

MONTHLY AAQM DATA ALONG WITH AQI FOR 17 NAMP STATION

APRIL 2024

About National Air Quality Index

1. Air Quality Index is a tool for effective communication of air quality status to people in terms, which are easy to understand. It transforms complex air quality data of various pollutants into a single number (index value), nomenclature and color.
2. There are six AQI categories, namely Good, Satisfactory, Moderately polluted, Poor, Very Poor, and Severe. Each of these categories is decided based on ambient concentration values of air pollutants and their likely health impacts (known as health breakpoints). AQ sub-index and health breakpoints are evolved for eight pollutants (PM₁₀, PM_{2.5}, NO₂, SO₂, CO, O₃, NH₃, and Pb) for which short-term (up to 24-hours) National Ambient Air Quality Standards are prescribed.
3. Based on the measured ambient concentrations of a pollutant, sub-index is calculated, which is a linear function of concentration (e.g. the sub-index for PM_{2.5} will be 51 at concentration 31 µg/m³, 100 at concentration 60 µg/m³, and 75 at concentration of 45 µg/m³). The worst sub-index determines the overall AQI. AQI categories and health breakpoints for the eight pollutants are as follow:

Table 1 : AQI Category, Pollutants and Health Breakpoints								
AQI Category (Range)	PM ₁₀ 24-hr	PM _{2.5} 24-hr	NO ₂ 24-hr	O ₃ 8-hr	CO 8-hr (mg/m ³)	SO ₂ 24-hr	NH ₃ 24-hr	Pb 24-hr
Good (0-50)	0-50	0-30	0-40	0-50	0-1.0	0-40	0-200	0-0.5
Satisfactory (51-100)	51-100	31-60	41-80	51-100	1.1-2.0	41-80	201-400	0.5 –1.0
Moderate (101-200)	101-250	61-90	81-180	101-168	2.1- 10	81-380	401-800	1.1-2.0
Poor (201-300)	251-350	91-120	181-280	169-208	10-17	381-800	801-1200	2.1-3.0
Very poor (301-400)	351-430	121-250	281-400	209-748*	17-34	801-1600	1200-1800	3.1-3.5
Severe (401-500)	430 +	250+	400+	748+*	34+	1600+	1800+	3.5+

Table 2: AQI : Associated Health Impacts	
AQI	Associated Health Impacts
Severe (401-500)	SEVERE : May cause respiratory effects even on healthy people and serious health effect on people with lung/heart diseases
Very Poor (301–400)	VERY-POOR: May cause respiratory illness to the people on prolonged exposure. Effect may be more pronounced in people with lung and heart diseases
Poor (201–300)	POOR : May cause breathing discomfort to people on prolonged exposure and discomfort to people with heart disease
Moderate (101–200)	MODERATE : May cause breathing discomfort to the people with lung disease such as asthma and discomfort to people with heart disease Children and older adults
Satisfactory (51–100)	SATISFACTORY : May cause minor breathing discomfort to sensitive people
Good (0–50)	GOOD : Minimal impact

Station: Near Old GSPCB office						City :Panaji	
Duration:- April-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in $\mu\text{g}/\text{m}^3$					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	01-04-2024	61	17	4	19	61	Satisfactory
2	04-04-2024	57		7	17	57	Satisfactory
3	08-04-2024	63	25	6	17	63	Satisfactory
4	11-04-2024	47	11	2	5	47	Good
5	15-04-2024	65	13	4	12	65	Satisfactory
6	18-04-2024	62	17	3	6	62	Satisfactory
7	22-04-2024	59	11	2	11	59	Satisfactory
8	25-04-2024	60	16	6	17	60	Satisfactory
9	29-04-2024	54	11	2	14	54	Satisfactory
10	30-04-2024	56	18	2	14	56	Satisfactory

Station: Within the premises of Municipality building							City :Mapusa
Duration:-April-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	01-04-2024	79	20	5	23	79	Satisfactory
2	04-04-2024	87	34	3	10	87	Satisfactory
3	08-04-2024	97	21	5	16	97	Satisfactory
4	12-04-2024	118	27	5	14	112	Moderate
5	15-04-2024	93	22	5	17	93	Satisfactory
6	18-04-2024	62	23	4	19	62	Satisfactory
7	22-04-2024	83	14	6	15	83	Satisfactory
8	25-04-2024	82	15	3	14	82	Satisfactory
9	29-04-2024	103	25	8	17	102	Moderate
10	30-04-2024	72	19	4	14	72	Satisfactory

Station: MPT Quarters							City: Baina	
Duration:- April-2024								
Sr.No		Time Weighted Average (TWA)					AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3						
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	NH ₃		
1	03-04-2024	74	25	2	5	10	74	Satisfactory
2	05-04-2024	86	28	2	5	10	86	Satisfactory
3	08-04-2024	53	29	2	5	10	53	Satisfactory
4	12-04-2024	108	28	2	15	10	105	Moderate
5	16-04-2024	78	38	2	18	10	78	Satisfactory
6	19-04-2024	49	33	2	19	10	55	Satisfactory
7	24-04-2024	110	28	2	16	10	107	Moderate
8	26-04-2024	40	21	2	12	10	40	Good
9	29-04-2024	109	41	2	5	10	106	Moderate
10	30-04-2024	33	20	2	12	10	33	Good

Station: Fuse Call Office							City: Vasco	
Duration:- April-2024								
Sr.No		Time Weighted Average (TWA)					AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3						
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	NH ₃		
1	03-04-2024	78	45	2	5	10	78	Satisfactory
2	05-04-2024	72	16	2	18	10	72	Satisfactory
3	08-04-2024	84	39	2	26	10	84	Satisfactory
4	12-04-2024	76	45	2	15	10	76	Satisfactory
5	16-04-2024	50	44	2	19	10	73	Satisfactory
6	19-04-2024	54	48	2	19	10	80	Satisfactory
7	24-04-2024	63	31	2	18	10	63	Satisfactory
8	26-04-2024	82	30	2	22	10	82	Satisfactory
9	29-04-2024	52	43	2	21	10	72	Satisfactory
10	30-04-2024	45	31	2	21	10	52	Satisfactory

Station: Roof top of Municipal market						City: Ponda	
Duration:-April-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTy
	Parameters	24-Hr	24-Hr	24-Hr	24-Hr		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	01-04-2024	53	12	3	5	53	Satisfactory
2	04-04-2024	51	15	5	15	51	Satisfactory
3	08-04-2024	59	19	3	12	59	Satisfactory
4	11-04-2024	66	19	5	17	66	Satisfactory
5	15-04-2024	75	23	5	12	75	Satisfactory
6	18-04-2024	104	19	6	14	102	Moderate
7	22-04-2024	102	29	6	16	101	Moderate
8	25-04-2024	94	24	6	18	94	Satisfactory
9	29-04-2024	75	19	8	19	75	Satisfactory
10	30-04-2024	80	18	6	17	80	Satisfactory

Station:- Rooftop of Ravindra Bhavan Building						City:-Margao	
Duration:- April -2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	01-04-2024	88	19	5	19	88	Satisfactory
2	04-04-2024	61	18	4	12	61	Satisfactory
3	08-04-2024	105	39	6	16	103	Moderate
4	11-04-2024	66	14	2	12	66	Satisfactory
5	15-04-2024	62	23	6	12	62	Satisfactory
6	18-04-2024	79	20	6	16	79	Satisfactory
7	22-04-2024	77	15	5	25	77	Satisfactory
8	25-04-2024	71	17	5	13	71	Satisfactory
9	29-04-2024	74	26	8	14	74	Satisfactory
10	30-04-2024	69	15	5	17	69	Satisfactory

Station: Residence of Mr. Rama Naik, Assanora Junction						City: Assanora	
Duration:-April-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hr	24-Hr	24-Hr	24-Hr		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	01-04-2024	66	21	6	21	66	Satisfactory
2	04-04-2024	72	27	7	16	72	Satisfactory
3	08-04-2024	71	31	6	16	71	Satisfactory
4	12-04-2024	85	22	4	18	85	Satisfactory
5	15-04-2024	83	19	6	18	83	Satisfactory
6	18-04-2024	78	30	7	18	78	Satisfactory
7	22-04-2024	89	17	4	17	89	Satisfactory
8	25-04-2024	86	21	5	17	86	Satisfactory
9	29-04-2024	82	25	6	18	82	Satisfactory
10	30-04-2024	86	28	5	18	86	Satisfactory

Station: Residence of Mr. Sagun Ramkrishna Fadte							City: Amona
Duration:- April-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in $\mu\text{g}/\text{m}^3$					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	01-04-2024	74	22	4	22	74	Satisfactory
2	04-04-2024	96	24	3	20	96	Satisfactory
3	08-04-2024	79	25	4	20	79	Satisfactory
4	11-04-2024	62	17	4	17	62	Satisfactory
5	15-04-2024	95	14	4	17	95	Satisfactory
6	18-04-2024	58	12	4	16	58	Satisfactory
7	22-04-2024	59	8	3	19	59	Satisfactory
8	25-04-2024	57	10	4	13	57	Satisfactory
9	29-04-2024	89	19	4	16	89	Satisfactory
10	30-04-2024	66	24	4	16	66	Satisfactory

Station: Municipality Building						City: Bicholim	
Duration:-April-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hr	24-Hr	24-Hr	24-Hr		
		Pollutants concentration in $\mu\text{g}/\text{m}^3$					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	01-04-2024	72	16	7	15	72	Satisfactory
2	04-04-2024	80	26	4	15	80	Satisfactory
3	08-04-2024	84	22	3	25	84	Satisfactory
4	12-04-2024	87	19	3	15	87	Satisfactory
5	15-04-2024	69	18	6	15	69	Satisfactory
6	18-04-2024	68	15	3	18	68	Satisfactory
7	22-04-2024	56	10	3	13	56	Satisfactory
8	25-04-2024	56	15	3	18	56	Satisfactory
9	29-04-2024	75	17	7	18	75	Satisfactory
10	30-04-2024	50	12	5	17	50	Good

Station: Near Ajoba temple, Honda junction						City: Honda	
Duration:-April-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hr	24-Hr	24-Hr	24-Hr		
		Pollutants concentration in $\mu\text{g}/\text{m}^3$					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	01-04-2024	48	14	3	7	48	Good
2	04-04-2024	94	25	3	13	94	Satisfactory
3	08-04-2024	61	19	4	16	61	Satisfactory
4	11-04-2024	81	19	5	13	81	Satisfactory
5	15-04-2024	59	14	2	15	59	Satisfactory
6	18-04-2024	57	11	3	17	57	Satisfactory
7	22-04-2024	49	19	2	14	49	Good
8	25-04-2024	56	17	3	16	56	Satisfactory
9	29-04-2024	54	8	3	15	54	Satisfactory
10	30-04-2024	55	10	4	12	55	Satisfactory

Station:- Usgao Junction						City:-Usgao	
Duration:-April -2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	01-04-2024	91	29	5	15	91	Satisfactory
2	04-04-2024	98	32	4	5	98	Satisfactory
3	08-04-2024	100	14	5	5	100	Moderate
4	11-04-2024	89	19	5	20	89	Satisfactory
5	15-04-2024	83	23	4	11	83	Satisfactory
6	18-04-2024	81	13	5	21	81	Satisfactory
7	22-04-2024	81	18	4	18	81	Satisfactory
8	25-04-2024	87	18	4	19	87	Satisfactory
9	29-04-2024	83	25	9	14	83	Satisfactory
10	30-04-2024	81	23	4	18	81	Satisfactory

Station:- Premises of Somnath English High School						City:-Codli	
Duration:-April-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	01-04-2024	88	25	5	17	88	Satisfactory
2	04-04-2024	118	44	4	12	112	Moderate
3	08-04-2024	105	35	4	20	104	Moderate
4	11-04-2024	95	37	4	17	95	Satisfactory
5	15-04-2024	69	14	5	15	69	Satisfactory
6	18-04-2024	58	13	2	20	58	Satisfactory
7	22-04-2024	97	11	2	17	97	Satisfactory
8	25-04-2024	80	17	4	21	80	Satisfactory
9	29-04-2024	86	26	8	17	86	Satisfactory
10	30-04-2024	47	15	5	16	47	Good

Station:- Rooftop of Sanguem Municipality Building						City:-Sanguem	
Duration:- April-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	01-04-2024	79	18	6	16	79	Satisfactory
2	04-04-2024	84	22	4	15	84	Satisfactory
3	08-04-2024	102	27	5	17	102	Moderate
4	11-04-2024	61	13	4	24	61	Satisfactory
5	15-04-2024	53	10	4	11	53	Satisfactory
6	18-04-2024	83	26	5	23	83	Satisfactory
7	22-04-2024	59	10	5	18	59	Satisfactory
8	25-04-2024	60	11	4	12	60	Satisfactory
9	29-04-2024	86	27	5	14	86	Satisfactory
10	30-04-2024	81	20	4	14	81	Satisfactory

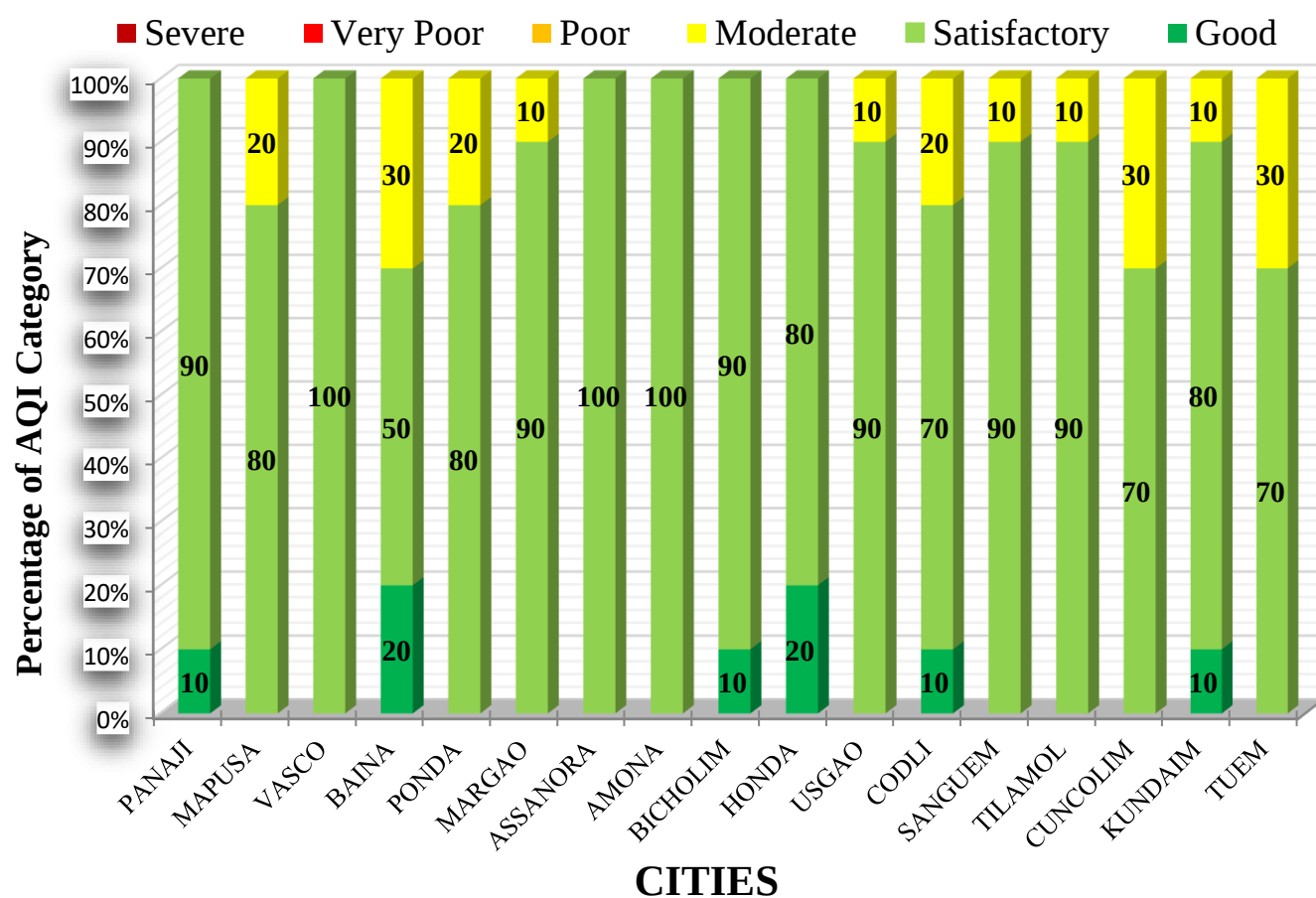
Station:- Tilamol Junction						City:-Tilamol	
Duration:-April-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	01-04-2024	102	40	7	19	101	Moderate
2	04-04-2024	87	19	4	19	87	Satisfactory
3	08-04-2024	78	16	4	15	78	Satisfactory
4	11-04-2024	54	9	2	12	54	Satisfactory
5	15-04-2024	55	13	5	14	55	Satisfactory
6	18-04-2024	60	14	2	15	60	Satisfactory
7	22-04-2024	64	16	2	16	64	Satisfactory
8	25-04-2024	60	18	4	16	60	Satisfactory
9	29-04-2024	79	16	9	14	79	Satisfactory
10	30-04-2024	58	18	6	16	58	Satisfactory

Station:- Rooftop of Power Station, Cuncolim Ind Estate						City:-Cuncolim	
Duration:- April-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	01-04-2024	103	32	6	18	102	Moderate
2	04-04-2024	99	37	2	15	99	Satisfactory
3	08-04-2024	87	27	5	19	87	Satisfactory
4	11-04-2024	97	22	5	13	97	Satisfactory
5	15-04-2024	72	22	6	17	72	Satisfactory
6	18-04-2024	118	30	6	18	112	Moderate
7	22-04-2024	88	22	6	18	88	Satisfactory
8	25-04-2024	90	22	5	20	90	Satisfactory
9	29-04-2024	97	28	6	20	97	Satisfactory
10	30-04-2024	101	26	4	28	101	Moderate

Station: Near IDC Office						City: Kundaim	
Duration:-April-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hr	24-Hr	24-Hr	24-Hr		
		Pollutants concentration in $\mu\text{g}/\text{m}^3$					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	01-04-2024	58	18	5	13	58	Satisfactory
2	04-04-2024	54	15	4	9	54	Satisfactory
3	08-04-2024	47	13	5	16	47	Good
4	11-04-2024	65	17	4	15	65	Satisfactory
5	15-04-2024	80	18	5	14	80	Satisfactory
6	18-04-2024	87	30	6	15	87	Satisfactory
7	22-04-2024	110	27	5	16	107	Moderate
8	25-04-2024	96	27	5	11	96	Satisfactory
9	29-04-2024	85	23	7	14	85	Satisfactory
10	30-04-2024	69	18	7	13	69	Satisfactory

Station: Near ESIC Hospital , Tuem Industrial Estate							City: Tuem
Duration:-April-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hr	24-Hr	24-Hr	24-Hr		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	01-04-2024	53	16	8	17	53	Satisfactory
2	04-04-2024	58	21	6	14	58	Satisfactory
3	08-04-2024	56	19	4	20	56	Satisfactory
4	12-04-2024	60	12	4	18	60	Satisfactory
5	15-04-2024	109	20	5	16	106	Moderate
6	18-04-2024	83	27	5	13	83	Satisfactory
7	22-04-2024	105	26	5	15	103	Moderate
8	25-04-2024	101	28	5	10	101	Moderate
9	29-04-2024	65	15	7	17	65	Satisfactory
10	30-04-2024	95	26	5	17	95	Satisfactory

Percentage of AQI Category for NAMP locations in Goa for APRIL 2024



Results and Interpretation:

It is seen that during the month of April 2024, out of 17 NAMP locations AQI is -

Good to Satisfactory to Moderate at 2 locations namely – Baina and Codlim .

Dominantly Satisfactory at 13 locations namely – Panaji, Mapusa, Vasco, Ponda, Margao, Assanora, Amona, Bicholim, Honda, Usgao, Sanguem, Tilamol and Kundaim

Satisfactory to Moderate at 2 locations namely – Cuncolim and Tuem.

(Dominant refers to 75% and above)