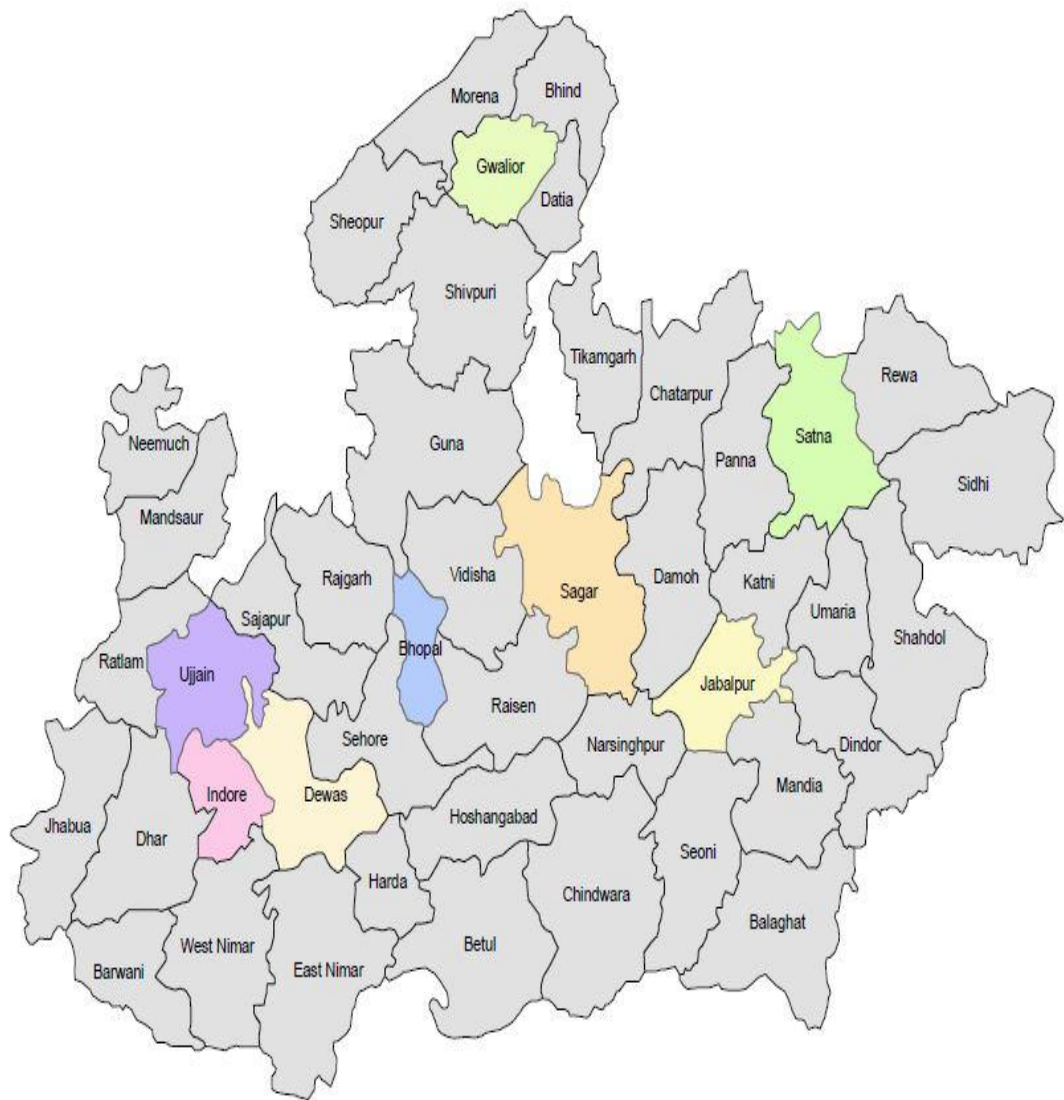


# Air Quality Index

(Madhya Pradesh)



**Central Pollution Control Board**  
**Zonal Office – Bhopal**

# INDEX

S. No.	PARTICULARS
1.	A Note on Air Quality Index (AQI) of Madhyapradesh
2.	Calculated AQI
3.	AQI Map based on 2014 NAMP data of Madhyapradesh

## Status of Air Quality in 09 Districts of Madhyapradesh w.r.t. Air Quality Index

Under National Ambient Air Quality Standards, 2009; 12 pollutants are notified based on short term & long term monitoring for Industrial/residential and Sensitive/ecological areas i.e. PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>2</sub>, NH<sub>3</sub>, Pb, O<sub>3</sub>, CO, Ni, As, B(a)P & Benzene. Under National Air Monitoring Program (NAMP), a huge quantity of data generates annually for prescribed parameters i.e. PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>2</sub>. CPCB evaluated the concept of Air quality Index (AQI) utilizing the data of Ambient Air Quality to ascertain the quality of air in terms of its probable impact on health and environment.

AQI is calculated for 03 parameters (PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>2</sub>) monitored under NAMP. The calculated values are categorized in 06 pollution categories i.e. Good, Satisfactory, Moderate, Poor, Very Poor & Severe as reported in AQI document.

With the help of mapping softwares i.e. *Autocad Map, Mapinfo & ArcGIS*; yearwise maps of air quality level at stations are also prepared.

Under National Air Monitoring Program (NAMP) program Air quality index of **22** Air Quality Monitoring Stations established in 09 districts of Madhyapradesh state was presented. At each station annually **104** days Air Pollutants (PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub>) level is being monitored on 24 hourly basis.

**The list of NAMP stations established in 9 districts is as below:**

District	Station Code	Location	Class of Area
Ujjain	526	Regional Office	Mixed
	527	District Office	Industrial
	528	Mahakal Temple	Mixed
	529	Chamunda Mata Chouraha, Nagar Nigam	Mixed
	84	BCI Labour Club Nagda	Residential
	246	Grasim Kalyan Kendra Nagda	Residential
Dewas	525	EID Perry (I) Limited	Industrial
Bhopal	122	Mrignayani Emporiyam, Hamidia Road	Commercial
	123	CETP, Govindpura AKVN Bhopal	Industrial
	247	Paryawaran Parisar, MPPCB, Bhopal	Mixed
	New	AKVN Mandideep Industrial Area	Industrial
	New	Kolar Police station, Kolar Road	Residential
Indore	127	M/s Indo-German Tool Room Sanwer Road, Indore	Industrial
	128	Secretary, Kothari Market Association, Indore	Commercial
	131	MPPCB, Sch. 78/C, Aranya, Vijay Nagar, Indore	Residential
Gwalior	478	Maharajbada, Nagar Nigam	Mixed
	479	Deen Dayal nagar, MPPCB, Regional Office, Gwalior	Mixed
Jabalpur	248	Plot No. 455/456, Vijay Nagar, Jabalpur	Residential
	New	M/s Udaipur Brewaries Rechhai	Industrial
Sagar	532	Pt. Deendayal Nagar Housing Board Colony	Residential
Satna	342	Regional Office MPPCB Dharwari	Residential
	343	Sub-Divisional Office E/M Light Machinery Satna	Industrial

**Ujjain** district has **06** NAMP stations established in industrial & mixed (commercial and residential) area to monitor air quality. Based on the available monitoring data of year 2014, AQI is calculated and the Air Quality at District office, Mahakal Temple & Chamunda Mata Chouraha (Nagar Nigam) found to be of **Moderate** level. Whereas at Regional Office, MPPCB the air quality found to be of **Satisfactory** level. Monitoring station operational at **Nagda** in residential area of M/s Grasim industries shows Satisfactory level of air quality.

NAMP station established in Industrial area of **Dewas** district at M/s EID Perry (I) Ltd has shown Satisfactory level of air pollutants.

**Bhopal**, the capital city of Madhya Pradesh has 05 operational NAMP stations in industrial, residential & mixed area. Station at AKVN Mandideep industrial area & Kolar Police Station are newly established and station code will be allotted soon. At all the 05 monitoring stations the air quality based on the 2014 data is found to be of **Moderate** level.

**Indore** district has 03 operational NAMP stations at residential, commercial & industrial area. At all the three monitoring locations the air quality found to be of **Moderate** level.

**Gwalior** has 02 NAMP stations established in mixed type of area and shows **Moderate** level of air quality.

**Jabalpur** has 02 NAMP station established in residential and industrial area to monitor the air quality. Station at M/s Udaipur Breweries Recchai is newly established. Monitoring station at residential area show **Satisfactory** level of air quality whereas station established at industrial area shows **Moderate** level of air quality.

**Sagar** district has 01 NAMP station established in residential area shows **Moderate** level of air quality.

**Satna** district has 02 NAMP stations established in residential & industrial area and both the stations show the **Moderate** level of air quality.

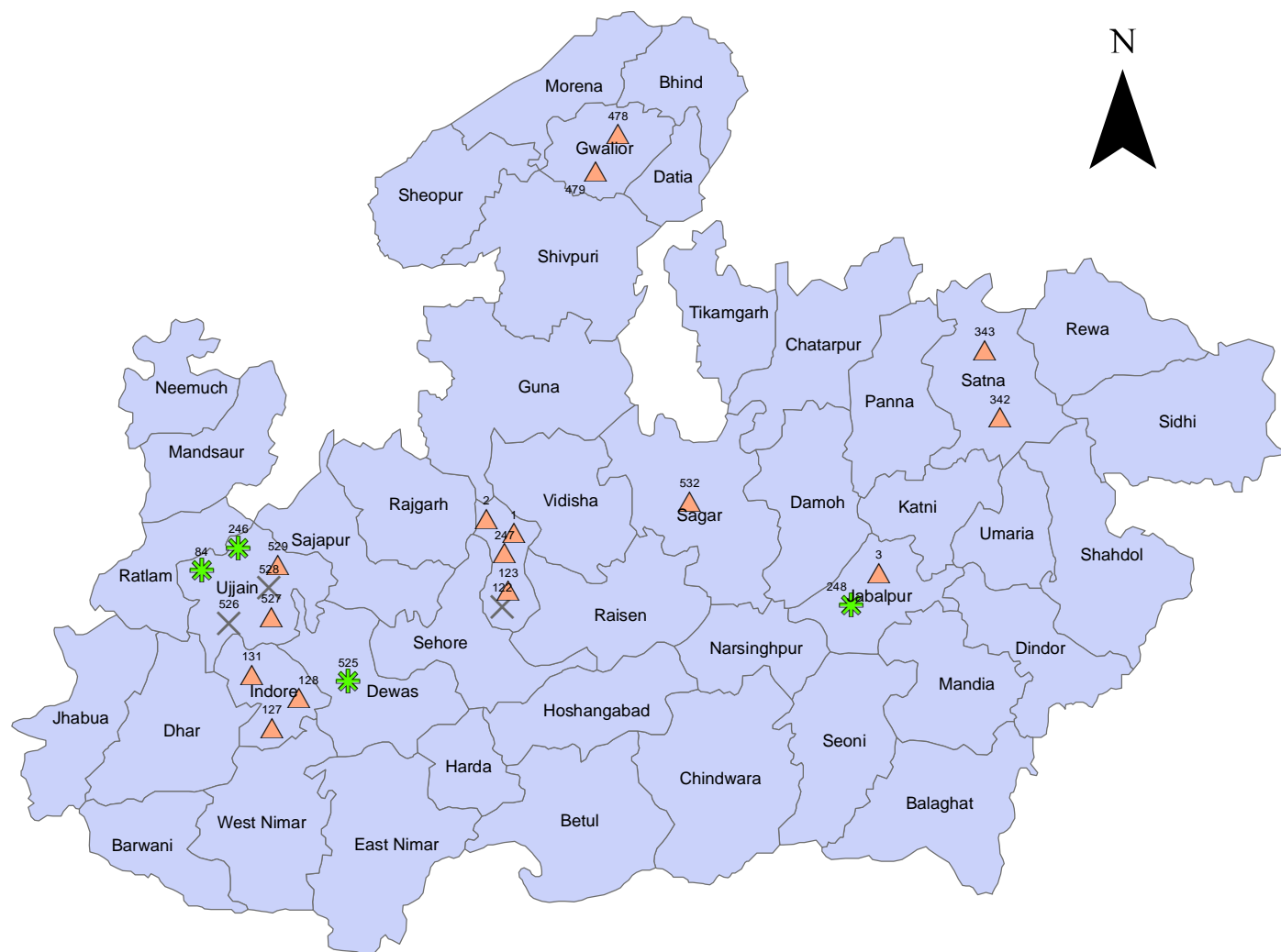
At most of the NAMP stations Air quality Index (AQI) is found to be of **Moderate** level which indicates that it may cause breathing discomfort to the people with possibility of lung disease such as asthma and discomfort to people with possibility of heart disease to Children and adults. The prominent air pollutant is **PM<sub>10</sub>**.

## Air Quality Index Of MadhyaPradesh

Name of City	Station Code	Location detail	Class of area	Category of Pollution		
				2013	2014	Upto June 2015
Ujjain	526	Regional Office	Mixed	Insufficient data*		Satisfactory
	527	District Office	Industrial	Moderate	Moderate	Moderate
	528	Mahakal Temple	Mixed	Insufficient data		Satisfactory
	529	Chamunda Mata Chouraha, Nagar Nigam	Mixed	Satisfactory	Moderate	Moderate
Nagda	84	BCI Labour Club Nagda	Residential	Moderate	Satisfactory	Insufficient data
	246	Grasim Kalyan Kendra Nagda	Residential	Moderate	Satisfactory	Insufficient data
Dewas	525	EID Perry (I) Limited	Industrial	Satisfactory	Satisfactory	Insufficient data
Bhopal	122	Mrignayani Emporiyam, Hamidia Road M.P. Hastashilp Vikas Nigam	Commercial	Insufficient data		
	123	CETP, Govindpura AKVN Bhopal	Industrial	Moderate	Moderate	Insufficient data
	247	Paryawaran Parisar, MPPCB, Bhopal	Mixed	Moderate	Moderate	Insufficient data
		AKVN Mandideep Industrial Area	Industrial	Insufficient data	Moderate	Insufficient data
		Kolar Police station, Kolar Road	Residential	Insufficient data	Moderate	Insufficient data
Indore	127	M/s Indo-German Tool Room Sector-E, Sanwer Road, Indore- 425015	Industrial	Insufficient data	Moderate	Moderate
	128	Secretary, Kothari Market Association, MG Road, Indore- 425007	Commercial	Insufficient data	Moderate	Moderate
	131	MPPCB, Sch. 78/C, Part-2, Aranya, Vijay Nagar Indore- 425010	Residential	Insufficient data	Moderate	Moderate
Gwalior	478	Maharaj bada, Nagar Nigam, post office building	Mixed	Insufficient data	Moderate	Insufficient data
	479	Deen Dayal nagar, MPPCB, Regional Office, Gwalior	Mixed	Insufficient data	Moderate	Insufficient data
Jabalpur	248	Plot No. 455/456, Vijay Nagar ,Jabalpur	Residential	Insufficient data	Satisfactory	Satisfactory
		M/s Udaipur Brewaries Rechhai	Industrial	Insufficient data	Moderate	Moderate
Sagar	532	Pt. Deendayal Nagar Housing Board Colony	Residential	Moderate	Moderate	Insufficient data
Satna	342	R.Office MPPCB Dharwari G.No.5 H.No.318	Residential	Insufficient data	Moderate	Insufficient data
	343	Sub-Divisional Office E/M Light Machinery Satna	Industrial	Insufficient data	Moderate	Insufficient data




**Insufficient data\*** :-Either monitoring was not carried out due to rain or instrument failure or NAMP data are not available at Zonal Office, Bhopal

# Status of NAMP Station (MadhyaPradesh) Based on Air Quality Index Year 2014



City	Station Code	Location	Area
Ujjain	526	RO, MPPCB	Mixed
	527	District Office	Industrial
	528	Mahakal Temple	Mixed
	529	Chamunda Mata Circle	Mixed
Nagda	84	BCI Labour Club	Residential
	246	Grasim Kalyan Kendra	Residential
Dewas	525	EID Perry (I) Limited	Industrial
Bhopal	122	Hamidia Road	Commercial
	123	CETP Govindpura	Industrial
	247	HO, MPPCB	Mixed
	1	Mandideep IA	Industrial
	2	Kolar Policestation	Residential
Indore	127	Indo-German, Sanwer Road	Industrial
	128	Kothari Market Asso	Commercial
	131	RO, MPPCB	Residential
Gwalior	478	Maharaj bada	Mixed
	479	RO, MPPCB	Mixed
Jabalpur	248	RO, MPPCB	Residential
	3	Udaipur Brewaries	Industrial
Sagar	532	Deendayal Housing B Colony	Residential
Satna	342	RO, MPPCB	Residential
	343	SDO Light Machinery	Industrial

## AQI Based Pollution Categories

-  Satisfactory
-  Moderate
-  NA