



पर्यावरण निगरानी केंद्र
Madhya Pradesh Pollution Control Board

September 07, 2021

International Day of Clean Air for Blue Skies

#HealthyAirHealthyPlanet

#CleanAirMyResponsibility



1. Preamble :

Air pollution is the world's largest environmental health risk and now in most instances the severity of pollution has reached an extent where government intervention has become necessary. Owing to community's increasing interest in clean air, and emphasizing the need to make further efforts to improve air quality to protect human health, [the United Nations General Assembly designated 07 September as the 'International Day of Clean Air for Blue Skies'](#) to sensitize the issue at global level. This year the theme of this day is 'Healthy Air Healthy Planet'. The Madhya Pradesh State, alongwith other States, also observed this day in line with the theme. The Environment Surveillance Centre (ESC), which has been established by M.P. Pollution Control Board (MPPCB) dedicatedly to ensure Self Monitoring of Compliance scheme of GoI, undertook several activities to mark the day.

The lockdowns due to Covid-19 pandemic have shown that a cleaner sky is possible. The study conducted by ESC, MPPCB during pandemic lockdown also supports this fact.

The ESC launched Hashtag campaign #CAMR – Clean Air My Responsibility to create awareness among the masses and sensitize them for cleaner air. The awareness campaign was also carried out which included display of relevant templates and the messages on the LED display panels installed in major cities in the State. Monitoring and analysis of air quality data of this day was also done across the State to mark the day. The ESC team members included Shri. Pracheer Dixit System Administrator, Shri Rakesh Goutam, Shri Abhishek Bhasker and Shri Dheeraj Wadukle. The study was performed under the direction of Shri V.K. Ahirwar Director (Environment) and supervision of Dr. Rajendra Chaturvedi, Scientist, ESC, MPPCB.

Air pollution is a problem with far-reaching impacts owing to its transport over long distances, i.e. as already established that the air pollution knows no boundaries and it it disproportionately affects children and the older persons. Owing to this the pollution transported from adjoining State to the Madhya Pradesh, and vice versa, needs to be seen and controlled in the interest of all as an additional approach.

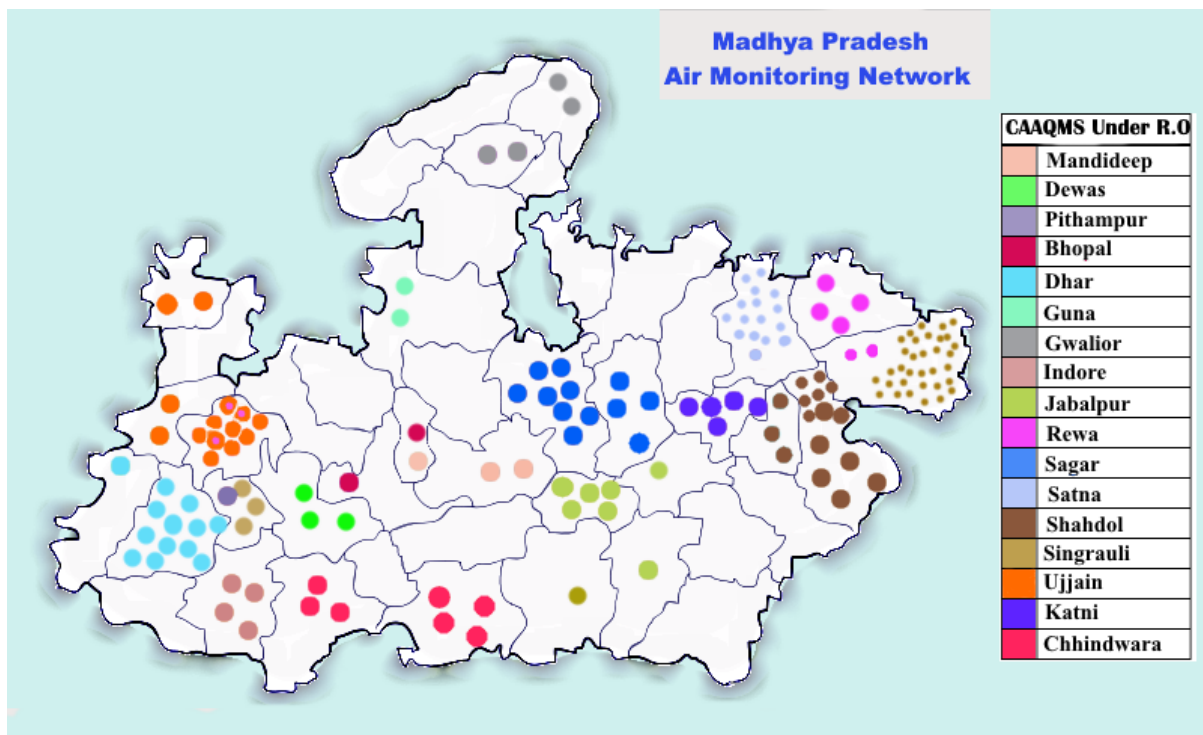
2. Activities Executed :

The following activities were undertaken by the Environment Surveillance Centre, MPPCB to observe the 'Clean Air for Blue Skies' day :

- i. The ESC launched Hashtag campaign #CAMR – Clean Air My Responsibility – to create awareness among the masses and sensitize them and make them understand that the Clear Air is not only the right of everyone but it is also a responsibility of everyone to take part in activities and contribute to ensure clean air.
- ii. Among others, the awareness programme included presentation and display of relevant templates on the LED display panels in major cities in the State.
- iii. The ESC also monitored and analysed the air quality data of this day across the State and brought the inference on the public portal to mark the day.

3. Monitoring Sites and Locations :

The ambient air monitoring was carried out round-the-clock on September 7, 2021 at 152 locations across the State which included commercial, residential, sensitive and industrial areas. Details of locations are shown in Table 1. Among the 152 stations 142 are operated under ‘Self Monitoring of Compliance’ scheme at locations designated by the MPPCB and the rest are operated exclusively by the MPPCB. Overall the network in the State includes 142 continuous ambient air quality monitoring stations and 10 meteorological stations.



Air Monitoring Network In Madhya Pradesh

This single day study is a symbolic to mark the occasion on the theme declared by the UN and not to be considered as representative picture of air quality of the area for a season or for a stretch of a period.

Tab. 1 - Network of Air Quality Monitoring in Madhya Pradesh State

S. No	City	Location	Coordinates
1	Anuppur	Premises of M/s Amarkantak Thermal Power Station, Chachai	23°09'47.0"N 81°38'04.8"E
2	Anuppur	Premises of M/s Amarkantak Thermal Power Station, Chachai	23°09'47.0"N 81°38'04.8"E
3	Anuppur	Collectorate, Anuppur	23°08'17.9"N 81°41'56.6"E
4	Anuppur	Premises of M/s MB Power (Madhya Pradesh) Limited, Anuppur	23°03'55.8"N 81°47'09.9"E
5	Anuppur	Premises of M/s MB Power (Madhya Pradesh) Limited, Anuppur	23°03'55.8"N 81°47'09.9"E
6	Anuppur	Premises of M/s MB Power (Madhya Pradesh) Limited, Anuppur	23°03'55.8"N 81°47'09.9"E
7	Betul	Premises of M/s Satpura Thermal Power Station, Sarni	22°06'28.2"N 78°10'43.50"E
8	Betul	Premises of M/s Satpura Thermal Power Station, Sarni	22°07'17.2"N 78°10'13.4"E
9	Betul	Premises of M/s Satpura Thermal Power Station, Sarni	22°06'23.30"N 78°10'28.60"E
10	Betul	Premises of M/s Satpura Thermal Power Station, Sarni	22°06'39.10"N 78°10'49.60"E
11	Bhind	Premises of M/s SRF Limited, Malanpur	26°21'07.0"N 78°17'05.4"E
12	Bhind	Premises of M/s SRF Limited, Malanpur	26°21'07.0"N 78°17'05.4"E
13	Bhopal	South T. T. Nagar, Bhopal City	23°14'00.9"N 77°24'02.1"E
14	Chhindwara	Premises of M/s RCCPL Pvt. Ltd. – Coal Mine, Umreth, Chhindwara	22°09'38.8"N 78°41'58.8"E
15	Damoh	Colelctorate, Shrivastav Colony, Damoh	23°49'03.0"N 79°26'46.5"E
16	Damoh	Premises of M/s Diamond Cements, Narsingarh, District Damoh	23°59'35.1"N 79°23'55.2"E
17	Damoh	Premises of M/s Diamond Cements Narsingarh, District Damoh	23°59'10.2"N 79°23'18.3"E
18	Damoh	Premises of M/s Diamond Cements Narsingarh, District Damoh	23°59'19.1"N 79°23'54.2"E
19	Dewas	Premises of M/s Barloecher India (P) Limited, Dewas	22°55'39.4"N 76°01'32.8"E
20	Dewas	Premises of M/s Royal Enterprises., Dewas	22°56'15.9"N 76°00'12.1"E
21	Dewas	Bhopal Chauraha, Dewas City	22°58'05.7"N 76°03'50.8"E

22	Dhar	Premises of M/s Aadi Chem Trade Pvt. Ltd., Pithampur	22°37'34.2"N 75°34'42.5"E
23	Dhar	Premises of M/s Bridgestone India Private Limited., Pithampur, Dhar	22°37'27.9"N 75°37'33.8"E
24	Dhar	Premises of M/s M.P. Waste Management Project, Pithampur	22°37'57.4"N 75°40'56.8"E
25	Dhar	Premises of M/s Shloak chemicals India private limited., Pithampur	22°37'58.3"N 75°34'47.1"E
26	Dhar	Premises of M/s Sugam Chemicals., Pithampur, Dist. Dhar	19°47'01.5"N 72°44'41.5"E
27	Dhar	Premises of M/s Tanishi Organo Chem., Pithampur, Dist. Dhar	22°41'57.2"N 75°52'46.5"E
28	Dhar	Premises of M/s Ultratech Cement Ltd_Dhar, Manawar, Dist. Dhar	2°15'55.2"N 75°07'32.4"E
29	Dhar	Premises of M/s Ultratech Cement Ltd_Dhar, Manawar, Dist. Dhar	2°15'55.2"N 75°07'32.4"E
30	Dhar	Premises of M/s Ultratech Cement Ltd_Dhar, Manawar, Dist. Dhar	2°15'55.2"N 75°07'32.4"E
31	Dhar	Premises of M/s Ultratech Cement Ltd_Dhar, Manawar, Dist. Dhar	2°15'55.2"N 75°07'32.4"E
32	Dhar	Premises of M/s Wonder Cement Limited., Badnawar	23°03'15.4"N 75°15'20.3"E
33	Dhar	Premises of M/s Wonder Cement Limited., Badnawar	23°03'15.4"N 75°15'20.3"E
34	Guna	Premises of M/s Gas Authority of India Limited (GAIL), Vijaipur	24°28'47.7"N 77°09'03.9"E
35	Guna	Premises of M/s Gas Authority of India Limited (GAIL), Vijaipur	24°28'47.7"N 77°09'03.9"E
36	Gwalior	Phool Bagh, Gwalior City	26°12'37.9"N 78°10'15.6"E
37	Gwalior	City Center, Gwalior City	26°12'12.4"N 78°11'35.7"E
38	Indore	Premises of M/s IPCA Laboratories Ltd. Pologround, Indore	22°44'15.9"N 75°51'19.1"E
39	Indore	Premises of M/s Krish Enterprises, Indore	22°47'04.9"N 75°54'12.7"E
40	Indore	Chhoti Gwal toli, Indore City	22°43'09.7"N 75°52'11.6"E
41	Jabalpur	Marhatal, Jabalpur City	23°10'07.0"N 79°55'56.1"E
42	Jhabua	Premises of M/s Shailchem Distillate., Meghnagar	22°54'40.1"N 74°32'54.2"E
43	Katni	Premises of M/s ACC Limited, Kymore, MHG Mines, Katni	24°03'44.5"N 80°36'53.4"E
44	Katni	PCB Regional Office premises Katni	23°48'22.4"N 80°22'20.3"E
45	Katni	Residencial Area of M/s ACC Limited, Kymore, Katni,	24°03'44.5"N 80°36'53.4"E
46	Katni	Residencial Area of M/s ACC Limited, Kymore, Katni	24°03'44.5"N 80°36'53.4"E
47	Katni	Gole Bazar, Katni City	23°50'02.8"N 80°23'25.4"E
48	Khandwa	Premises of M/s Shree Singaji Thermal Power Plant, Dogaliya	22°06'03.8"N 76°32'00.3"E

49	Khandwa	Premises of M/s Shree Singaji Thermal Power Plant, Dogaliya	22°06'03.8"N 76°32'00.3"E
50	Khandwa	Premises of M/s Shree Singaji Thermal Power Plant, Dogaliya	22°06'03.8"N 76°32'00.3"E
51	Khargone	Premises of M/s NTPC Limited, Khargone	22°04'04.8"N 75°51'24.4"E
52	Khargone	Premises of M/s NTPC Limited, Khargone	22°04'04.8"N 75°51'24.4"E
53	Khargone	Premises of M/s NTPC Limited, Khargone	22°04'04.8"N 75°51'24.4"E
54	Khargone	Premises of M/s NTPC Limited, Khargone	22°04'04.8"N 75°51'24.4"E
55	Maihar	Maihar Sharda Mandir, Dist. Satna	24°15'40.7"N 80°43'23.4"E
56	Mandideep	Sector-D Industrial Area, Mandideep, Dist. Raisen	23°06'30.4"N 77°30'41.1"E
57	Narsinghpur	Premises of M/s BLA Power (P) Ltd., Gaderwara	22°57'32.5"N 78°43'56.3"E
58	Narsinghpur	Premises of M/s Gadarwara Super Thermal Power Station, Gadarwara	22°51'42.5"N 78°51'58.3"E
59	Narsinghpur	Premises of M/s Gadarwara Super Thermal Power Station, Gadarwara	22°51'42.5"N 78°51'58.3"E
60	Narsinghpur	Premises of M/s Gadarwara Super Thermal Power Station, Gadarwara	22°51'42.5"N 78°51'58.3"E
61	Narsinghpur	Premises of M/s Gadarwara Super Thermal Power Station, Gadarwara	22°51'42.5"N 78°51'58.3"E
62	Neemuch	Civil Hospital Campus, Neemuch	24°27'34.9"N 74°52'30.0"E
63	Neemuch	Premises of M/s UltraTech Cement Limited, Khor	24°34'55"N 74°48'17"E
64	Pithampur	Sector-2 Industrial Area, Pithampur	22°37'29.1"N 75°40'30.9"E
65	Raisen	Premises of M/s HEG Ltd., Mandideep, Dist. Raisen	23°05'45.9"N 77°31'09.2"E
66	Raisen	Premises of M/s Vardhman Yarns CPP, Mandideep, Dist. Raisen	23.077148,77.55100
67	Ratlam	Premises of M/s IPCA Laboratories Ltd., Dist. Ratlam	23.415951,75.074867
68	Ratlam	Shastri Nagar, Dist. Ratlam	23°19'54.2"N 75°02'45.5"E
69	Rewa	MPPCB Regional Office, Rewa	24°32'45.3"N 81°19'14.9"E
70	Rewa	Premises of M/s Jaypee Rewa Cement Plant., Jaypeepuram Rewa	24°33'57.1"N 81°10'3.5"E
71	Rewa	Premises of M/s Ultra tech Cement Limited – Jaypeepuram, Madhepur	24°31'31.98"N 81°10'9.91"E
72	Rewa	Collectorate, Dist. Rewa	24°32'18.8"N 81°17'22.3"E
73	Sagar	Premises of M/s Bharat Oman Refineries Ltd CPP, Bina	24.249308 78.161273
74	Sagar	Premises of M/s Bharat Oman Refineries Ltd CPP, Bina	24.249308 78.161273
75	Sagar	Premises of M/s Bharat Oman	24.249308 78.161273

		Refineries Ltd CPP, Bina	
76	Sagar	Deen Dayal Nagar, Sagar City	23°51'50.5"N 78°48'10.4"E
77	Sagar	Premises of M/s Jaiprakash Power Vntures Ltd, Bina	24°18'51.3"N 78°07'43.7"E
78	Sagar	Premises of M/s Jaiprakash Power Vntures Ltd, Bina	24°18'51.3"N 78°07'43.7"E
79	Sagar	Premises of M/s Jaiprakash Power Vntures Ltd., Bina	24°18'51.3"N 78°07'43.7"E
80	Sagar	Premises of M/s Jaiprakash Power Vntures Ltd., Bina	24°18'51.3"N 78°07'43.7"E
81	Satna	Premises of M/s Bhilai Jaypee Cement Ltd, Raghuraj nagar	24°36'32.3"N 80°54'11.7"E
82	Satna	Premises of M/s Bhilai Jaypee Cement Ltd, Raghuraj nagar	24°36'32.3"N 80°54'11.7"E
83	Satna	Bandhavgar Colony, Satna City	24°35'03.6"N 80°51'17.8"E
84	Satna	Premises of M/s Birla Corporation Limited, Satna	24°35'43.6"N 80°51'15.5"E
85	Satna	Premises of M/s Birla Corporation Limited, Mines, Satna	24°35'41.7"N 80°51'48.5"E
86	Satna	Premises of M/s Birla Corporation Limited, Mines, Satna	24°35'41.7"N 80°51'48.5"E
87	Satna	Premises of M/s KJS Cement Limited, Maihar satna	24°15'29.78"N 80°48'00.95"E
88	Satna	Premises of M/s KJS Cement Limited, Maihar, Satna	24°15'26.23"N 80°47'33.62"E
89	Satna	Premises of M/s Prism Cement Plant, Bathia	24.561207,80.995371
90	Satna	Premises of M/s Prism Cement Plant, Bathia	24.566078,81.006624
91	Satna	Premises of M/s Prism Cement Plant, Bathia	24.566078,81.006624
92	Satna	Premises of M/s Reliance Cement Co Pvt Ltd, Bharouli, Satna	24°09'27.5"N - 24°10'48.6"N
93	Satna	Premises of M/s Reliance Cement Co Pvt Ltd, Mines, Bharouli, Satna	24°10'05.5"N 80°41'42.8"E
94	Satna	Premises of M/s Ultratech Cement Limited, Satna	24°10'N-24°15'N 80°45'E-80°50'E
95	Satna	Premises of M/s Ultratech Cement Limited, Satna	24°10'N-24°15'N 80°45'E-80°50'E
96	Sehore	Premises of M/s Vardhman Fabrics CPP, Budhni, Dist. Sehore	22°46'22.0"N 77°39'02.4"E
97	Seoni	Premises of M/s Jhabua Power, Ghanshour	22°44'16.7"N 79°54'41.6"E
98	Shahdol	Premises of M/s Amlai OC Sec B Mine SECL Sohagpur, Dhanpuri	23°09'22.2"N 81°35'03.3"E
99	Shahdol	Premises of M/s Bangwar UG Mine SECL Sohagpur Area, Burhar	23°09'04.9"N 81°32'21.1"E

100	Shahdol	Premises of M/s Orient Paper mills Ltd & CPP, Amlai	23°11'40.3"N 81°35'30.8"E
101	Shahdol	Premises of M/s Orient Paper mills Ltd & CPP, Amlai	23°11'40.3"N 81°35'30.8"E
102	Shahdol	Premises of M/s Orient Paper mills Ltd & CPP, Amlai	23°11'40.3"N 81°35'30.8"E
103	Shahdol	Premises of M/s Orient Paper mills Ltd & CPP, Amlai	23°11'40.3"N 81°35'30.8"E
104	Sidhi	Premises of M/s Sidhi Cement Works, Rampur Naikin, Bharatpur	24°19'26.6"N 81°19'28.9"E
105	Sidhi	Premises of M/s Sidhi Cement Works, Rampur Naikin, Bharatpur	24°19'32.4"N 81°20'13.1"E
106	Singrauli	Surya Kiran Bhawan, Singrauli City	24°06'32.3"N 82°38'44.1"E
107	Singrauli	Premises of M/s Amlohri Open Cast Mine, Singrauli	24°08'11.7"N 82°35'31.1"E
108	Singrauli	Premises of M/s Bina Project NCL, Sonebhadra	24°09'25.4"N 82°44'36.7"E
109	Singrauli	Premises of M/s Block-B Project NCL, Singrauli	24°12'30.0"N 82°39'25.4"E
110	Singrauli	Premises of M/s Dudhichua Northern Coalfields Ltd., Singrauli	24°10'02.4"N 82°40'18.0"E
111	Singrauli	Premises of M/s Essar Power MP LTD., Karsulal	24°00'32.8"N 82°25'01.0"E
112	Singrauli	Premises of M/s Essar Power MP LTD., Karsulal	24°00'32.8"N 82°25'01.0"E
113	Singrauli	Premises of M/s Essar Power MP LTD., Karsulal	24°00'32.8"N 82°25'01.0"E
114	Singrauli	Premises of M/s Essar Power MP LTD., Karsulal	24°00'32.8"N 82°25'01.0"E
115	Singrauli	Premises of M/s Hindalco Industries Limited (CPP), Bargawan	24°13'50.6"N 82°26'32.2"E
116	Singrauli	Premises of M/s Hindalco Industries Ltd.(Aluminium Project), Bargawan	24°13'50.6"N 82°26'32.2"E
117	Singrauli	Premises of M/s Hindalco Industries Ltd.(Aluminium Project), Bargawan	24°13'50.6"N 82°26'32.2"E
118	Singrauli	Premises of M/s Hindalco Industries Ltd.(Aluminium Project), Bargawan	24°13'50.6"N 82°26'32.2"E
119	Singrauli	Premises of M/s Jaiprakash Power Ventures Ltd, Coal Mine, Majhauri	24°09'48.7"N 82°23'55.6"E
120	Singrauli	Premises of M/s Jaiprakash Power Ventures Ltd., Coal Mine, Majhauri	24°09'48.7"N 82°23'55.6"E
121	Singrauli	Premises of M/s Jaiprakash Power Ventures Ltd., Coal Mine, Majhauri	24°09'48.7"N 82°23'55.6"E
122	Singrauli	Premises of M/s Jaypee Power Ventures Limited, Nigrie	24°09'06.3"N 81°54'16.8"E
123	Singrauli	Premises of M/s Jaypee Power Ventures Limited, Nigrie	24°09'06.3"N 81°54'16.8"E
124	Singrauli	Premises of M/s Jaypee Power Ventures Limited, Nigrie	24°09'06.3"N 81°54'16.8"E
125	Singrauli	Premises of M/s Jaypee Power	24°09'06.3"N 81°54'16.8"E

		Ventures Limited, Nigrie	
126	Singrauli	Premises of M/s Jhingurda Northern Coal Mines, Singrauli	24°12'13.1"N 82°40'30.0"E
127	Singrauli	Premises of M/s NCL Jayant Project, Singrauli	24°09'18.5"N 82°38'41.4"E
128	Singrauli	Premises of M/s Nigahi Project NCL, Singrauli	24°08'14.1"N 82°37'50.3"E
129	Singrauli	Premises of M/s Sasan Mines, Amlohri	24°07'34.0"N 82°33'38.8"E
130	Singrauli	Premises of M/s Sasan Power Ltd., Amlohri	23°58'47.5"N 82°37'36.6"E
131	Singrauli	Premises of M/s Sasan Power Ltd., Amlohri	23°58'47.5"N 82°37'36.6"E
132	Singrauli	Premises of M/s Sasan Power Ltd., Amlohri	23°58'47.5"N 82°37'36.6"E
133	Singrauli	Premises of M/s Trimula Industries Ltd, Village Godvali, Devssar	24°12'24.7"N 82°31'37.3"E
134	Singrauli	Premises of M/s Trimula Industries Ltd, Village, Godvali Devssar	24°12'24.7"N 82°31'37.3"E
135	Singrauli	Premises of M/s Vindhychal Super Thermal Power Station, Singrauli	24°05'51.3"N 82°40'24.8"E
136	Singrauli	Premises of M/s Vindhychal Super Thermal Power Station, Singrauli	24°05'51.3"N 82°40'24.8"E
137	Singrauli	Premises of M/s Vindhychal Super Thermal Power Station, Singrauli	24°05'51.3"N 82°40'24.8"E
138	Singrauli	Premises of M/s Vindhychal Super Thermal Power Station, Singrauli	24°05'51.3"N 82°40'24.8"E
139	Ujjain	Premises of M/s Grasim Industries Ltd, SFD & CPP, Nagda	23°26'47.5"N 75°24'26.7"E
140	Ujjain	Premises of M/s Grasim Industries Ltd, SFD & CPP, Nagda	23°26'47.5"N 75°24'26.7"E
141	Ujjain	Premises of M/s Grasim Industries Ltd,SFD & CPP, Nagda	23°26'47.5"N 75°24'26.7"E
142	Ujjain	Premises of M/s Grasim Industries Ltd. New Caustic Soda, Nagda	23°26'47.5"N 75°24'26.7"E
143	Ujjain	Premises of M/s Grasim Industries Ltd. New Caustic Soda, Nagda	23°26'47.5"N 75°24'26.7"E
144	Ujjain	Premises of M/s Grasim Industries Ltd. New Caustic Soda, Nagda	23°26'47.5"N 75°24'26.7"E
145	Ujjain	Premises of M/s Lanxess India Private Limited., Nagda	23°26'28.3"N 75°24'23.0"E
146	Ujjain	Premises of M/s Saurabh Industries., Ujjain	23°10'33.1"N 75°48'51.0"E
147	Ujjain	Premises of M/s Swastik Chloroffin Llp., Nagda	28°41'14.4"N 77°09'43.1"E
148	Ujjain	Mahakaleshwar Temple, Ujjain City	23°10'57.8"N 75°46'05.6"E
149	Umaria	Premises of M/s Sanjay Gandhi Thermal Power Station, Birsinghpur	23°18'26.4"N 81°03'56.0"E

150	Umaria	Premises of M/s Sanjay Gandhi Thermal Power Station, Birsinghpur	23°18'26.4"N 81°03'56.0"E
151	Umaria	Premises of M/s SECL Johilla Area, Umaria	23°23'03.7"N 80°59'48.5"E
152	Shahdol	Premises of M/s Bicharpur Coal Mines, Shahdol	23°15'58.3"N 81°20'37.7"E

4. Methodology :

The monitoring was performed on round-the-clock basis uninterruptedly using continuous ambient air quality monitoring systems (CAAQMS). The near-surface measurement of criteria pollutants was done using online real-time analyzers. The measurement principles and calibration procedure were followed as per the standard norms prescribed by the CPCB. A check of zero setting and span checks were done for better performance of trace gas analyzers and reliability of data. This data is converted into digital values and transmitted to the Central Server location. The averaged value of a time interval of 15 minute has been recorded for each parameter for analysis purpose.

5. The Pollutants Measured :

The criteria pollutants which are responsible for causing serious health and environmental hazards were considered for this short study. The CPCB has set ambient air quality standards for all the parameters based on human health and environment criteria. A maximum of seven parameters were monitored during the course, viz. Particulate Matters, i.e. PM₁₀&PM_{2.5}, Nitrogen oxide (NO_x), Sulphur dioxide (SO₂), Ozone (O₃), Carbon monoxide (CO) and Ammonia (NH₃), at few stations but Particulate matters, Nitrogen oxide and sulphur dioxide were the common parameters at all the stations. In addition to this the meteorological parameters, viz. Wind speed, wind direction and Temperature were also observed.

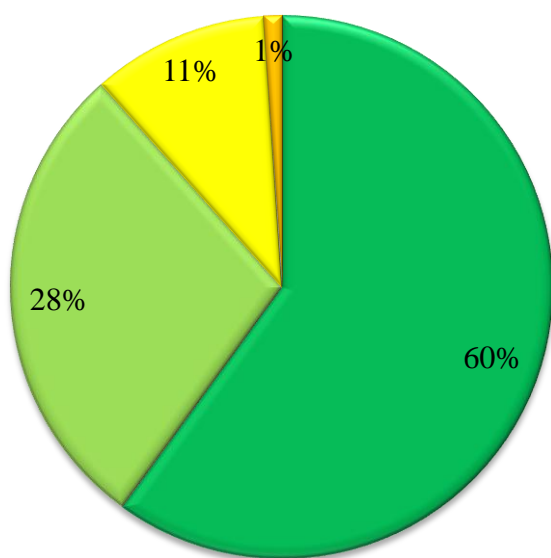
6. Observations –

Air Quality Index (AQI) is used for effective communication of air quality status to the common 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 colour. The AQI has been categorized into six categories, viz. Good, Satisfactory, Moderately polluted, Poor, Very Poor, and Severe. Each of these categories is decided on the basis of ambient concentration of air pollutants and their likely health impacts.

Looking to overall AQI share at all the stations the Good category was observed 60%, Satisfactory category was 28.4%, Moderate category 10.5%, and 1.1 % under Poor category. No instance was recorded under Very poor or Severe category on the study day. Fig.1.

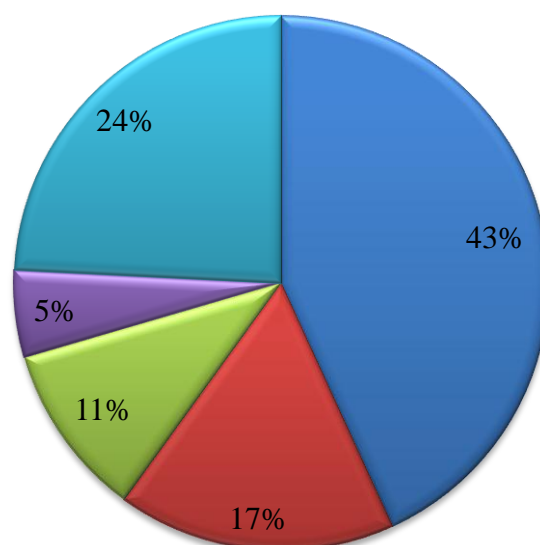
The overall State level AQI during the study was 54. The top three stations with highest AQI included Sarni with 235, Amlai with 176 and Manawar with 130. The prominent pollutant which contributed to the AQI during this period was PM₁₀ followed by CO. The other pollutant PM_{2.5}, SO₂ and NO_x each contributed <10% as prominent pollutant for AQI. As far as prominent pollutant contributing to the AQI is concerned, the PM₁₀ was responsible for 43% locations and CO for 24 % locations. The district/location wise AQI is presented in table - 2.

Fig. 1: Percentage of AQI Categories on Sept. 07, 2021



■ Good ■ Satisfactory
■ Moderate ■ Poor

Fig. 2: Percentage of AQI Pollutants on Sept. 07, 2021



■ PM₁₀ ■ PM_{2.5} ■ SO₂
■ NO₂ ■ CO

The percentage of AQI pollutants is shown in Fig 2. The location wise graph of PM₁₀ and PM_{2.5} can be referred at fig. 8 and 9.

This being only one day study, and that too during rainy season, the observations are not to be considered as representative of air quality of the area for a season or for a stretch of a period. The data at 57 locations was found to be inadequate for AQI measurement.

Tab. 2 - Air Quality Index at various Locations on September 07, 2021

S. No	Monitoring Locations	AQI	AQI Category	Prominent Pollutant
1	Location- Premises of M/s Amarkantak Thermal Power Station, Chachai, Anuppur	NA	ID	–
2	Location- Premises of M/s Amarkantak Thermal Power Station, Chachai, Anuppur	NA	ID	–
3	Location- Collectorate, Anuppur	38	Good	CO
4	Location- Premises of M/s MB Power (Madhya Pradesh) Limited, Anuppur	12	Good	SO2
5	Location- Premises of M/s MB Power (Madhya Pradesh) Limited, Anuppur	10	Good	SO2
6	Location- Premises of M/s MB Power (Madhya Pradesh) Limited, Anuppur	104	Moderate	CO
7	Location- Premises of M/s Satpura Thermal Power Station, Sarni, Betul	NA	ID	–
8	Location- Premises of M/s Satpura Thermal Power Station, Sarni, Betul	48	Good	PM10
9	Location- Premises of M/s Satpura Thermal Power Station, Sarni, Betul	235	Poor	CO
10	Location- Premises of M/s Satpura Thermal Power Station, Sarni, Betul	NA	ID	–
11	Location- Premises of M/s Srf Limited, Malanpur, Bhind	30	Good	PM10
12	Location- Premises of M/s Srf Limited, Malanpur, Bhind	28	Good	PM10
13	Location- T T Nagar, Bhopal	74	Satisfactory	PM10
14	Location- Premises of M/s RCCPL COAL MINE, Umreth, Chhindwara	27	Good	PM2.5
15	Location- Shrivastav Colony, Damoh	41	Good	SO2
16	Location- Premises of M/s Diamond Cements Clinker Division, Narsingarh, Damoh	NA	ID	–
17	Location- Premises of M/s Diamond Cements Clinker Division, Narsingarh, Damoh	43	Good	SO2
18	Location- Premises of M/s Diamond Cements Clinker Division, Narsingarh, Damoh	10	Good	CO
19	Location- Premises of M/s Barloecher India (P) Limited, Dewas	NA	ID	–
20	Location- Premises of M/s Royal Enterprises., Dewas		VOC Only	
21	Location- Bhopal Chauraha, Dewas	57	Satisfactory	PM10
22	Location- Premises of M/s Aadi Chem Trade PVT. LTD., Pithampur, Dhar		VOC Only	

23	Location- Premises of M/s Bridgestone India Private Limited., Pithampur, Dhar	NA	ID	-
24	Location- Premises of M/s M.P. Waste Management Project, Pithampur, Dhar	NA	ID	-
25	Location- Premises of M/s Shloak chemicals India private limited., Pithampur, Dhar	VOC Only		
26	Location- Premises of M/s Sugam Chemicals., Pithampur, Dhar	VOC Only		
27	Location- Premises of M/s Tanishi Organo Chem., Pithampur, Dhar	VOC Only		
28	Location- Premises of M/s Ultratech Cement Ltd_Dhar, Manawar, Dhar	12	Good	CO
29	Location- Premises of M/s Ultratech Cement Ltd_Dhar, Manawar, Dhar	11	Good	CO
30	Location- Premises of M/s Ultratech Cement Ltd_Dhar, Manawar, Dhar	62	Satisfactory	PM10
31	Location- Premises of M/s Ultratech Cement Ltd_Dhar, Manawar, Dhar	130	Moderate	PM10
32	Location- Premises of M/s Wonder Cement Limited., Badnawar, Dhar	47	Good	PM10
33	Location- Premises of M/s Wonder Cement Limited., Badnawar, Dhar	104	Moderate	PM10
34	Location- Premises of M/s Gas Authority of India Limited (GAIL), Vijaipur, Guna	12	Good	CO
35	Location- Premises of M/s Gas Authority of India Limited (GAIL), Vijaipur, Guna	34	Good	CO
36	Location- PHOOL BAGH, Gwalior	113	Moderate	PM10
37	Location- City Center, Gwalior	47	Good	PM10
38	Location- Premises of M/s IPCA Pologround, Indore	NA	ID	-
39	Location- Premises of M/s Krish Enterprises, Indore	VOC Only		
40	Location- Chhoti Gwaltoli, Indore	57	Satisfactory	PM10
41	Location- Marhatal, Jabalpur	44	Good	PM10
42	Location- Premises of M/s Shailchem Distillate., Meghnagar, Jhabua	VOC Only		
43	Location- Premises of M/s ACC Limited Kymore MHG Mines Katni	50	Good	CO
44	Location- MPPCB RO Office, Katni	75	Satisfactory	PM2.5
45	Location- Residencial Area of M/s ACC Limited Kymore, Katni	NA	ID	-
46	Location- Residencial Area of M/s ACC Limited Kymore, Katni	NA	ID	-
47	Location- Gole Bazar, Katni	49	Good	PM10

48	Location- Premises of M/s Shree Singaji Thermal Power Plant, Dogaliya, Khandwa	NA	ID	-
49	Location- Premises of M/s Shree Singaji Thermal Power Plant, Dogaliya	NA	ID	-
50	Location- Premises of M/s Shree Singaji Thermal Power Plant, Dogaliya	NA	ID	-
51	Location- Premises of M/s NTPC Ltd Super Thermal Power Project, Khargone	37	Good	PM2.5
52	Location- Premises of M/s NTPC Ltd Super Thermal Power Project, Khargone	NA	ID	-
53	Location- Premises of M/s NTPC Ltd Super Thermal Power Project, Khargone	61	Satisfactory	PM2.5
54	Location- Premises of M/s NTPC Ltd Super Thermal Power Project, Khargone	NA	ID	-
55	Location- Maihar Sarda Mandir Dt- Satna	22	Good	NO2
56	Location- Sector-D Industrial Area, Mandideep	124	Moderate	SO2
57	Location- Premises of M/s BLA Power (P) Ltd., Gaderwara	NA	ID	-
58	Location- Premises of M/s Gadarwara Super Thermal Power Station NTPC, Narsinghpur	19	Good	SO2
59	Location- Premises of M/s Gadarwara Super Thermal Power Station NTPC, Narsinghpur	34	Good	CO
60	Location- Premises of M/s Gadarwara Super Thermal Power Station NTPC, Narsinghpur	46	Good	PM2.5
61	Location- Premises of M/s Gadarwara Super Thermal Power Station NTPC, Narsinghpur	45	Good	PM2.5
62	Location- Civil Hospital, Neemuch	11	Good	SO2
63	Location- Premises of M/s UltraTech Cement Ltd. Unit: Vikram Cement, Khor, Neemuch	NA	ID	-
64	Location- Sector-2 Industrial Area, Pithampur	76	Satisfactory	PM10
65	Location- Premises of M/s HEG Ltd., Mandideep, Raisen	110	Moderate	PM10
66	Location- Premises of M/s Vardhman Yarns CPP, Mandideep, Raisen	127	Moderate	PM10
67	Location- Premises of M/s IPCA Laboratories Ltd., Ratlam	46	Good	SO2
68	Location- Shastri Nagar, Ratlam	70	Satisfactory	PM10
69	Location- MPPCB RO Office, Rewa	26	Good	CO
70	Location- Premises of M/s Jaypee Rewa Cement Unit of Jaiprakash Associates Ltd., Rewa	NA	ID	-

71	Location- Premises of M/s Ultratech Cement Ltd - Bela Cement Works, Jaypeepuram madhepur, Rewa	10	Good	CO
72	Location- Collectorate, Rewa	54	Satisfactory	PM10
73	Location- Premises of M/s Bharat Oman Refineries Ltd CPP, Bina, Sagar	45	Good	PM10
74	Location- Premises of M/s Bharat Oman Refineries Ltd CPP, Bina, Sagar	17	Good	NO2
75	Location- Premises of M/s Bharat Oman Refineries Ltd CPP, Bina, Sagar	NA	ID	-
76	Location- Deen Dayal Nagar, Sagar	61	Satisfactory	PM10
77	Location- Premises of M/s Jaiprakash Power Vntures Ltd.(Jaypee Bina Thermal Power Plant), Bina, Sagar	NA	ID	-
78	Location- Premises of M/s Jaiprakash Power Vntures Ltd.(Jaypee Bina Thermal Power Plant), Bina, Sagar	NA	ID	-
79	Location- Premises of M/s Jaiprakash Power Vntures Ltd.(Jaypee Bina Thermal Power Plant), Bina, Sagar	NA	ID	-
80	Location- Premises of M/s Jaiprakash Power Vntures Ltd.(Jaypee Bina Thermal Power Plant), Bina, Sagar	NA	ID	-
81	Location- Premises of M/s Bhilai Jaypee Cement Ltd, Raghuraj nagar, Satna	NA	ID	-
82	Location- Premises of M/s Bhilai Jaypee Cement Ltd, Raghuraj nagar, Satna	NA	ID	-
83	Location- Bandhavgar Colony, Satna	41	Good	PM10
84	Location- Premises of M/s Birla Corporation Limited, Satna	46	Good	PM10
85	Location- Premises of M/s Birla Corporation Limited, Satna	40	Good	PM2.5
86	Location- Premises of M/s Birla Corporation Limited, Satna	16	Good	PM2.5
87	Location- Premises of M/s KJS CEMENT LIMITED, Maihar Satna	14	Good	PM10
88	Location- Premises of M/s KJS CEMENT LIMITED, Maihar Satna	32	Good	NO2
89	Location- Premises of M/s Prism Cement Plant, Bathia, Satna	42	Good	CO
90	Location- Premises of M/s Prism Cement Plant, Bathia, Satna	26	Good	CO
91	Location- Premises of M/s Prism Cement Plant, Bathia, Satna	NA	ID	-

92	Location- Premises of M/s Reliance Cement Co Pvt Ltd, Bharouli Satna	60	Satisfactory	PM10
93	Location- Premises of M/s Reliance Cement Co Pvt Ltd, Bharouli Satna	61	Satisfactory	PM2.5
94	Location- Premises of M/s Ultratech Cement Limited (Unit- Maihar Cement Works), Satna	NA	ID	-
95	Location- Premises of M/s Ultratech Cement Limited (Unit- Maihar Cement Works), Satna	11	Good	NO2
96	Location- Premises of M/s Vardhman Fabrics CPP, Housangabad Budhni, Sehore	57	Satisfactory	PM10
97	Location- Premises of M/s Jhabua Power, Ghanshour, Seoni	90	Satisfactory	PM10
98	Location- Premises of M/s Amlai OC Sec B Mine SECL, Sohagpur Area, Dhanpuri, Shahdol	62	Satisfactory	CO
99	Location- Premises of M/s Bangwar UG Mine SECL Sohagpur Area, Burhar, Shahdol	47	Good	PM10
100	Location- Premises of M/s Orient Paper mills Ltd CPP, Amlai, Shahdol	122	Moderate	PM10
101	Location- Premises of M/s Orient Paper mills Ltd CPP, Amlai, Shahdol	176	Moderate	PM10
102	Location- Premises of M/s Orient Paper mills Ltd CPP, Amlai, Shahdol	NA	ID	-
103	Location- Premises of M/s Orient Paper mills Ltd CPP, Amlai, Shahdol	103	Moderate	PM10
104	Location- Premises of M/s Sidhi Cement Works (UltraTech Cement Ltd.) Rampur , Sidhi	80	Satisfactory	CO
105	Location- Premises of M/s Sidhi Cement Works (UltraTech Cement Ltd.) Rampur , Sidhi	92	Satisfactory	CO
106	Location- Surya Kiran Bhawan, Singrauli	78	Satisfactory	NOx
107	Location- Premises of M/s Amlohri Open Cast Mine, Singrauli	54	Satisfactory	PM10
108	Location- Premises of M/s Bina Project NCL, Sonebhadra, Singrauli	NA	ID	-
109	Location- Premises of M/s Block-B Project NCL, Singrauli	59	Satisfactory	PM2.5
110	Location- Premises of M/s Dudhichua Northern Coalfields Limited (NCL), Singrauli	41	Good	PM10
111	Location- Premises of M/s Essar Power MP LTD., Karsulal, Singrauli	75	Satisfactory	PM10
112	Location- Premises of M/s Essar Power MP LTD., Karsulal, Singrauli	85	Satisfactory	PM10
113	Location- Premises of M/s Essar Power MP LTD., Karsulal, Singrauli	NA	ID	-

114	Location- Premises of M/s Essar Power MP LTD., Karsulal, Singrauli	26	Good	PM10
115	Location- Premises of M/s Hindalco Industries Limited (CPP), Bargawan, Singrauli	48	Good	PM2.5
116	Location- Premises of M/s Hindalco Industries Ltd.(Aluminium), Bargawan, Singrauli	12	Good	CO
117	Location- Premises of M/s Hindalco Industries Ltd.(Aluminium), Bargawan, Singrauli	NA	ID	-
118	Location- Premises of M/s Hindalco Industries Ltd.(Aluminium), Bargawan, Singrauli	15	Good	CO
119	Location- Premises of M/s Jaiprakash Power Ventures LTD (North) Coal Mine, Singrauli	NA	ID	-
120	Location- Premises of M/s Jaiprakash Power Ventures LTD (North) Coal Mine, Singrauli	44	Good	PM2.5
121	Location- Premises of M/s Jaiprakash Power Ventures LTD (North) Coal Mine, Singrauli	NA	ID	-
122	Location- Premises of M/s Jaypee Power Ventures Limited, Nigrie, Singrauli	37	Good	CO
123	Location- Premises of M/s Jaypee Power Ventures Limited, Nigrie, Singrauli	18	Good	SO2
124	Location- Premises of M/s Jaypee Power Ventures Limited, Nigrie, Singrauli	18	Good	SO2
125	Location- Premises of M/s Jaypee Power Ventures Limited, Nigrie, Singrauli	34	Good	CO
126	Location- Premises of M/s Jhingurda Northern Coal Mines, Singrauli	NA	ID	-
127	Location- Premises of M/s NCL Jayant Project, Singrauli	NA	ID	-
128	Location- Premises of M/s Nigahi Project NCL, Singrauli	65	Satisfactory	PM10
129	Location- Premises of M/s Sasan Mines, Amlohri, Singrauli	98	Satisfactory	PM2.5
130	Location- Premises of M/s Sasan Power Ltd., Amlohri, Singrauli	NA	ID	-
131	Location- Premises of M/s Sasan Power Ltd., Amlohri, Singrauli	NA	ID	-
132	Location- Premises of M/s Sasan Power Ltd., Amlohri, Singrauli	NA	ID	-
133	Location- Premises of M/s Trimula Industries Ltd, Village -Godvali Devssar, Singrauli	NA	ID	-
134	Location- Premises of M/s Trimula Industries Ltd, Village -Godvali Devssar, Singrauli	NA	ID	-
135	Location- Premises of M/s Vindhychal Super Thermal Power Station N.T.P.C., Singrauli	NA	ID	-

136	Location- Premises of M/s Vindhyachal Super Thermal Power Station N.T.P.C., Singrauli	NA	ID	–
137	Location- Premises of M/s Vindhyachal Super Thermal Power Station N.T.P.C., Singrauli	NA	ID	–
138	Location- Premises of M/s Vindhyachal Super Thermal Power Station N.T.P.C., Singrauli	NA	ID	–
139	Location- Premises of M/s Grasim Industries Ltd Staple Fibre Division CPP, Nagda, Ujjain	24	Good	PM10
140	Location- Premises of M/s Grasim Industries Ltd Staple Fibre Division CPP, Nagda, Ujjain	14	Good	PM10
141	Location- Premises of M/s Grasim Industries Ltd Staple Fibre Division CPP, Nagda, Ujjain	28	Good	PM2.5
142	Location- Premises of M/s Grasim Industries Ltd. New Caustic Soda, Nagda, Ujjain	Chlorine, HCL		
143	Location- Premises of M/s Grasim Industries Ltd. New Caustic Soda, Nagda, Ujjain	Chlorine, HCL		
144	Location- Premises of M/s Grasim Industries Ltd. New Caustic Soda, Nagda, Ujjain	10	Good	CO
145	Location- Premises of M/s Lanxess India Private Limited., Nagda, Ujjain	89	Satisfactory	PM10
146	Location- Premises of M/s Saurabh Industries., Ujjain	VOC Only		
147	Location- Premises of M/s Swastik Chloroffin Llp., Nagda, Ujjain	VOC Only		
148	Location- Mahakaleshwar Temple, Ujjain	80	Satisfactory	PM10
149	Location- Premises of M/s Sanjay Gandhi Thermal Power Station, Birsinghpur, Umaria	47	Good	NO2
150	Location- Premises of M/s Sanjay Gandhi Thermal Power Station, Birsinghpur, Umaria	NA	ID	–
151	Location- Premises of M/s SECL Johilla Area, Umaria	21	Good	PM2.5
152	Location- Premises of M/s Bicharpur Coal Mine, Shahdol	86	Satisfactory	PM2.5

* ID – Inadequate Data

7. Spread of pollutants Values and Time Relation -

Intra-day distribution analysis of State-wide data was performed to find out the spread of data values with time relation. This gives information about the particular time slot of day when the value of parameters was observed to be maximum or minimum at any station. However, no specific trend of Crest time and Trough time could be established due to short monitoring duration.

Salient features :

- i. The awareness programme included launching of Hashtag campaign #CAMR – Clean Air My Responsibility.
- ii Presentation and display of thematic templates on the LED display panels in major cities in the State.
- iii. Air quality at 152 locations in the State was observed across the State under jurisdiction of 17 Regional offices.
- iv The prominent pollutant was noticed to be PM₁₀ with dominance at 43% locations.
- v. Among all the locations monitored, 60% were found under ‘Good’ category and 28% locations were found under ‘Satisfactory’ category.

Awareness Campaign on LED Display Panels and Twitter



माननीय मंत्री
श्री हरदीप सिंह डोग
पर्यावरण विभाग, मध्यप्रदेश शासन

माननीय मुख्यमंत्री
श्री शिवराज सिंह चौहान
मध्यप्रदेश शासन

" निर्माण कार्यों के आसपास जल का छिड़काव
करें एवं निर्माण सामग्री ढक कर रखें जिससे
पर्यावरण सुरक्षित रहे। "

CREATED BY -
FINCHFLY



ERC-MPPCB

27 Tweets



Tweets

Tweets & replies

Media

Likes



" स्वच्छ एवं स्वस्थ पर्यावरण में भागीदार बनिए "

#हरित_प्रदेश_मध्यप्रदेश

@MP_MyGov @environment_mp

@HardeepsinghDa1

@JansamparkMP



1

2



ERC-MPPCB @ercmppcb · 2h

" स्वच्छ एवं स्वस्थ पर्यावरण में भागीदार बनिए "

#हरित_प्रदेश_मध्यप्रदेश

@MP_MyGov @environment_mp

@HardeepsinghDa1

@JansamparkMP



ERC-MPPCB

27 Tweets

Tweets Tweets & replies Media Likes

@JansamparkMP



1 2



ERC-MPPCB @ercmppcb · 2h

" स्वच्छ एवं स्वस्थ पर्यावरण में भागीदार बनिए "

#हरित_प्रदेश_मध्यप्रदेश

@MP_MyGov @environment_mp

@HardeepsinghDa1

@JansamparkMP



1 2



ERC-MPPCB @ercmppcb · 2h

Campaign on Social Media

#CAMP – CleanAirMyResponsibility

The image shows a screenshot of a Twitter profile page for the account ERC-MPPCB (@ercmppcb). The left sidebar contains navigation options: Home, Explore, Notifications, Messages, Bookmarks, Lists, Profile, and More. A blue 'Tweet' button is visible below the navigation. The main content area shows a tweet thread from ERC-MPPCB, dated Sep 6, with 31 tweets in total. The visible tweets are:

- Tweet 1:** ERC-MPPCB @ercmppcb · Sep 6
Do you Know?
Walk or cycle to your office or business area if it is close by.
This will reduce traffic load on road as well as exhaust pollution thus making the ambient air cleaner.
[#cleanairforblueskies](#)
[#CAMR](#)
[#CleanAirMyResponsibility](#)
[@moefcc](#) [@environment_mp](#)
[@HardeepDang226](#)
1 retweet, 2 likes
- Tweet 2:** ERC-MPPCB @ercmppcb · Sep 6
Do You Know?
Reduce idling time at traffic signals
This will help to prevent the emission of toxic VOCs and unburnt mixtures which may include cancer producing compounds.
[#cleanairforblueskies](#)
[#CAMR](#)
[#CleanAirMyResponsibility](#)
[@moefcc](#) [@environment_mp](#)
[@HardeepDang226](#)
1 retweet, 1 like
- Tweet 3:** ERC-MPPCB @ercmppcb · Sep 6
Do you Know?
Tune the engine and maintain tyre pressure properly.
This will help to reduce the emission of poisonous gases like carbon monoxide and other exhaust emissions.
[#cleanairforblueskies](#)
[#CAMR](#)
[#CleanAirMyResponsibility](#)
[@moefcc](#) [@environment_mp](#)
[@HardeepDang226](#)
1 retweet, 1 like

At the bottom left, the profile information for ERC-MPPCB is visible, including the profile picture and the name @ercmppcb.