
Ranchi	153	1894

Table above shows the city wise Average and Max AQI for November 2022. During this period Average AQI is highest in Delhi although the Max AQI is recorded highest in Korba and has been recorded above 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 and Ranchi also, the Max AQI recorded has crossed 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 15 devices which worked in Korba in this period 10 devices recorded maximum AQI greater than 1000 and another 3 were around 900. Average Monthly AQI is above 100 at all locations except 1. Device placed at Surakachar chowk near the underground Mines recorded the highest Average AQI at 428 while device at NTPC Housing Colony was the cleanest at 99 just within the Satisfactory range. The device at Gud Deva (Coal Siding) which is also close to the Surakachar underground mines has also repeatedly recorded high AQI values. 5 devices have recorded Average AQI above 300

Location wise Avg and Max AQI for devices placed at Korba				
Device Number	Location	Avg	Max	
861480034766644	Village Pali	384	2001	
861480034786105	RSS nagar	327	1115	
861480034775850	Child Home Darri	252	1275	
861480034765562	Gevra Mines Rehabilitated Area	185	1220	
861480034757130	Korba City, Patharipara	158	885	
861480034765406	RSS Nagar	221	1005	
861480034765406	Near Dipka Main Road	279	1948	
861480034774176	Old Age Home, Near Sarvmangla Mandir	322	1138	
862649042685215	NTPC Jamnipalli Housing Colony	99	568	
861480034781205	sarai singar chowk	267	821	
861480034777179	Surakachar chowk (underground Mines)	428	1620	
861480034784340	Kanha Auto repairs, Station road	331	1300	
861480034773236	Aryan Public School, Hardi Bazaar	171	865	
862649042690587	Near BALCO Power Plant	254	659	
861480034754749	Gud Deva (Coal Siding)	325	2029	

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. These devices have not worked for a single day in November 2022.



Map - Install and industrial locations at Korba. Numbers reflect Average and Max AQI of the location for November 2022. 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 November 2022																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Korba	248	256	276	327	317	322	263	272	256	242	284	276	282	263	301	266
Delhi	466	431	593	518	418	370	341	409	290	317	366	364	377	318	285	236
Ranchi	102	253	217	110	188	234	200	180	183	151	138	137	194	229	180	157

	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Korba	249	233	267	266	273	293	265	228	235	259	284	300	306	296
Delhi	305	307	283	344	320	247	216	226	331	376	354	428	450	390
Ranchi	119	121	127	110	117	131	76	107	109	122	132	192	209	182

The Tables above show Daily Average AQI between different cities for November 2022. Cells where AQI >100 have been highlighted. Only the device at Ranchi recorded AQI below 100 on 1 day. Other than that, the Air Quality in all three cities has been above 100 for the entire month and further deteriorating. AQI in Delhi even crossed 500 on 2 days and above 400 on 6 days in the month. In fact, Air Quality in Delhi was above 200 for the entire month and below 300 for only 6 days in the month. Even in Korba, AQI has been above 200 for the entire month and above 300 for 6 days. Both Korba and Delhi are fighting for the top spot in bad air quality with Delhi edging out Korba

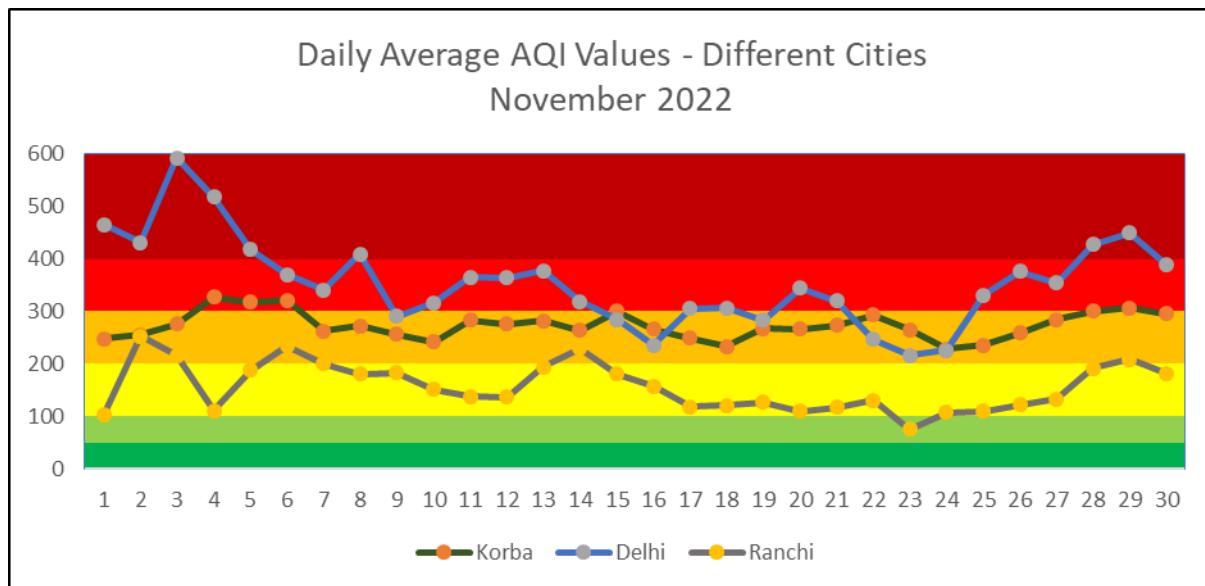


Table below shows the Daily Average AQI for individual devices placed at Korba. Figures above 250 have been marked in Red. The data reads like a sorry state of affairs. Only 2 locations 57130 and 85215 did not record any interval above 250. Both of these are residential locations. Location 84340 recorded AQI of 600 on 27 November. This is located near Kusmunda mines on a busy commercial road.

Average AQI, Device Wise at Korba for November 2022																
Date	66644	86105	75850	65562	57130	73930	65406	74176	85215	81205	77179	84340	73236	90587	54749	
1	436	244	195	154			208	282		259	479	195	54		302	
2	400	257	184	162			143	259		289	420	443	41		230	
3	417	293	231	137				344		308	441		49		323	
4	409	376	290	230				401	353		349	463		71		392
5	438	362	302	250			257	386		373	462		45		382	
6	406	372	311	265			248	375		353	445	371	52		370	
7	389	342	296	205	136		233	326	100	359	418	275	66		303	
8	380	351	275	206	155		252	347	110	352	429		52		330	
9	400	329	227	169	111	322	272	341	73	315	424	387	56		280	
10	388	267	208	173	59	247	181	268	73	314	416	327	123	220	256	
11	380	321	257	185		312	228	327	84	323	451	381	223	209	344	
12	338	311	250	204			292	295	98	320	459	329	218		314	
13	431	326	255	208			358	301	86	328	446	321	188	219	316	
14	359	311	219	160		327	311	293	72	321	439	306	183	215	238	
15	400	415	293	179		353	311	310	119	317	422	348	210	277	378	
16	324	316	221	138		333	310	266	91	268	434	290	187	286	309	
17	358	285	199	138		192	348	306	80	284	410	303	190	224	269	
18	350	275	188	137		189	286	273	79	222	402	304	159	209	248	
19	335	299	221		169	184	254	311	97	353	374	279	260	295	354	
20	333	317	247		123	180	287	339	75	306	393	359	188	274	338	
21	376	326	261		136	210	309	350	92	320	399	327	199	264	340	

22	394	358	290		166	253	349	315	113	275	396	299	265	323	371
23	336	348	256		174	244	338	318	98	152	399	275	226	278	363
24	345	317	238		155	200	302	304	98	108	368	186	150	241	274
25	340	315	230		157	199	246	287	96	152	392		184	228	283
26	352	340	233		144	249		301	103	162	390	318	218	248	356
27	436	353	269		192	218		333	113	139	353	600	230	277	308
28	441	376	318		208	222		400	118	129	423	422	256	263	418
29	444	382	327		188	236		390	143	146	424	420	281	269	425
30	391	361	296		158	251		371	131	143	461	377	280		397

Table – Daily Average AQI at Korba for November 2022 (blank implies device did not work)

Table - AQI Category wise information for individual devices (**November 2022**)

AQI categories Wise Information for Different Devices - November 2022										
Device Number	Location	0-50	50-100	100-200	200-300	300-400	>400	Grand Total	Percent >100	Percent >200
861480034766644	Korba					19	11	30	100%	100%
861480034786105	Korba				7	22	1	30	100%	100%
861480034775850	Korba			4	22	4		30	100%	87%
861480034777765	Korba	-	-	-	-	-	-	0	-	-
861480034765562	Korba			11	7			18	100%	39%
861480034757130	Korba		1	14	1			16	94%	6%
862649042673930	Korba			5	10	5		20	100%	75%
861480034765406	Korba			2	12	9	1	24	100%	92%
861480034774176	Korba				8	22		30	100%	100%
862649042685215	Korba		16	8				24	33%	0%
861480034781205	Korba			8	6	16		30	100%	73%
861480034777179	Korba					9	21	30	100%	100%
861480034784340	Korba			2	5	14	4	25	100%	92%
861480034773236	Korba	3	6	10	11			30	70%	37%
862649042690587	Korba				18	1		19	100%	100%
861480034754749	Korba				8	20	2	30	100%	100%
861480034766461	Delhi				5	13	12	30	100%	100%
861480034784522	Delhi			1	9	14	6	30	100%	97%
862649043466961	Delhi				6	14	10	30	100%	100%
861480034785552	Delhi			4	6	16	4	30	100%	87%
861480034766453	Ranchi		1	26	3			30	97%	10%

The above table shows that the AQI was above 200 for 6 locations in Korba for the entire month. In Delhi as well 2 locations had AQI above 200 for the entire month and other 2 were close behind. Only Ranchi had cleaner air although 97% of the time AQI was above 100 here as well.

Time Interval wise Average AQI City wise and Device wise for November 2022 can be seen in table below

	<b>Midnight to 6 AM</b>	<b>6 AM to 12 Noon</b>	<b>12 Noon to 6 PM</b>	<b>6 PM to midnight</b>
<b>Delhi</b>	<b>407</b>	<b>409</b>	<b>274</b>	<b>369</b>
66461	<b>457</b>	<b>453</b>	<b>310</b>	<b>411</b>
66961	<b>400</b>	<b>408</b>	<b>285</b>	<b>406</b>
84522	<b>405</b>	<b>396</b>	<b>229</b>	<b>341</b>
85552	<b>362</b>	<b>373</b>	<b>270</b>	<b>314</b>
<b>Korba</b>	<b>255</b>	<b>287</b>	<b>218</b>	<b>343</b>
54749	<b>283</b>	<b>327</b>	<b>276</b>	<b>411</b>
57130	<b>107</b>	<b>209</b>	<b>100</b>	<b>215</b>
65406	<b>201</b>	<b>276</b>	<b>210</b>	<b>445</b>
65562	<b>150</b>	<b>187</b>	<b>155</b>	<b>257</b>
66644	<b>338</b>	<b>434</b>	<b>342</b>	<b>424</b>
73236	<b>175</b>	<b>173</b>	<b>117</b>	<b>218</b>
73930	<b>177</b>	<b>222</b>	<b>171</b>	<b>312</b>
74176	<b>343</b>	<b>343</b>	<b>232</b>	<b>367</b>
75850	<b>257</b>	<b>259</b>	<b>163</b>	<b>332</b>
77179	<b>383</b>	<b>425</b>	<b>459</b>	<b>459</b>
81205	<b>263</b>	<b>273</b>	<b>224</b>	<b>311</b>
84340	<b>285</b>	<b>325</b>	<b>257</b>	<b>451</b>
85215	<b>86</b>	<b>101</b>	<b>83</b>	<b>121</b>
86105	<b>311</b>	<b>355</b>	<b>238</b>	<b>404</b>
90587	<b>256</b>	<b>272</b>	<b>175</b>	<b>298</b>
<b>Ranchi</b>	<b>150</b>	<b>161</b>	<b>102</b>	<b>199</b>

Time Interval Wise Maximum AQI at different Cities and devices for November 2022

	<b>Midnight to 6 AM</b>	<b>6 AM to 12 Noon</b>	<b>12 Noon to 6 PM</b>	<b>6 PM to midnight</b>
<b>Delhi</b>	<b>1285</b>	<b>1308</b>	<b>718</b>	<b>1220</b>
66461	1285	<b>1308</b>	718	1188
66961	965	1083	680	<b>1220</b>
84522	1279	<b>1294</b>	534	715
85552	642	<b>793</b>	598	678
<b>Korba</b>	<b>1958</b>	<b>2001</b>	<b>2029</b>	<b>1948</b>
54749	1958	1851	<b>2029</b>	1839
57130	306	<b>885</b>	810	585
65406	457	720	1489	<b>1948</b>
65562	362	589	<b>1220</b>	414
66644	1538	<b>2001</b>	1988	1726
73236	397	729	443	<b>865</b>
73930	451	471	925	<b>1005</b>
74176	<b>1138</b>	988	431	728
75850	393	675	751	<b>1275</b>

77179	804	1228	948	1620
81205	656	821	768	813
84340	808	1073	1029	1300
85215	326	360	442	568
86105	765	853	1115	1115
90587	397	434	383	659
Ranchi	452	1894	375	508

Annexure 1 – Device Locations

<b>Device Name / Location</b>	<b>Current City</b>	<b>City</b>
861480034766644	Village Pali	Korba
861480034786105	RSS nagar	Korba
861480034775850	Child Home Darri	Korba
861480034777765	-	Korba
861480034765562	Gevra Mines Rehabilitated Area	Korba
861480034757130	Korba City, Patharipara	Korba
862649042673930	Balco Housing Board	Korba
861480034765406	RSS Nagar	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	RSS Nagar	Korba
861480034754749	Gud Deva	Korba
861480034766461	Delhi	Delhi
861480034784522	Deli-RS	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
Feb	258	23	1326	34
May	128	40	1150	54
Jun	147	39	1033	54
Jul	77	38	560	50
Aug	102	34	558	53
Sep	163	35	394	53
Oct	312	30	6113	50
Nov	384	23	2001	49
<b>Overall Average</b>	<b>206</b>	<b>32</b>	<b>6113</b>	<b>54</b>

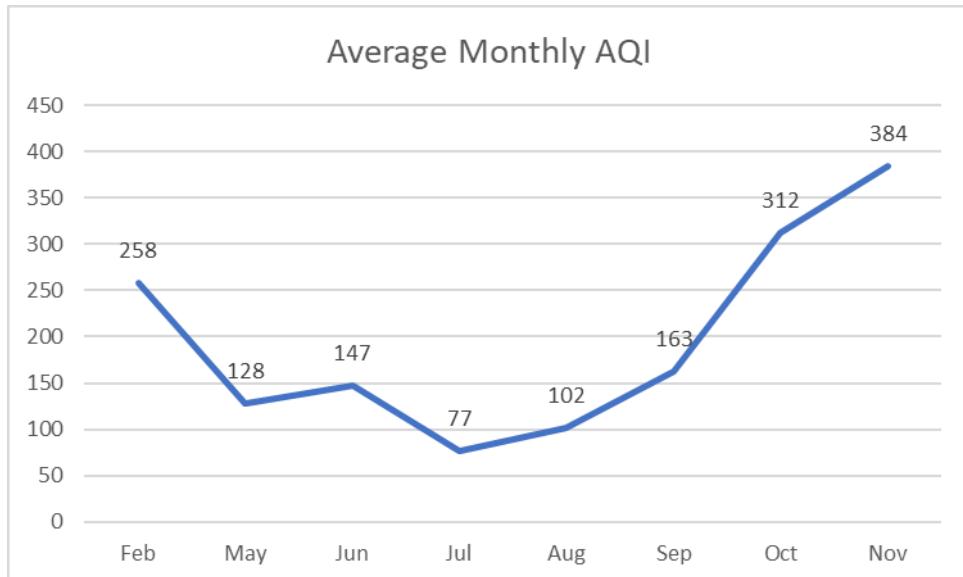


Table - AQI Categories Month Wise

	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	7	3	2				12
Aug	3	7	6	1			17
Sep			2				2
Oct			3	5	13	2	23
Nov					19	11	30

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

	<b>Midnight to 6 AM</b>	<b>6 AM to 12 Noon</b>	<b>12 Noon to 6 PM</b>	<b>6 PM to Midnight</b>
Jan	391		1994	1205
Feb	978	1221	514	1326
May	1003	507	1150	836
Jun	381	677	514	1033
Jul	223	280	560	417
Aug	412	451	369	558
Sep	48	277	327	394
Oct	889	6113	6113	1675
Nov	1538	2001	1988	1726

Table - Avg AQI Time Interval Wise

	<b>Midnight to 6 AM</b>	<b>6 AM to 12 Noon</b>	<b>12 Noon to 6 PM</b>	<b>6 PM to Midnight</b>
Jan	237		340	474
Feb	234	318	121	364
May	132	145	90	148
Jun	141	175	105	167
Jul	56	66	90	99
Aug	74	117	87	131
Sep	26	132	194	187
Oct	241	366	295	343
Nov	338	434	342	424

Note - The device did not work between 21 Feb to 6 May 2022 –

- 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	77	38	1010	59
Aug	102	34	963	58
Sep	119	34	730	60
Oct	179	29	1125	49
Nov	327	23	1115	38

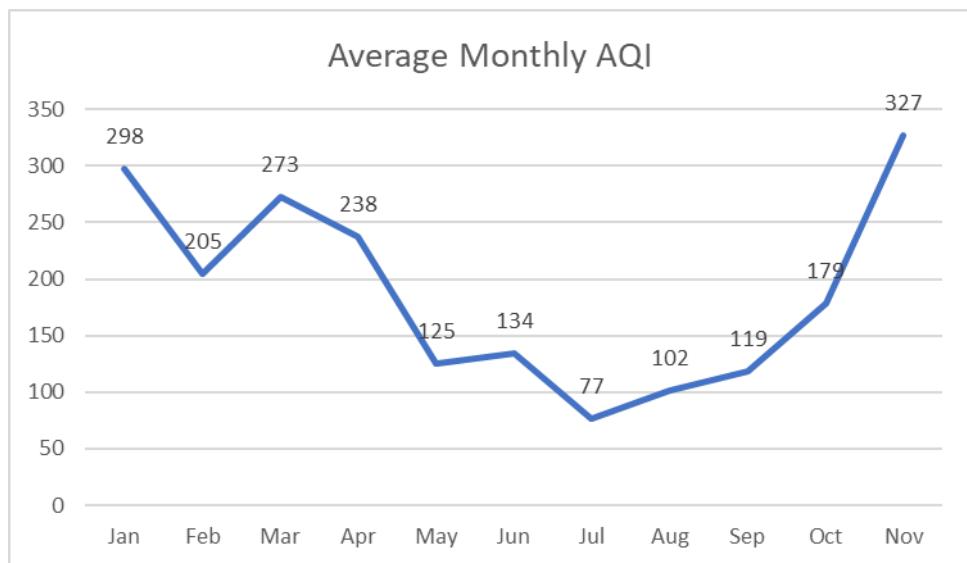


Table - AQI Categories Month Wise

	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
-----	--	--	--	---	----	---	----

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	852.5	1115	1115

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

- 861480034775850 - Child Home Darri

Table - Monthly Average and Max AQI and HI

	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

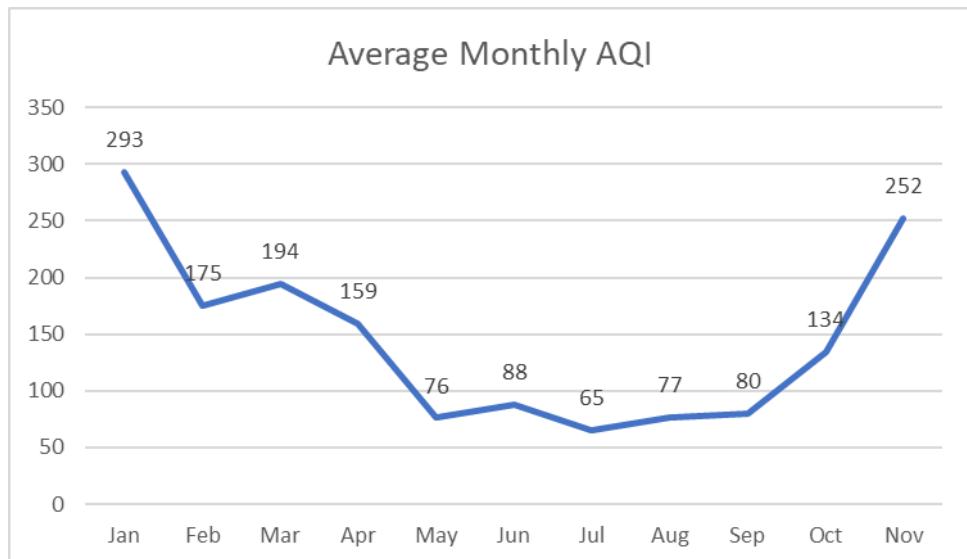


Table - AQI Categories Month Wise

	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
-----	--	--	---	----	---	--	----

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

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

- 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

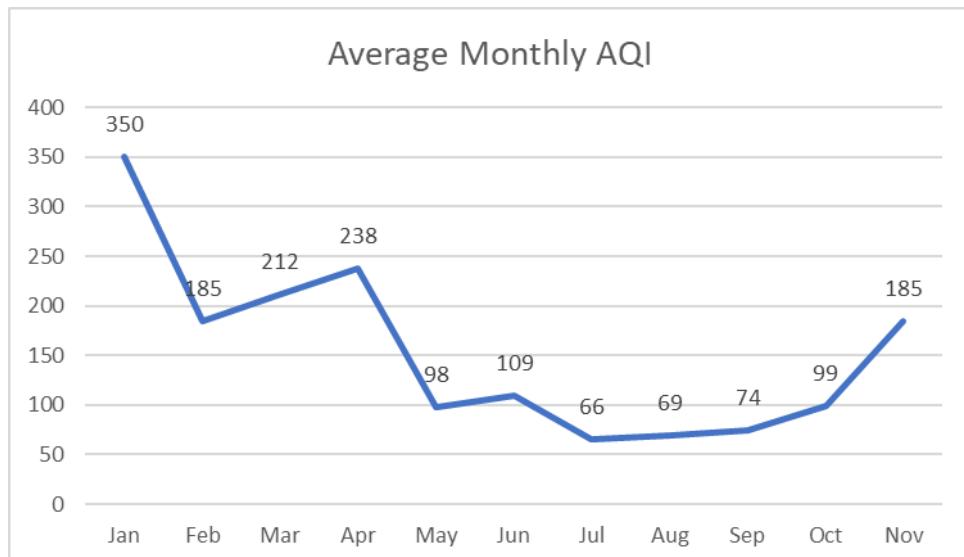


Table - AQI Categories Month Wise

	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
-----	--	--	----	---	--	--	----

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

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

- 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

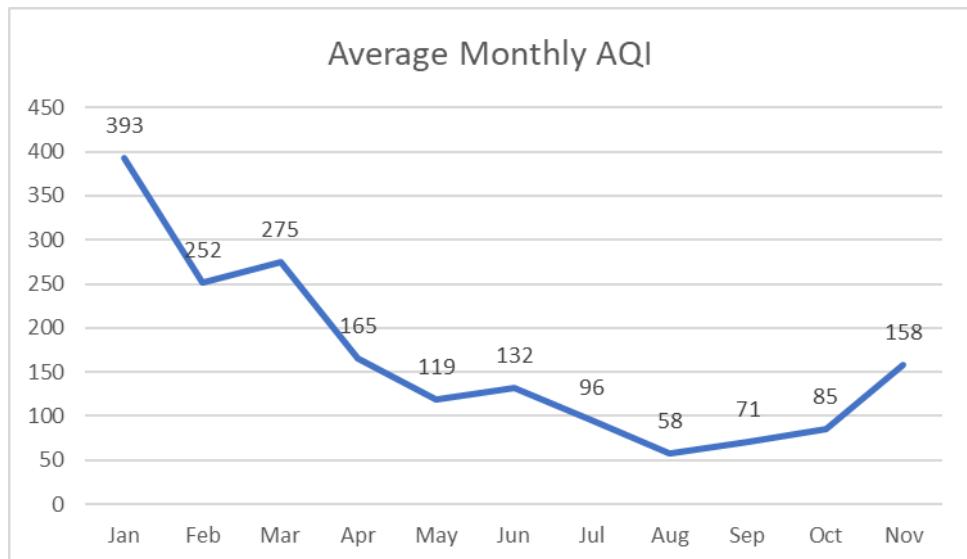


Table - AQI Categories Month Wise

	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
-----	--	---	----	---	--	----

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

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

- 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

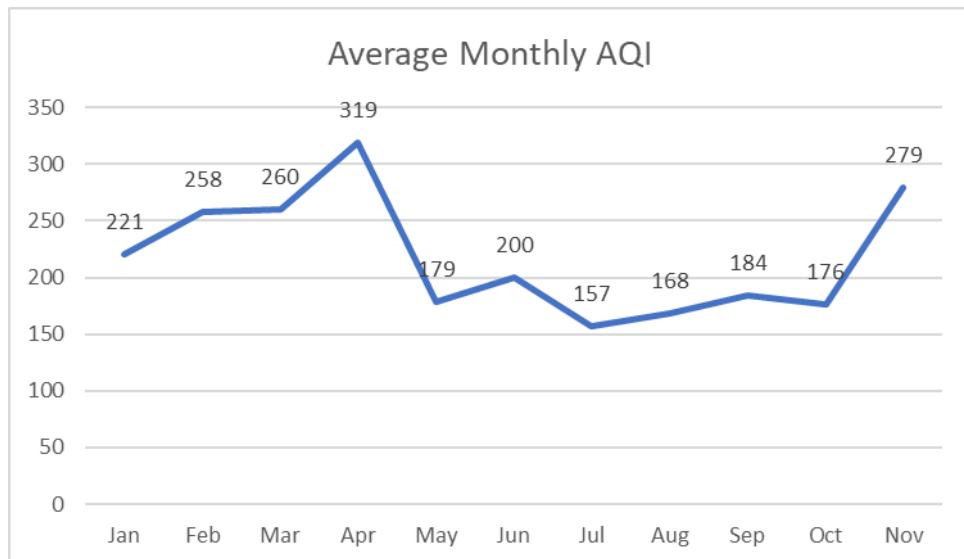


Table - AQI Categories Month Wise

	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
-----	--	--	---	----	---	---	----

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

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

- 861480034774176 - Balco Township, Relocated to Old Age Home near Sarvmangla Mandir in October

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	177	31	4556	56
Nov	322	24	1138	46

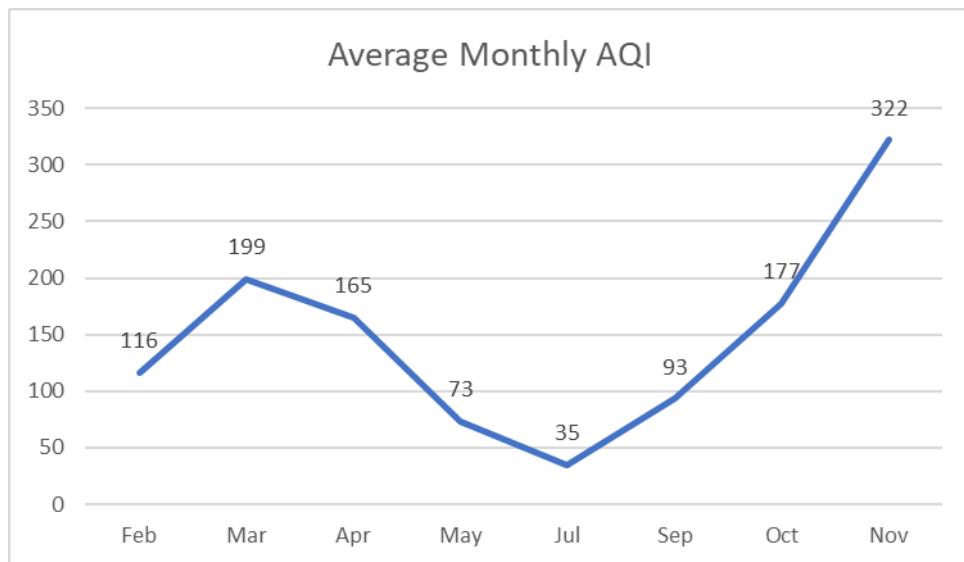


Table - AQI Categories Month Wise

	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

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	4556	1419	550
Nov	1138	988	431	728

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	207	114	215
Nov	343	343	232	367

- 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

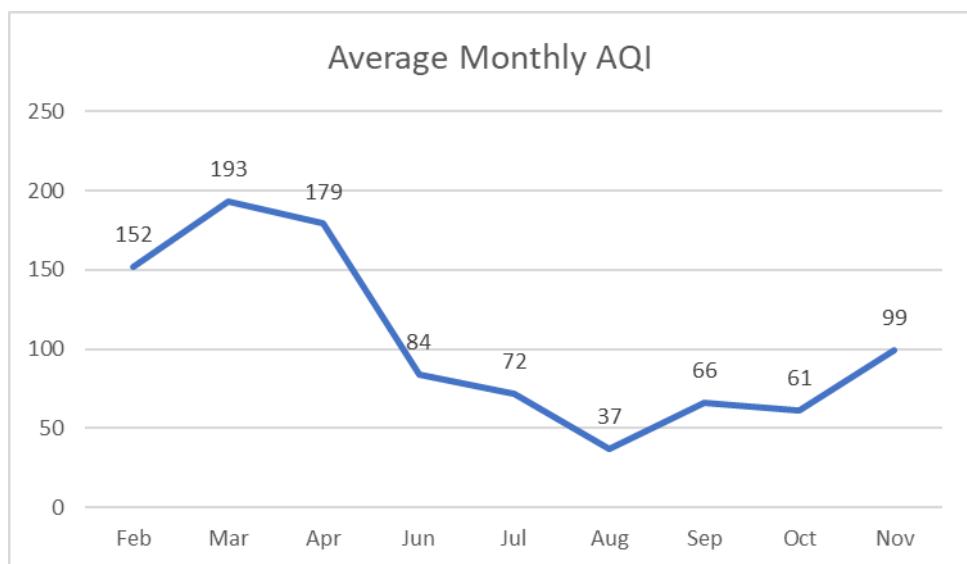


Table - AQI Categories Month Wise

	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

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

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

- 861480034781205 sarai singar chowk – Installed in October 2022

Table - Monthly Avg and Max AQI and HI

	Avg AQI	Avg HI	Max AQI	Max HI
Oct	236	27	2491	44
Nov	267	23	821	39

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

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

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

- 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

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

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

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

- 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

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

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

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	490	522	391	579