

MONTHLY AAQM DATA ALONG WITH AQI FOR 17 NAMP STATION

AUGUST 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:-August - 2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	1-Hr	1-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	02-08-2024	33	15	6	14	0.58	3	0.01	33	Good
2	06-08-2024	36	18	7	15	0.63	4	0.01	36	Good
3	09-08-2024	32	16	7	15	0.58	4	0.02	32	Good
4	13-08-2024	34	18	7	16	0.63	6	0.02	34	Good
5	16-08-2024	33	18	8	17	0.75	7	0.01	38	Good
6	20-08-2024	35	18	8	17	0.71	7	0.01	36	Good
7	23-08-2024	31	17	7	17	0.68	5	0.01	34	Good
8	27-08-2024	35	18	7	17	0.79	7	0.01	40	Good
9	30-08-2024	37	18	8	18	0.81	7	0.01	41	Good

Station: Within the premises of Municipality building							City :Mapusa			
Duration:-August - 2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	1-Hr	1-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	02-08-2024	33	15	6	14	0.58	2.87	0.01	33	Good
2	06-08-2024	36	18	7	15	0.63	3.51	0.01	36	Good
3	09-08-2024	32	16	7	15	0.58	4.14	0.02	32	Good
4	13-08-2024	34	18	7	16	0.63	6.48	0.02	34	Good
5	16-08-2024	33	18	8	17	0.75	6.78	0.01	38	Good
6	20-08-2024	35	18	8	17	0.71	6.78	0.01	36	Good
7	23-08-2024	31	17	7	17	0.68	5.24	0.01	34	Good
8	27-08-2024	35	18	7	17	0.79	7.09	0.01	40	Good
9	30-08-2024	37	18	8	18	0.81	7.40	0.01	41	Good

Station: Fuse Call Office							City: Vasco	
Duration:- August-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	03-08-2024	34	19	2	5	10	34	Good
2	09-08-2024	30	12	2	10	10	30	Good
3	13-08-2024	37	29	2	9	10	48	Good
4	16-08-2024	43	16	2	5	10	43	Good
5	21-08-2024	20	14	2	11	10	23	Good
6	23-08-2024	16	12	2	10	10	20	Good
7	28-08-2024	54	11	2	5	10	54	Satisfactory
8	30-08-2024	16	13	2	5	10	21	Good

Station: MPT Quarters							City: Baina	
Duration:- August-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	03-08-2024	94	35	2	10	10	94	Satisfactory
2	09-08-2024	99	18	2	10	10	99	Satisfactory
3	13-08-2024	84	25	2	5	10	84	Satisfactory
4	16-08-2024	70	34	2	5	10	70	Satisfactory
5	21-08-2024	39	21	2	10	10	39	Good
6	23-08-2024	42	27	2	9	10	45	Good
7	28-08-2024	136	5	2	5	10	124	Moderate
8	30-08-2024	29	14	2	5	10	29	Good

Station: Roof top of Municipal market									City: Ponda	
Duration:-August - 2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	1-Hr	1-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	01-08-2024	24	13	7	13	0.57	4	0.010	29	Good
2	05-08-2024	28	15	6	14	0.62	4	0.010	31	Good
3	08-08-2024	30	16	6	13	0.59	5	0.010	30	Good
4	12-08-2024	30	18	6	15	0.64	6	0.020	32	Good
5	16-08-2024	32	16	7	15	0.72	6	0.010	36	Good
6	19-08-2024	30	15	7	15	0.75	6	0.010	38	Good
7	22-08-2024	26	14	6	14	0.48	5	0.010	26	Good
8	26-08-2024	29	16	6	14	0.51	7	0.010	29	Good
9	29-08-2024	31	17	7	16	0.62	6	0.010	31	Good

Station: Rooftop of Ravindra Bhavan Building									City:-Margao	
Duration:- August-2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	02-08-2024	24	15	5	10	0.29	4	0.01	24	Good
2	07-08-2024	26	15	6	10	0.36	5	0.01	26	Good
3	09-08-2024	27	15	6	13	0.28	5	0.02	27	Good
4	14-08-2024	29	16	7	13	0.25	5	0.01	29	Good
5	16-08-2024	26	15	7	12	0.34	6	0.01	26	Good
6	21-08-2024	29	15	7	13	0.31	6	0.01	29	Good
7	23-08-2024	25	14	6	13	0.27	5	0.01	25	Good
8	28-08-2024	32	18	7	13	0.34	7	0.01	32	Good
9	30-08-2024	30	16	7	14	0.28	7	0.01	30	Good

Station: Residence of Mr. Rama Naik, Assanora Junction									City: Assanora	
Duration:-August - 2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTy
		24-Hr	24-Hr	24-Hr	24-Hr	1-Hr	1-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	02-08-2024	23	13	6	10	0.25	3	0.010	23	Good
2	06-08-2024	25	14	6	12	0.31	4	0.010	25	Good
3	09-08-2024	26	13	7	12	0.38	6	0.010	26	Good
4	13-08-2024	27	15	7	13	0.45	6	0.010	27	Good
5	16-08-2024	30	16	7	14	0.37	6	0.010	30	Good
6	20-08-2024	28	16	7	14	0.42	7	0.010	28	Good
7	23-08-2024	26	14	6	12	0.39	6	0.010	26	Good
8	27-08-2024	30	15	8	13	0.45	6	0.010	30	Good
9	30-08-2024	29	16	7	14	0.36	7	0.010	29	Good

Station: Residence of Mr. Sagun Ramkrishna Fadte									City: Amona	
Duration:- - August - 2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	1-Hr	1-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	01-08-2024	36	18	7	15	0.69	4.14	0.02	36	Good
2	05-08-2024	37	20	8	15	0.72	5.1	0.02	37	Good
3	08-08-2024	38	22	9	16	0.83	6.7	0.01	42	Good
4	12-08-2024	42	24	10	19	0.96	7.4	0.01	48	Good
5	16-08-2024	41	23	9	18	0.98	8.33	0.01	49	Good
6	19-08-2024	41	23	9	19	0.91	7.71	0.02	46	Good
7	22-08-2024	32	17	9	17	0.62	7.09	0.01	32	Good
8	26-08.2024	36	20	9	18	0.73	8.33	0.01	37	Good
9	29-08-2024	40	21	10	18	0.68	8.63	0.01	40	Good

Station: Municipality Building									City: Bicholim	
Duration:-August - 2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTy
		24-Hr	24-Hr	24-Hr	24-Hr	1-Hr	1-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	03-08-2024	43	23	8	15	0.84	4.78	0.010	1	Good
2	07-08-2024	40	22	9	14	0.92	5.74	0.010	2	Good
3	10-08-2024	45	23	9	16	0.96	7.33	0.010	3	Good
4	14-08-2024	43	21	10	19	0.91	8.63	0.010	4	Good
5	17-08-2024	40	22	8	15	0.88	8.94	0.010	5	Good
6	21-08-2024	37	20	10	16	0.95	9.25	0.010	6	Good
7	24-08-2024	42	22	9	17	0.93	9.56	0.010	7	Good
8	28-08-2024	62	30	12	20	1.26	13.88	0.010	8	Good
9	30-08-2024	33	18	8	14	0.58	8	0.010	33	Good

Station: Near Ajoba temple, Honda junction									City: Honda	
Duration:-August - 2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTy
		24-Hr	24-Hr	24-Hr	24-Hr	1-Hr	1-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	01-08-2024	29	15	6	12	0.56	5	0.010	29	Good
2	05-08-2024	25	15	6	11	0.42	4	0.020	25	Good
3	08-08-2024	27	13	6	14	0.37	6	0.020	27	Good
4	12-08-2024	28	16	7	15	0.41	6	0.010	28	Good
5	16-08-2024	30	16	7	15	0.48	6	0.010	30	Good
6	19-08-2024	30	17	7	14	0.45	7	0.010	30	Good
7	22-08-2024	28	15	7	14	0.32	6	0.010	28	Good
8	26-08-2024	29	15	6	14	0.28	6	0.010	29	Good
9	29-08-2024	33	18	7	15	0.35	7	0.010	33	Good

Station:- Usgao Junction									City:-Usgao	
Duration:- August -2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	01-08-2024	37	20	8	14	0.75	4	0.01	38	Good
2	05-08-2024	39	21	8	15	0.78	5	0.01	39	Good
3	08-08-2024	37	20	8	17	0.65	7	0.02	37	Good
4	12-08-2024	45	25	9	19	0.73	7	0.01	45	Good
5	16-08-2024	42	24	9	18	0.62	7	0.01	42	Good
6	19-08-2024	41	22	9	18	0.77	8	0.02	41	Good
7	22-08-2024	31	17	8	18	0.61	7	0.02	31	Good
8	26-08-2024	37	19	9	16	0.65	8	0.02	37	Good
9	29-08-2024	39	21	9	17	0.68	9	0.01	39	Good

Premises of Somnath English High S									City:-Codli	
Duration:- August-2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	03-08-2024	27	13	6	13	0.25	3	0.02	27	Good
2	07-08-2024	30	15	7	14	0.31	4	0.01	30	Good
3	10-08-2024	28	15	8	13	0.45	4	0.02	28	Good
4	14-08-2024	26	16	7	14	0.51	4	0.02	26	Good
5	17-08-2024	28	16	7	20	0.42	5	0.02	28	Good
6	21-08-2024	31	17	8	15	0.46	5	0.02	31	Good
7	24-08-2024	26	14	7	15	0.39	6	0.01	26	Good
8	28-08-2024	27	15	8	16	0.42	6	0.01	27	Good
9	31-08-2024	30	13	7	15	0.31	6	0.01	30	Good

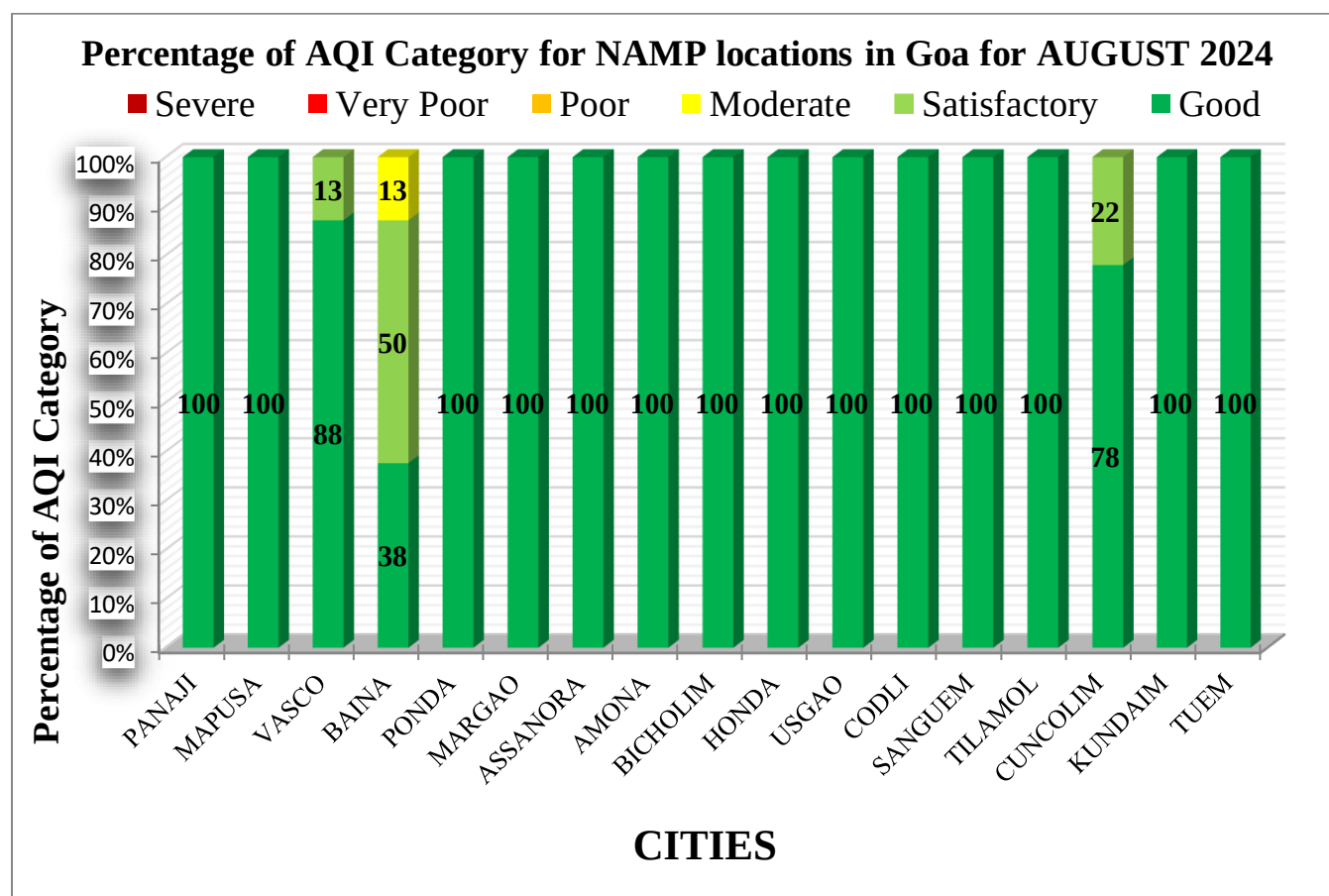
Station: Rooftop of Sanguem Municipality Building									City: Sanguem	
Duration:- August-2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	03-08-2024	34	15	7	13	0.32	4	0.02	34	Good
2	07-08-2024	31	15	6	13	0.28	5	0.02	31	Good
3	10-08-2024	29	15	7	14	0.35	5	0.01	29	Good
4	14-08-2024	28	17	7	14	0.29	6	0.02	28	Good
5	17-08-2024	25	15	7	15	0.38	5.86	0.01	25	Good
6	21-08-2024	29	16	7	15	0.32	6.17	0.01	29	Good
7	24-08-2024	26	14	6	13	0.27	5.55	0.01	26	Good
8	28-08-2024	28	15	7	14	0.31	6.48	0.01	28	Good
9	31-08-2024	31	16	7	15	0.34	6.78	0.01	31	Good

Station: Tilamol Junction									City: Tilamol	
Duration:- August-2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	03-08-2024	37	20	9	17	0.71	4.5	0.010	37	Good
2	07-08-2024	40	21	9	19	0.75	5.4	0.010	40	Good
3	10-08-2024	41	21	9	16	0.72	6.7	0.020	41	Good
4	14-08-2024	39	20	8	5	0.83	7.4	0.010	42	Good
5	17-08-2024	42	23	8	15	0.76	7.7	0.010	42	Good
6	21-08-2024	43	23	9	15	0.83	8.3	0.020	43	Good
7	24-08-2024	41	21	9	10	0.72	7.1	0.010	41	Good
8	28-08-2024	45	23	10	14	0.91	8.3	0.020	46	Good
9	31-08-2024	39	21	8	13	0.84	7.4	0.010	42	Good

Station: Rooftop of Power Station, Cuncolim Ind Estate									City: Cuncolim	
Duration:- September-2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	03-08-2024	43	23	8	15	0.84	4.78	0.010	43	Good
2	07-08-2024	40	22	9	14	0.92	5.74	0.010	46	Good
3	10-08-2024	45	23	9	16	0.96	7.33	0.010	48	Good
4	14-08-2024	43	21	10	19	0.91	8.63	0.010	46	Good
5	17-08-2024	40	22	8	15	0.88	8.94	0.010	44	Good
6	21-08-2024	37	20	10	16	0.95	9.25	0.010	48	Good
7	24-08-2024	42	22	9	17	0.93	9.56	0.010	47	Good
8	28-08-2024	62	30	12	20	1.26	13.88	0.010	63	Satisfactory
9	31-08-2024	47	23	11	19	1.02	9.25	0.010	51	Satisfactory

Station: Near IDC Office					City: Kundaim					
Duration:- August - 2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTy
		24-Hr	24-Hr	24-Hr	24-Hr	1-Hr	1-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	01-08-2024	27	13	6	11	0.65	4	0.010	33	Good
2	05-08-2024	27	13	7	12	0.41	5	0.020	27	Good
3	08-08-2024	32	17	8	14	0.72	6	0.010	36	Good
4	12-08-2024	46	26	11	19	0.93	8	0.010	47	Good
5	16-08-2024	44	24	10	19	0.82	9	0.010	44	Good
6	19-08-2024	44	21	10	17	0.77	9	0.010	44	Good
7	22-08-2024	34	16	9	17	0.62	9	0.010	34	Good
8	26-08-2024	38	20	9	18	0.74	10	0.010	38	Good
9	29-08-2024	42	24	10	19	0.81	10	0.010	42	Good

Station: Near ESIC Hospital , Tuem Industrial Estate									City: Tuem	
Duration: August - 2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTy
		24-Hr	24-Hr	24-Hr	24-Hr	1-Hr	1-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	02-08-2024	38	19	8	14	0.79	4	0.010	40	Good
2	06-08-2024	40	22	9	14	0.75	5	0.020	40	Good
3	09-08-2024	40	20	8	16	0.63	7	0.010	40	Good
4	13-08-2024	44	25	9	18	0.79	9	0.010	44	Good
5	16-08-2024	41	22	9	17	0.83	8	0.010	42	Good
6	20-08-2024	39	23	8	17	0.88	9	0.020	44	Good
7	23-08-2024	36	18	9	17	0.73	9	0.010	37	Good
8	27-08-2024	45	21	9	18	0.79	10	0.010	45	Good
9	30.08-2024	41	21	10	18	0.77	9	0.010	41	Good



Results and Interpretation:

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

Dominantly Good at 14 locations namely – Panaji, Mapusa, Ponda, Margao, Assanora, Amona, Bicholim, Honda, Usgao, Codli, Sanguem, Tilamol, Kundaim and Tuem

Good to Satisfactory at 1 locations namely –Vasco

Good to Satisfactory to Moderate at 1 location namely – Cuncolim

Satisfactory to Moderate to Poor at 1 location namely –Baina

(Dominant refers to 75% and above)