

MONTHLY AAQM DATA ALONG WITH AQI FOR 17 NAMP STATION

MAY 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:- May-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	06-05-2024	49	9	2	5	49	Good
2	09-05-2024	70	16	2	17	70	Satisfactory
3	13-05-2024	75	22	5	17	75	Satisfactory
4	16-05-2024	41	10	2	5	41	Good
5	20-05-2024	48	16	2	5	48	Good
6	21-05-2024	70	18	3	7	70	Satisfactory
7	23-05-2024	30	9	2	5	30	Good
8	24-05-2024	62	14	3	15	62	Satisfactory
9	27-05-2024	45	13	2	11	45	Good
10	30-05-2024	62	13	2	5	62	Satisfactory

Station: Within the premises of Municipality building							City :Mapusa
Duration:- May-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	06-05-2024	80	34	2	15	80	Satisfactory
2	09-05-2024	65	16	6	17	65	Satisfactory
3	13-05-2024	119	35	4	15	113	Moderate
4	16-05-2024	51	14	4	9	51	Satisfactory
5	20-05-2024	60	17	4	11	60	Satisfactory
5	21-05-2024	92	28	5	13	92	Satisfactory
6	23-05-2024	69	13	2	9	69	Satisfactory
6	24-05-2024	83	23	4	14	83	Satisfactory
7	27-05-2024	94	19	2	11	94	Satisfactory
8	30-05-2024	109	31	2	5	106	Moderate

Station: MPT Quarters							City: Baina	
Duration:- May-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	09-05-2024	58	18	2	5	10	58	Satisfactory
2	10-05-2024	45	19	2	12	10	45	Good
3	15-05-2024	78	31	2	5	10	78	Satisfactory
4	16-05-2024	69	31	2	13	10	69	Satisfactory
5	22-05-2024	74	21	2	10	10	74	Satisfactory
6	27-05-2024	54	22	2	12	10	54	Satisfactory
7	29-05-2024	37	23	2	5	10	38	Good
8	31-05-2024	48	21	2	5	10	48	Good

Station: Fuse Call Office							City: Vasco	
Duration:- May-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	09-05-2024	50	18	2	9	10	50	Good
2	10-05-2024	37	24	2	16	10	40	Good
3	15-05-2024	37	26	2	15	10	43	Good
4	16-05-2024	34	32	2	20	10	53	Satisfactory
5	22-05-2024	73	28	2	5	10	73	Satisfactory
6	27-05-2024	49	29	2	5	10	49	Good
7	29-05-2024	50	22	2	9	10	50	Good
8	31-05-2024	69	16	2	11	10	69	Satisfactory

Station: Roof top of Municipal market						City: Ponda	
Duration:- May-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	06-05-2024	86	40	5	15	86	Satisfactory
2	09-05-2024	81	20	7	17	81	Satisfactory
3	13-05-2024	96	22	5	22	96	Satisfactory
4	16-05-2024	43	9	2	5	43	Good
5	20-05-2024	63	14	2	12	63	Satisfactory
6	21-05-2024	66	20	4	10	66	Satisfactory
7	23-05-2024	28	9	2	5	28	Good
8	24-05-2024	46	15	4	7	46	Good
9	27-05-2024	79	17	2	10	79	Satisfactory
10	30-05-2024	41	10	2	5	41	Good

Station:- Rooftop of Ravindra Bhavan Building						City:-Margao	
Duration:- May -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	06-05-2024	82	21	6	20	82	Satisfactory
2	09-05-2024	96	27	5	20	96	Satisfactory
3	13-05-2024	69	18	6	15	69	Satisfactory
4	16-05-2024	43	9	2	5	43	Good
5	20-05-2024	53	17	2	11	53	Satisfactory
6	21-05-2024	53	12	4	10	53	Satisfactory
7	23-05-2024	112	32	2	5	108	Moderate
8	24-05-2024	43	10	2	5	43	Good
9	27-05-2024	94	27	2	5	94	Satisfactory
10	30-05-2024	81	16	4	10	81	Satisfactory

Station: Residence of Mr. Rama Naik, Assanora Junction							City: Assanora
Duration:- May-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	06-05-2024	87	18	5	17	87	Satisfactory
2	09-05-2024	89	21	2	12	89	Satisfactory
3	13-05-2024	78	30	5	15	78	Satisfactory
4	16-05-2024	80	16	4	10	80	Satisfactory
5	20-05-2024	52	7	2	5	52	Satisfactory
6	21-05-2024	77	22	5	16	77	Satisfactory
7	23-05-2024	69	20	2	5	69	Satisfactory
8	24-05-2024	63	17	4	17	63	Satisfactory
9	27-05-2024	76	21	4	10	76	Satisfactory
10	30-05-2024	104	30	2	9	102	Moderate

Station: Residence of Mr. Sagun Ramkrishna Fadte							City: Amona
Duration:- May-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	06-05-2024	57	16	5	14	57	Satisfactory
2	09-05-2024	77	21	7	20	77	Satisfactory
3	13-05-2024	73	16	5	16	73	Satisfactory
4	16-05-2024	37	7	2	5	37	Good
5	20-05-2024	45	13	2	9	45	Good
6	21-05-2024	64	19	6	14	64	Satisfactory
7	23-05-2024	47	12	4	5	47	Good
8	24-05-2024	56	15	5	18	56	Satisfactory
9	27-05-2024	69	24	4	5	69	Satisfactory
10	30-05-2024	52	20	2	5	52	Satisfactory

Station: Municipality Building						City: Bicholim	
Duration:- May-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	06-05-2024	85	21	6	16	85	Satisfactory
2	09-05-2024	62	15	6	12	62	Satisfactory
3	13-05-2024	66	19	6	18	66	Satisfactory
4	16-05-2024	50	10	2	9	50	Satisfactory
5	20-05-2024	44	9	2	5	44	Good
6	21-05-2024	52	14	2	7	52	Satisfactory
7	23-05-2024	43	12	2	5	43	Good
8	24-05-2024	46	15	2	4	46	Good
9	27-05-2024	58	16	4	5	58	Satisfactory
10	30-05-2024	55	15	2	5	55	Satisfactory

Station: Near Ajoba temple, Honda junction						City: Honda	
Duration:- May-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	06-05-2024	71	22	7	15	71	Satisfactory
2	09-05-2024	69	17	4	18	69	Satisfactory
3	13-05-2024	61	20	5	16	61	Satisfactory
4	16-05-2024	53	13	2	5	53	Satisfactory
5	20-05-2024	61	15	2	13	61	Satisfactory
6	21-05-2024	55	15	6	12	55	Satisfactory
7	23-05-2024	31	9	2	5	31	Good
8	24-05-2024	57	13	7	21	57	Satisfactory
9	27-05-2024	64	17	5	5	64	Satisfactory
10	30-05-2024	43	12	2	5	43	Good

Station:- Usgao Junction						City:-Usgao	
Duration:-May -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	06-05-2024	49	11	7	9	49	Good
2	09-05-2024	86	16	6	19	86	Satisfactory
3	13-05-2024	84	22	5	16	84	Satisfactory
4	16-05-2024	49	12	2	5	49	Good
5	20-05-2024	53	13	2	10	53	Satisfactory
6	21-05-2024	62	20	2	11	62	Satisfactory
7	23-05-2024	74	27	2	5	74	Satisfactory
8	24-05-2024	68	17	5	13	68	Satisfactory
9	27-05-2024	72	18	5	5	72	Satisfactory
10	30-05-2024	82	21	2	5	82	Satisfactory

Station:- Premises of Somnath English High School						City:-Codli	
Duration:-May-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	06-05-2024	99	21	5	14	99	Satisfactory
2	09-05-2024	74	21	6	19	74	Satisfactory
3	13-05-2024	79	27	4	16	79	Satisfactory
4	16-05-2024	73	14	5	11	73	Satisfactory
5	20-05-2024	63	16	2	13	63	Satisfactory
6	21-05-2024	51	12	2	14	51	Satisfactory
7	23-05-2024	51	17	2	5	51	Satisfactory
8	24-05-2024	46	12	2	5	46	Good
9	27-05-2024	55	23	2	5	55	Satisfactory
10	30-05-2024	40	9	2	9	40	Good

Station:- Rooftop of Sanguem Municipality Building						City:-Sanguem	
Duration:- May-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	06-05-2024	72	17	8	16	72	Satisfactory
2	09-05-2024	72	22	5	15	72	Satisfactory
3	13-05-2024	65	12	6	16	65	Satisfactory
4	16-05-2024	40	11	2	11	40	Good
5	20-05-2024	51	15	2	5	51	Satisfactory
6	21-05-2024	58	18	5	9	58	Satisfactory
7	23-05-2024	34	12	2	5	34	Good
8	24-05-2024	56	12	4	11	56	Satisfactory
9	27-05-2024	72	22	2	9	72	Satisfactory
10	30-05-2024	69	21	2	9	69	Satisfactory

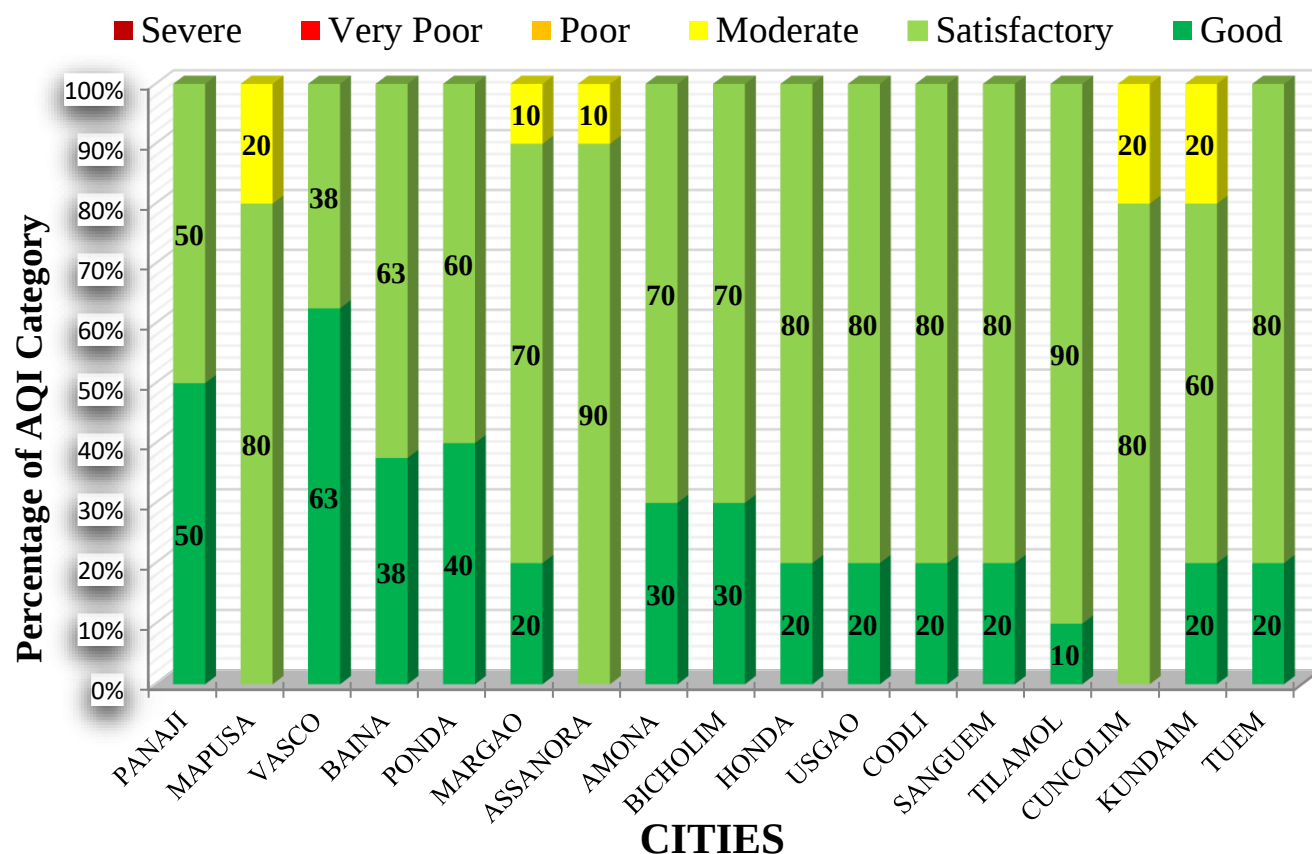
Station:- Tilamol Junction						City:-Tilamol	
Duration:-May-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in $\mu\text{g}/\text{m}^3$					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	06-05-2024	80	18	6	17	80	Satisfactory
2	09-05-2024	88	16	2	15	88	Satisfactory
3	13-05-2024	65	16	6	16	65	Satisfactory
4	16-05-2024	53	15	2	11	53	Satisfactory
5	20-05-2024	53	11	2	13	53	Satisfactory
6	21-05-2024	79	21	5	13	79	Satisfactory
7	23-05-2024	37	9	2	5	37	Good
8	24-05-2024	64	18	4	12	64	Satisfactory
9	27-05-2024	61	18	6	5	61	Satisfactory
10	30-05-2024	72	18	2	5	72	Satisfactory

Station:- Rooftop of Power Station, Cuncolim Ind Estate						City:-Cuncolim	
Duration:- May-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	06-05-2024	100	25	6	14	100	Satisfactory
2	09-05-2024	85	23	4	12	85	Satisfactory
3	13-05-2024	90	27	5	17	90	Satisfactory
4	16-05-2024	57	14	4	11	57	Satisfactory
5	20-05-2024	83	21	4	12	83	Satisfactory
6	21-05-2024	82	25	5	14	82	Satisfactory
7	23-05-2024	62	19	2	5	62	Satisfactory
8	24-05-2024	97	30	4	17	97	Satisfactory
9	27-05-2024	111	37	2	9	107	Moderate
10	30-05-2024	128	31	2	5	119	Moderate

Station: Near IDC Office						City: Kundaim	
Duration:- May-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	06-05-2024	106	30	6	13	104	Moderate
2	09-05-2024	91	24	5	14	91	Satisfactory
3	13-05-2024	104	37	4	18	103	Moderate
4	16-05-2024	83	17	2	9	83	Satisfactory
5	20-05-2024	72	23	2	15	72	Satisfactory
6	21-05-2024	66	18	3	11	66	Satisfactory
7	23-05-2024	38	11	2	5	38	Good
8	24-05-2024	88	20	4	14	88	Satisfactory
9	27-05-2024	48	12	2	10	48	Good
10	30-05-2024	51	11	2	5	51	Satisfactory

Station: Near ESIC Hospital , Tuem Industrial Estate							City: Tuem
Duration:- May-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	06-05-2024	99	35	6	18	99	Satisfactory
2	09-05-2024	80	23	7	15	80	Satisfactory
3	13-05-2024	86	23	4	17	86	Satisfactory
4	16-05-2024	45	10	2	5	45	Good
5	20-05-2024	49	11	2	10	49	Good
6	21-05-2024	82	25	4	14	82	Satisfactory
7	23-05-2024	60	14	2	5	60	Satisfactory
8	24-05-2024	75	19	3	15	75	Satisfactory
9	27-05-2024	73	24	2	11	73	Satisfactory
10	30-05-2024	59	13	2	5	59	Satisfactory

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



Results and Interpretation:

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

Good to Satisfactory at 6 locations namely – Panaji, Vasco, Baina, Ponda, Amona and Bicholim

Good to Satisfactory to Moderate at 2 locations namely – Margao and Kundaim

Dominantly Satisfactory at 9 locations namely – Mapusa, , Assanora, Honda, Usgao, Codlim, Sanguem, Tilamol, Cuncolim and Tuem.

(Dominant refers to 75% and above)