

MONTHLY AAQM DATA ALONG WITH AQI FOR 18 NAMP STATION

NOVEMBER 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:-November - 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	01-11-2024	119	65	14	20	1.33	20.84	0.04	117	Moderate
2	02-11-2024	103	57	11	17	1.08	21.75	0.10	102	Moderate
3	03-11-2024	124	67	15	22	1.47	22.37	0.07	123	Moderate
4	04-11-2024	78	40	12	16	0.48	20.53	0.13	78	Satisfactory
5	05-11-2024	86	42	12	19	0.63	19.30	0.05	86	Satisfactory
6	06-11-2024	98	48	13	21	1.23	21.45	0.19	98	Satisfactory
7	07-11-2024	73	38	11	15	0.32	22.67	0.06	73	Satisfactory
8	08-11-2024	91	47	10	20	0.62	17.35	0.11	91	Satisfactory
9	12-11-2024	96	47	14	19	0.62	16.74	0.10	96	Satisfactory
10	15-11-2024	88	44	11	17	0.57	18.57	0.06	88	Satisfactory
11	19-11-2024	90	47	10	16	0.57	16.14	0.07	90	Satisfactory
12	22-11-2024	81	41	12	17	0.52	17.05	0.03	81	Satisfactory
13	26-11-2024	78	41	12	17	0.62	17.66	0.03	78	Satisfactory
14	29-11-2024	75	38	11	15	0.62	16.44	0.02	75	Satisfactory

Station: Within the premises of Municipality building							City :Mapusa			
Duration:-November - 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	02-11-2024	81	44	13	18	0.74	16	0.04	81	Satisfactory
2	05-11-2024	70	36	11	16	0.69	17	0.02	70	Satisfactory
3	09-11-2024	76	41	12	17	0.84	16	0.03	76	Satisfactory
4	12-11-2024	86	49	12	19	0.53	15	0.03	86	Satisfactory
5	16-11-2024	79	38	10	17	0.95	16	0.09	79	Satisfactory
6	19-11-2024	83	42	12	19	0.77	14	0.05	83	Satisfactory
7	23-11-2024	75	37	11	17	0.64	17	0.05	75	Satisfactory
8	26-11-2024	82	44	12	18	0.89	15	0.04	82	Satisfactory
9	29-11-2024	89	46	13	19	0.97	17	0.05	89	Satisfactory

Station: Fuse Call Office						City: Vasco		
Duration:- November-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	01-11-2024	57	46	34	7	10	77	Satisfactory
2	06-11-2024	43	15	2	5	10	43	Good
3	08-11-2024	53	23	2	10	10	53	Satisfactory
4	13-11-2024	81	45	2	13	10	81	Satisfactory
5	15-11-2024	23	22	2	5	10	37	Good
6	20-11-2024	85	58	2	12	10	97	Satisfactory
7	22-11-2024	100	78	2	5	10	160	Moderate
8	27-11-2024	128	59	2	14	10	119	Moderate
9	29-11-2024	109	65	5	5	10	117	Moderate

Station: MPT Quarters						City: Baina		
Duration:- November-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	01-11-2024	58	MB	17	30	10	58	Satisfactory
2	06-11-2024	66	MB	5	5	10	66	Satisfactory
3	08-11-2024	61	MB	2	5	10	61	Satisfactory
4	13-11-2024	71	MB	2	17	10	71	Satisfactory
5	15-11-2024	37	MB	2	12	10	37	Good
6	20-11-2024	97	MB	2	12	10	97	Satisfactory
7	22-11-2024	71	MB	6	14	10	71	Satisfactory
8	27-11-2024	116	MB	2	20	10	111	Moderate
9	29-11-2024	110	MB	2	11	10	107	Moderate

Station: Roof top of Municipal market									City: Ponda	
Duration:-November - 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	04-11-2024	75	37	13	16	0.89	12	0.01	75	Satisfactory
2	07-11-2024	82	42	11	19	0.94	15	0.01	82	Satisfactory
3	11-11-2024	73	35	12	18	0.62	17	0.01	73	Satisfactory
4	14-11-2024	69	33	11	16	0.78	16	0.01	69	Satisfactory
5	18-11-2024	77	40	14	18	0.83	17	0.01	77	Satisfactory
6	21-11-2024	65	33	13	17	0.71	15	0.01	65	Satisfactory
7	25-11-2024	71	37	12	16	0.65	16	0.01	71	Satisfactory
8	28-11-2024	74	35	12	17	0.52	17	0.03	74	Satisfactory

Station: Rooftop of Ravindra Bhavan Building								City:-Margao		
Duration:- November-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	01-11-2024	73	35	10	16	0.48	17	0.01	73	Satisfactory
2	06-11-2024	65	33	10	17	0.55	18	0.09	65	Satisfactory
3	08-11-2024	80	36	10	16	0.32	15	0.03	80	Satisfactory
4	13-11-2024	71	37	11	18	0.51	17	0.03	71	Satisfactory
5	15-11-2024	65	32	10	16	0.38	16	0.04	65	Satisfactory
6	20-11-2024	69	36	10	17	0.42	19	0.02	69	Satisfactory
7	22-11-2024	75	38	10	17	0.33	17	0.04	75	Satisfactory
8	27-11-2024	72	35	9	15	0.46	16	0.02	72	Satisfactory
9	29-11-2024	66	32	11	16	0.59	18	0.02	66	Satisfactory

Station: Residence of Mr. Rama Naik, Assanora Junction								City: Assanora		
Duration: November - 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	01-11-2024	63	33	10	17	0.41	16	0.01	63	Satisfactory
2	05-11-2024	59	30	9	15	0.33	17	0.02	59	Satisfactory
3	08-11-2024	71	38	10	17	0.25	15	0.02	71	Satisfactory
4	12-11-2024	69	34	11	14	0.58	16	0.02	69	Satisfactory
5	15-11-2024	61	32	10	16	0.44	16	0.01	61	Satisfactory
6	19-11-2024	66	35	10	15	0.32	15	0.03	66	Satisfactory
7	22-11-2024	63	33	10	15	0.56	15	0.02	63	Satisfactory
8	27-11-2024	69	36	9	16	0.28	14	0.02	69	Satisfactory
9	29-11-2024	75	37	11	16	0.37	16	0.02	75	Satisfactory

Station: Residence of Mr. Sagun Ramkrishna Fadte								City: Amona		
Duration:- - Novemberr - 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	04-11-2024	85	43	14	20	0.96	18	0.06	85	Satisfactory
2	07-11-2024	96	47	12	21	1.12	22	0.12	96	Satisfactory
3	11-11-2024	97	47	14	19	0.83	17	0.03	97	Satisfactory
4	14-11-2024	92	43	11	20	0.78	16	0.04	92	Satisfactory
5	18-11-2024	104	48	13	18	0.95	19	0.46	103	Moderate
6	21-11-2024	90	43	12	16	0.64	16	0.09	90	Satisfactory
7	25-11-2024	95	46	13	18	0.33	18	0.04	95	Satisfactory
8	28-11-2024	83	41	13	17	0.57	19	0.03	83	Satisfactory

Station: Municipality Building							City: Bicholim			
Duration: November - 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	01-11-2024	63	31	10	16	0.71	14	0.13	63	Satisfactory
2	05-11-2024	77	40	14	18	0.48	17	0.03	77	Satisfactory
3	08-11-2024	85	44	12	17	0.63	14	0.02	85	Satisfactory
4	12-11-2024	93	44	13	21	0.51	15	0.04	93	Satisfactory
5	15-11-2024	81	37	10	16	0.68	15	0.01	81	Satisfactory
6	19-11-2024	86	42	11	18	0.43	17	0.07	86	Satisfactory
7	22-11-2024	79	38	11	16	0.54	16	0.02	79	Satisfactory
8	26-11-2024	85	41	9	15	0.60	17	0.04	85	Satisfactory
9	29-11-2024	93	44	12	17	0.39	17	0.02	93	Satisfactory

Station: Near Ajoba temple, Honda junction								City: Honda		
Duration:- November - 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	04-11-2024	64	32	11	20	0.62	15	0.01	64	Satisfactory
2	07-11-2024	75	38	10	17	0.83	17	0.01	75	Satisfactory
3	11-11-2024	64	32	11	20	0.71	16	0.01	64	Satisfactory
4	14-11-2024	73	38	10	18	0.34	17	0.01	73	Satisfactory
5	18-11-2024	78	36	10	16	0.45	15	0.03	78	Satisfactory
6	21-11-2024	68	34	10	15	0.69	16	0.03	68	Satisfactory
7	25-11-2024	79	41	10	16	0.52	16	0.02	79	Satisfactory
8	28-11-2024	72	36	9	16	0.29	16	0.02	72	Satisfactory

Station:- Usgao Junction									City:-Usgao	
Duration:- November-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	04-11-2024	73	34	12	18	0.72	18	0.01	73	Satisfactory
2	07-11-2024	85	41	14	19	0.89	20	0.01	85	Satisfactory
3	11-11-2024	84	46	11	17	0.61	18	0.02	84	Satisfactory
4	14-11-2024	79	38	12	20	0.57	17	0.04	79	Satisfactory
5	18-11-2024	74	36	11	18	0.78	18	0.02	74	Satisfactory
6	21-11-2024	80	41	11	16	0.45	15	0.02	80	Satisfactory
7	25-11-2024	76	38	11	18	0.66	16	0.02	76	Satisfactory
8	29-11-2024	83	38	11	17	0.51	17	0.03	83	Satisfactory

Premises of Somnath English High School									City:-Codli	
Duration:- November -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	02-11-2024	64	32	10	16	0.29	16	0.01	64	Satisfactory
2	06-11-2024	76	36	11	16	0.42	18	0.11	76	Satisfactory
3	09-11-2024	69	35	10	15	0.53	15	0.01	69	Satisfactory
4	13-11-2024	79	38	12	17	0.34	17	0.01	79	Satisfactory
5	16-11-2024	83	41	11	16	0.45	16	0.03	83	Satisfactory
6	20-11-2024	71	37	10	16	0.38	17	0.04	71	Satisfactory
7	23-11-2024	67	34	10	16	0.25	17	0.08	67	Satisfactory
8	27-11-2024	70	38	10	15	0.31	16	0.12	70	Satisfactory
9	30-11-2024	68	36	10	15	0.47	16	0.03	68	Satisfactory

Station: Rooftop of Sanguem Municipality Building								City: Sanguem		
Duration:- November-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	02-11-2024	78	38	12	16	0.52	15	0.03	78	Satisfactory
2	06-11-2024	73	34	11	16	0.77	18	0.02	73	Satisfactory
3	09-11-2024	66	33	10	15	0.69	16	0.02	66	Satisfactory
4	13-11-2024	78	39	10	15	0.72	17	0.02	78	Satisfactory
5	16-11-2024	73	35	11	17	0.84	15	0.01	73	Satisfactory
6	20-11-2024	69	33	11	16	0.57	17	0.02	69	Satisfactory
7	23-11-2024	74	34	11	18	0.63	16	0.04	74	Satisfactory
8	27-11-2024	65	32	10	15	0.71	16	0.02	65	Satisfactory
9	30-11-2024	69	35	11	16	0.49	17	0.01	69	Satisfactory

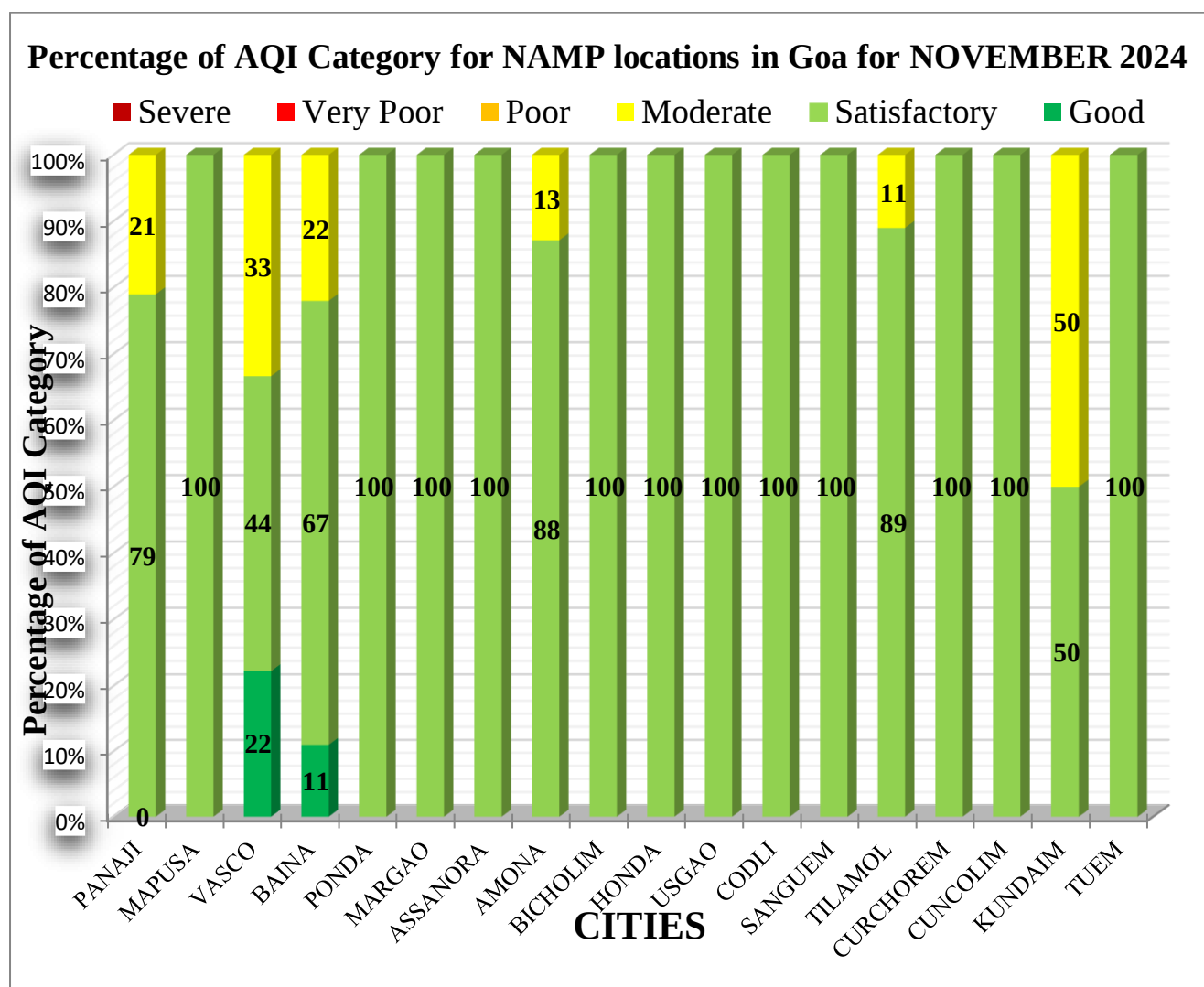
Station: Tilamol Junction								City: Tilamol		
Duration:- November -2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	02-11-2024	74	25	13	19	0.83	15	0.01	74	Satisfactory
2	06-11-2024	88	26	14	21	0.65	17	0.04	88	Satisfactory
3	09-11-2024	76	26	14	19	0.51	16	0.03	76	Satisfactory
4	13-11-2024	104	29	14	21	0.72	16	0.03	103	Moderate
5	16-11-2024	96	37	13	22	0.79	15	0.04	96	Satisfactory
29	20-11-2024	83	40	12	19	0.64	16	0.01	83	Satisfactory
7	23-11-2024	75	43	12	18	0.58	17	0.05	75	Satisfactory
8	27-11-2024	79	45	12	16	0.71	18	0.02	79	Satisfactory
9	30-11-2024	84	41	11	17	0.60	16	0.03	84	Satisfactory

Rooftop of Electricity panel room at GSUDA market City:-Curchorem										
Duration:- November -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	02-11-2024	95	47	15	20	0.82	18	0.04	95	Satisfactory
2	06-11-2024	70	38	13	17	0.65	19	<0.01	70	Satisfactory
3	09-11-2024	81	44	14	16	0.71	18	0.02	81	Satisfactory
4	13-11-2024	94	45	12	18	0.58	17	0.01	94	Satisfactory
5	16-11-2024	98	48	13	20	1.04	15	0.04	98	Satisfactory
6	20-11-2024	79	38	12	16	0.79	16	0.03	79	Satisfactory
7	23-11-2024	74	35	12	18	0.83	16	0.02	74	Satisfactory
8	27-11-2024	84	41	13	18	0.94	15	0.02	84	Satisfactory
9	30-11-2024	72	37	12	16	0.66	16	0.03	72	Satisfactory

Station: Rooftop of Power Station, Cuncolim Ind Estate							City: Cuncolim				
Duration:- November -2024											
Sr.No		Time Weighted Average (TWA)								AQI	AIR QLTY
		24-Hr	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 & As which is in ng/m3)									
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	As	Pb		
1	02-11-2024	88	44	13	21	0.55	16	<0.004	0.02	88	Satisfactory
2	06-11-2024	96	48	15	22	0.72	19	0.09	0.03	96	Satisfactory
3	09-11-2024	92	44	16	22	0.81	18	0.12	0.03	92	Satisfactory
4	13-11-2024	89	43	13	20	0.67	16	0.02	0.04	89	Satisfactory
5	16-11-2024	83	40	14	19	0.86	19	0.02	0.03	83	Satisfactory
6	20-11-2024	77	37	13	20	0.74	18	1.27	0.05	77	Satisfactory
7	23-11-2024	74	36	13	17	0.53	17	0.59	0.03	74	Satisfactory
8	28-11-2024	81	37	13	19	0.89	17	0.78	0.07	81	Satisfactory
9	30-11-2024	76	37	13	18	0.64	18	1.78	0.09	76	Satisfactory

Station: Near IDC Office					City: Kundaim						
Duration:- November - 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	04-11-2024	98	46	13	21	0.72	19	0.17	98	Satisfactory	
2	07-11-2024	96	46	11	18	0.96	20	0.05	96	Satisfactory	
3	11-11-2024	106	48	12	19	0.88	17	0.11	104	Moderate	
4	14-11-2024	89	42	10	17	0.65	16	0.35	89	Satisfactory	
5	18-11-2024	113	54	13	16	0.79	19	0.37	108	Moderate	
6	21-11-2024	93	48	11	17	1.16	17	0.26	93	Satisfactory	
7	25-11-2024	111	50	13	17	0.84	16	0.58	107	Moderate	
8	28-11-2024	115	53	13	18	0.73	18	0.25	110	Moderate	

Station: Near ESIC Hospital , Tuem Industrial Estate										
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Results and Interpretation:

It is seen that during the month of November 2024, out of 18 locations AQI is -

Good to Satisfactory to Moderate at 2 locations namely - Vasco and Baina

Dominantly Satisfactory at 15 locations namely – Panaji, Mapusa, Ponda, Margao, Assanora, Amona, Bicholim, Honda, Usgao, Codli, Sanguem, Tilamol, Curchorem, Cuncolim and Tuem

Satisfactory to Moderate at 1 location namely - Kundaim

(Dominant refers to 75% and above)